Addendum to the Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) (SCH No. 2017061069) (1375 Sunflower Ave., 1376 South Coast Dr., and 3370 Harbor Blvd.)

Prepared for

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SECTION 1.0
PURPOSE OF ADDENDUM

1.1 APPROVED PROJECT

The Preliminary Master Plan for Former Los Angeles Times (LA Times) Site (Planning Application-17-30) project was evaluated in *Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration* (hereinafter referred to as the "Former LA Times Site IS/MND"). The project was certified by the Costa Mesa Planning Commission on August 14, 2017. The project analyzed the reuse of the project site with office and parking uses (hereinafter referred to as the "Approved Project"). The Approved Project consists of the reuse of most of the existing 339,063-square-foot (SF) LA Times building and associated surface parking lot. Specifically, the Approved Project includes demolition of 88,904 square feet of the existing building, the development of two new office buildings totaling 315,000 SF of building area, construction of three parking structures with a total of 2,397 spaces, and construction of surface parking totaling 391 spaces. The Approved Project would be renovated/constructed in three phases and all buildings would have been Leadership in Energy and Environmental Design (LEED) certified.

1.2 BASIS FOR ADDENDUM

The California Environmental Quality Act (CEQA) allows for the preparation of an Addendum to a certified Mitigated Negative Declaration (MND) to document minor technical changes in the project characteristics or environmental conditions under which the project would be developed. This Addendum to the project has been prepared in accordance with the provisions of CEQA (*California Public Resources Code,* Sections 21000 et seq.); the State CEQA Guidelines (Title 14, *California Code of Regulations,* Sections 15000 et seq.); and the rules, regulations, and procedures for implementing CEQA as adopted by the City of Costa Mesa (City). Section 15164(b) of the State CEQA Guidelines states that "the lead agency or a responsible agency shall prepare an addendum to a previously adopted Negative Declaration if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred". Section 21166 (Subsequent or Supplemental Impact Report; Conditions) of CEQA, and Section 15162(a) of the State CEQA Guidelines address when a subsequent EIR is required. As stated in Section 15162(a), a subsequent EIR is required when:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The purpose of this Addendum is to analyze the impacts resulting from implementation of the proposed project (including impacts resulting from changes in circumstances) and to identify the difference, if any, between the impacts evaluated with the Approved Project and those that would be associated with the proposed project. It also reviews whether any new information of substantial importance has been identified that shows that the proposed project would have one or more significant effects not discussed in the previous environmental documents. An Addendum is currently proposed to allow proposed changes to the Approved Project.

1.3 MODIFIED PROJECT

The Modified Project would be developed in three phases, like the Approved Project.

In November 2017, the property, along with the entitlements, was acquired by Press LLC. Press LLC obtained demolition and building permits for a revised Phase 1 in August of 2018, which is currently under construction. The revised Phase 1 development consists of the following “packages” that were submitted to the Building Safety Division for building permits and approvals:

Phase 1 – Package 1 is the renovation of the existing Sunflower and connector office buildings, which are comprised of 83,345 square feet of office space. This area will be renovated with a new cut-through in the southernmost section of the connector office building, creating a walking path between the connector office building and the northerly portion of Building A. Package 1 includes demolition of 5,368 square feet of building area and construction of 20,309 square feet of building area; building area would be 98,286 square feet at completion.

Phase 1 – Package 1.5 is the construction of a two-story, 35,150-square-foot concrete tilt-up building that will be an addition to the Sunflower building.

Phase 1 – Package 2 is the adaptive reuse of the existing 198,365 square foot industrial warehouse space which formerly contained the LA Times printing press facility. This area will be renovated, and additional square feet will be added as mezzanine and a second and third story in the northeastern portion of the Building A. Package 2 includes demolition of 23,224 square feet of building area and construction of 32,182 square feet; building area would be 207,323 square feet at completion.

Phases 1 and 2 would also include construction of 1,414 surface parking spaces, mostly west of the buildings.

Approved Project

Preliminary Master Plan 17-03 was for the renovation of the former LA Times facility located on a 23.4-acre site into a 1-to-5 story office complex not to exceed 655,000 square feet of floor area. The project was approved to be constructed in the following Phases:

- Phase 1: Repurposing the existing building (former LA Times) for a 339,063-square-foot, two-story open office space with two levels of tiered mezzanine space; a three-level parking structure with 1,277 parking spaces; and 87 surface parking spaces.
- Phase 2: A new five-story building with 190,000 square feet of office space; a four-level parking structure with 697 parking spaces and 220 surface parking spaces.
- Phase 3: A new five-story building with 125,000 square feet of office space; a four-level parking structure with 423 parking spaces and 84 surface parking spaces.

Proposed Amendments

- Planning Application 17-03 A1 is an amendment to the above Preliminary Master Plan to replace the five-story, 190,000 square feet of office space previously approved for Phase 2 with renovation of 44,555 square feet, and new construction of 6,354 square feet (totaling 50,909 square feet), in the southerly portion of the existing building (facing South Coast Drive) into a two-story, indoor retail market hall. The retail market hall will consist of approximately 40 tenant spaces, the majority of which will be occupied by food-related uses including, but not limited to, sit-down and take-out restaurants, microbreweries, covered and open dining patios, food stalls, cafes, bars and lounges, an event space, and live entertainment. Retail shops and kiosks are also proposed. Additionally, the applicant is proposing approximately 29 State Alcoholic Beverage Control (ABC) License establishments for the sale of alcoholic beverages (beer, wine, and hard liquor) for on-site consumption after 11 PM (closing times no later than 1 AM, 7 days a week proposed), with live entertainment and dancing, not within 200 feet of residentially-zoned properties. A finding of Public Convenience or Necessity (PCN) is also being requested for certain ABC licenses.

  Adjacent to the proposed retail market hall will be a 1.5-acre private park that will have areas for outdoor dining, recreation, and art installation exhibits, as well as two one-story freestanding buildings to be used for café/dining with outdoor seating, each approximately 2,100 square feet in size. Weekend farmer's markets, art and craft fairs, and weekend community and/or special events will also be provided within the 1.5-acre private park area, as well as live entertainment between the hours of 8 AM to 10 PM, seven days a week.
- The applicant is also requesting that Condition of Approval (COA) Number 42 of Preliminary Master Plan 17-03, which requires the removal of the railroad tracks and related equipment within Sunflower Avenue, be deferred until such time as the bikeway improvements are installed at a future date to be determined. Also proposed is an amendment to COA Number 43 with regard to the design of the trail.
- Planning Application 19-30 is a conditional use permit to allow an 1,808 square foot multi-purpose event space within the proposed indoor retail space/market hall for private events (parties, weddings, banquets, etc.) to operate under a State Alcoholic Beverage Control (ABC) License Type 48 (On-Sale General - Public Premise) with live entertainment and dancing after 11 PM (1 AM closing time, 7 days a week proposed) not within 200 feet of residentially-zoned properties. A finding of Public Convenience or Necessity (PCN) is also being requested for the ABC license.

Zoning Application 18-72 is a minor conditional use permit to allow up to 10 percent of the 1,414 provided on-site parking spaces to be for small car (compact) parking spaces (140 spaces maximum).

Phase 3, proposes construction of an office building totaling 107,650 SF and up to five stories tall in the west part of the Project site; and a parking structure, three levels high and with 423 parking spaces, also in the west part of the site.

Pursuant to Section 15367 of the State CEQA Guidelines, the City is the lead agency for the proposed project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment. The City, as the lead agency, has the authority for project approval and certification of the accompanying environmental documentation.

In accordance with Section 21166 of CEQA and Sections 15162 and 15164 of the State CEQA Guidelines, based on the analysis presented in this document, the City has determined there are no new significant impacts result from the proposed project, nor is there any substantial increase in the severity of any previously identified environmental impacts. In addition, the changes with respect to the circumstances under which the proposed project would be undertaken would not result in new or more severe significant environmental impacts. The potential impacts associated with the proposed project would either be the same or less than the anticipated levels described in Former LA Times Site IS/MND. An Addendum is the appropriate environmental documentation for the proposed project and requested approvals.

Section 2.0 of this Addendum provides background information on the previously approved project, including actions taken by the City Council. Section 3.0 provides a description of the proposed project. Section 4.0 presents an environmental analysis of the proposed project. Section 5.0 presents the findings related to the environmental analysis of the proposed project.

SECTION 2.0
PROJECT BACKGROUND

The Modified Project would be implemented on the site of the Approved Project site located at 1375 Sunflower Avenue, 1376 South Coast Drive, and 3370 Harbor Boulevard, in the City of Costa Mesa as shown on Exhibit 1, Regional Location/Local Vicinity Map, in the City of Costa Mesa (City). The site has been subject to previous planning efforts. The following section provides a summary of the planning efforts that are integral to the Modified Project.

GENERAL PLAN FINAL ENVIRONMENTAL IMPACT REPORT (FEIR) AND THE 2015-2035 GENERAL PLAN

In July 2016, the City's General Plan Final Environmental Impact Report (GP FEIR) was certified, and the 2015-2035 General Plan was approved. These documents addressed the development of the Former LA Times Site IS/MND with up to 655,000 SF of office development or 553,000 SF of commercial/retail development.

PRELIMINARY MASTER PLAN FOR FORMER LA TIMES SITE (PLANNING APPLICATION-17-30) INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The City of Costa Mesa adopted an IS/MND for the Former LA Times Site project (Planning Application -17-30) in August 2017. The project approved by the City with adoption of the 2017 IS/MND is henceforth referred to as the Approved Project. The Approved Project permitted reuse of 250,159 SF of the existing building plus development of two new office buildings totaling 315,000 SF; the Approved Project is summarized by phase in Section 1.1, *Approved Project*, above.

The IS/MND determined that impacts to all environmental topics were less than significant except for impacts to cultural resources. Two mitigation measures were required for impacts to cultural resources: Mitigation Measure CULT-1 requiring archaeological monitoring during demolition, excavation, and grading; and Mitigation Measure CULT-2 requiring paleontological monitoring during excavation and grading. Impacts to cultural resources were determined to be less than significant after implementation of mitigation.

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SECTION 3.0
PROJECT DESCRIPTION AND SETTING

3.1 PROJECT LOCATION

The Modified Project site is located at 1375 Sunflower Avenue, 1376 South Coast Drive, and 3370 Harbor Boulevard, in the City of Costa Mesa as shown on Exhibit 1, Regional Location/Local Vicinity Map. The LA Times building and associated surface parking areas encompass approximately 19.5 acres on two adjacent parcels (Assessor Parcel Numbers [APNs] 140-041-24 and 140-041-40). The adjacent parcel of bare land, approximately 4 acres (APN 140-041-62), was a baseball field that was demolished in late 2018 or early 2019. The Interstate 405 Freeway (I-405) is about 0.2 mile to the south. Regional access to the site is from the I-405 via Harbor Boulevard or Fairview Road.

3.2 PROJECT SETTING

The 23.4-acre project site is bound to the west by the National University campus, office buildings, and Harbor Boulevard; to the north by Sunflower Avenue and commercial and industrial development; to the east by commercial development, a Los Angeles Chargers practice field, and Susan Street; to the south by an IKEA retail store; and to the southeast by an active agricultural area. The project site is in a developed and urbanized area of the City of Costa Mesa, north of I-405 as shown on Exhibit 2, Aerial Photograph. The 23.4-acre project site, consisting of three parcels, is currently occupied by the 339,063-square-foot former LA Times building and ancillary structures, surface parking areas, and graded bare land. The site is relatively flat; elevations on site range from about 30 to 32 feet above mean sea level (AMSL). Minimal landscaping is present, as the portion of the site containing the former LA Times building is an active construction site; and the portion of the site that contained the former baseball field has been cleared and graded (see Exhibits 3a and 3b, Site Photographs).

The original LA Times building opened in 1968, with its first expansion occurring in 1980 and its final expansion in 1989. In 2010, the LA Times ceased printing operations at their Costa Mesa facility in line with efforts to consolidate their printing facilities into their Los Angeles and Irwindale facilities. This LA Times site was closed in October 2014 (Los Angeles Times 2016).

As of a site visit on September 18, 2019, part of one of the buildings in the north part of the site had been demolished; and the rest of the two buildings in the north part of the site (the Connection and Sunflower buildings) had been gutted and were undergoing renovations.

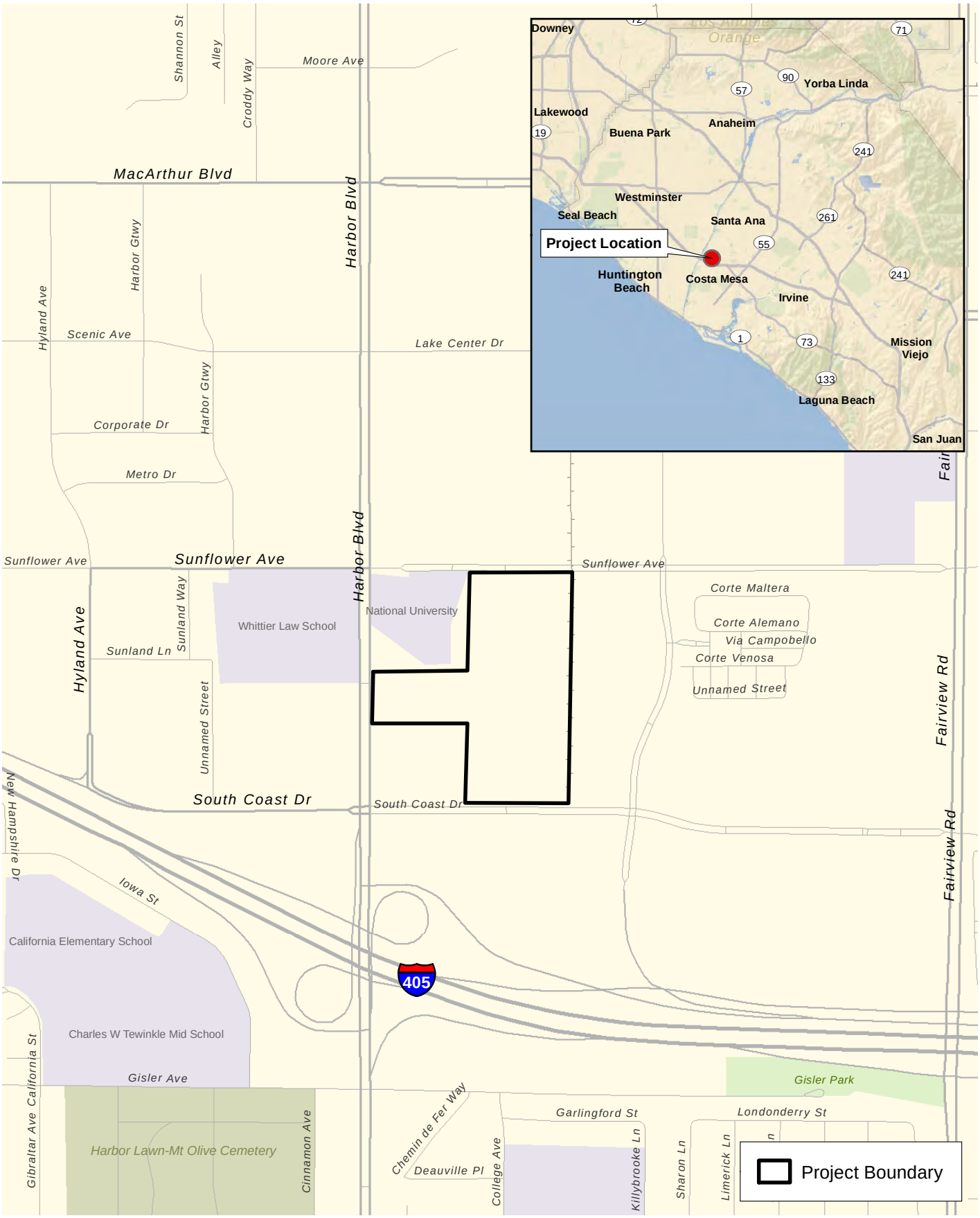
The General Plan land use designation for the project site is Commercial Center and the zoning designation for the site is Planned Development Commercial (PDC).

3.3 MODIFIED PROJECT DESCRIPTION

3.3.1 PHASE 1

In November 2017, the property, along with the entitlements, was acquired by Press LLC. Press LLC obtained demolition and building permits for a revised Phase 1 in August of 2018, which is currently under construction. The revised Phase 1 development consists of the following “packages” that were submitted to the Building Safety Division for building permits and approvals:

Phase 1 – Package 1 is the renovation of the existing Sunflower and connector office buildings, which are comprised of 83,345 square feet of office space. This area will be renovated with a new



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Regional Location and Local Vicinity

Exhibit 1

Addendum to the Preliminary Master Plan for Former LA Times Site

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Aerial Photograph

Exhibit 2

Addendum to the Preliminary Master Plan for Former LA Times Site

N W E S

500 250 0 500 Feet

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Photo 1: View from the north end of the project site looking south of renovation of part of the Sunflower Building.

Photo 2: View from the northeast site boundary looking west at renovation of the Connector Building (on left) and Sunflower Building (center and right).

Photo 3: View from the east site boundary looking southeast of the former LA Times building.

Photo 4: View from the southeast corner of the site looking northwest at the south end of the former LA Times building.

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Site Photographs

Exhibit 3a

Addendum to the Preliminary Master Plan for Former LA Times Site

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Photo 5: View from the west site boundary looking southeast. The former LA Times building is on the left; the IKEA retail building, offsite to the south, is in the right background.

Photo 6: View from the west site boundary looking east at the former LA Times building.

Photo 7: View from the northeast corner of the former baseball field in the west part of the site looking southwest across the west part of the site.

Photo 8: View from the southwest corner of the former baseball field in the west part of the site looking northwest across the west part of the site.

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Site Photographs

Exhibit 3b

Addendum to the Preliminary Master Plan for Former LA Times Site

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cut-through in the southernmost section of the connector office building, creating a walking path between the connector office building and the northerly portion of Building A. Package 1 includes demolition of 5,368 square feet of building area and construction of 20,309 square feet of building area; building area would be 98,286 square feet at completion.

Phase 1 – Package 1.5 is the construction of a two-story, 35,150-square-foot concrete tilt-up building that will be an addition to the Sunflower building.

Phase 1 – Package 2 is the adaptive reuse of the existing 198,365 square foot industrial warehouse space which formerly contained the LA Times printing press facility. This area will be renovated, and additional square feet will be added as mezzanine and a second and third story in the northeastern portion of the Building A. Package 2 includes demolition of 23,224 square feet of building area and construction of 32,182 square feet; building area would be 207,323 square feet at completion.

Parking

Surface parking (1,132 spaces) would be built mostly west of the buildings.

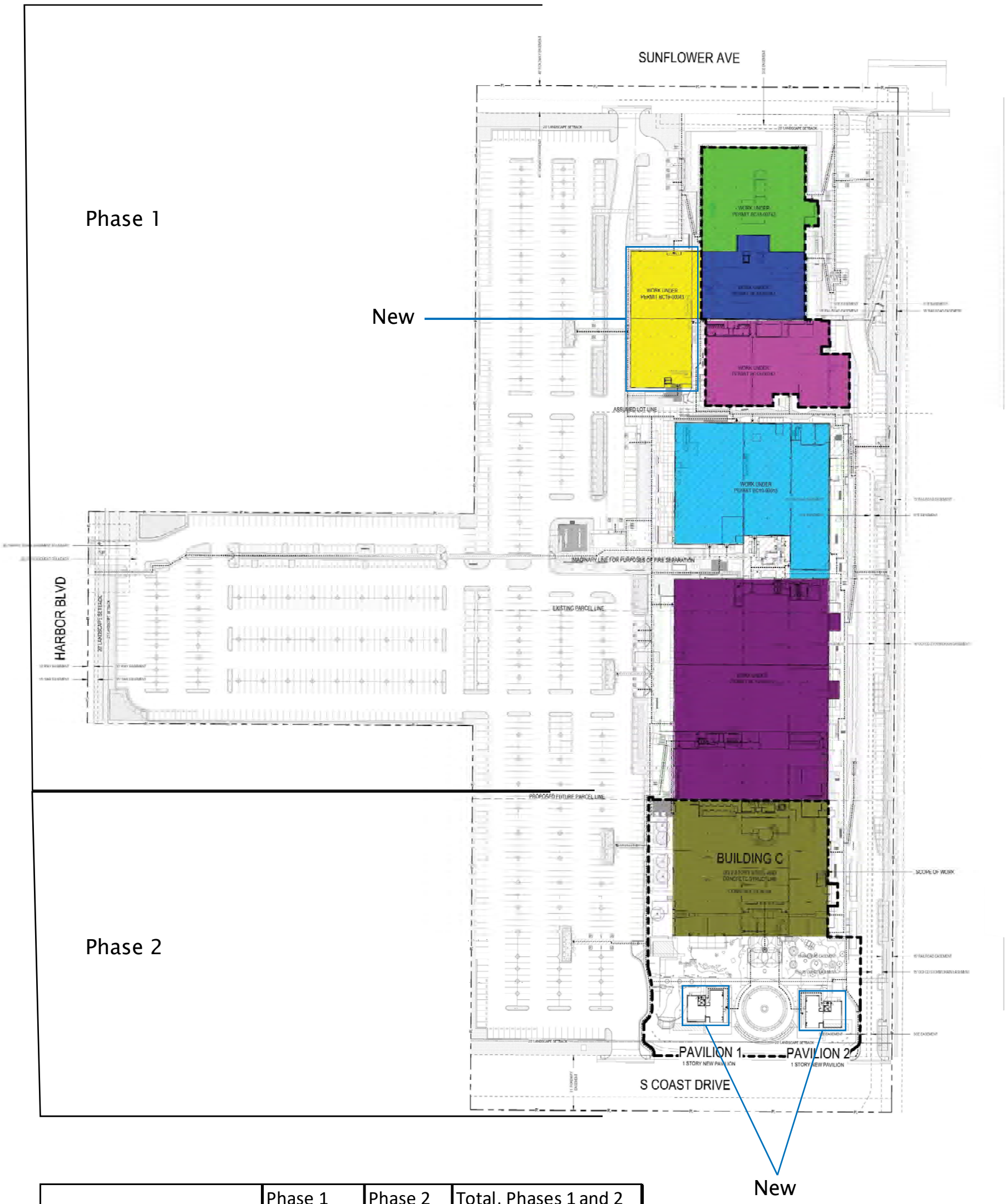
3.3.2 PHASE 2

Planning Application 17-03 A1 is an amendment to the above Preliminary Master Plan to replace the five-story, 190,000 square feet of office space previously approved for Phase 2 with an approximately 50,909 square foot, two-story, indoor retail market hall within the southerly portion of the existing building (facing South Coast Drive). The retail market hall will consist of approximately 40 tenant spaces, the majority of which will be occupied by food-related uses including, but not limited to, sit-down and take-out restaurants, microbreweries, covered and open dining patios, food stalls, cafes, bars and lounges, an event space, and live entertainment. Retail shops and kiosks are also proposed. Additionally, the applicant is proposing approximately 29 State Alcoholic Beverage Control (ABC) License establishments for the sale of alcoholic beverages (beer, wine, and hard liquor) for on-site consumption after 11 PM (closing times no later than 1 AM, 7 days a week proposed), with live entertainment and dancing, not within 200 feet of residentially-zoned properties. A finding of Public Convenience or Necessity (PCN) is also being requested for certain ABC licenses. A site plan for the Proposed Project is shown in Exhibit 4, Site Plan, Phases 1 and 2.

Adjacent to the proposed retail market hall will be a 1.5-acre private park that will have areas for outdoor dining, recreation, and art installation exhibits, as well as two one-story freestanding buildings to be used for café/dining with outdoor seating, each approximately 2,100 square feet in size. Weekend farmer's markets, art and craft fairs, and weekend community and/or special events will also be provided within the 1.5-acre private park area, as well as live entertainment between the hours of 8 AM to 10 PM, seven days a week.

Parking

Surface parking (282 spaces) would be built west of the southern part of the former warehouse building. Zoning Application 18-72 is a minor conditional use permit to allow up to 10 percent of the 1,414 provided on-site parking spaces to be for small car (compact) parking spaces (140 spaces maximum).



	Phase 1	Phase 2	Total, Phases 1 and 2
Existing	287,269	44,555	331,824
Demolition	12,388	0	12,388
Existing after Demolition	274,881	44,555	319,436
New Construction	71,419	6,354	77,773
Net Change	59,031	6,354	65,385
At Project Completion	346,300	50,909	397,209

Source: Ehrlich Yanai Rhee Chaney. 2019.

Site Plan, Phases 1 and 2

Exhibit 4

Addendum to the Preliminary Master Plan for Former LA Times Site

N W E S

Map not to scale

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3.3.3 PHASE 3

Phase 3 of the Modified Project proposes a future office building of up to five stories and 107,650 SF in the west part of the site. A parking structure, three levels high and with 423 parking spaces, would also be built in the west part of the site.

3.3.4 ACCESS AND CIRCULATION

Consistent with the Approved Project, site access would be via two driveways from Sunflower Avenue: a main driveway west of the former LA Times building and a secondary driveway east of it; two driveways from South Coast Drive: a main driveway west of the building and a secondary driveway east of it; and one driveway from Harbor Boulevard. The driveway from Harbor Boulevard and one of the driveways from South Coast Drive would be signalized; and the remaining three driveways would be controlled by one-way stop signs.

TABLE 1
MODIFIED PROJECT BUILDING AREA

	Building Area (SF)					
	Existing	**Demolition**	**Existing After Demolition**	**New Construction**	**Net Change**	**At Project Completion**
Phase 1						
Package 1: renovation, Sunflower and Connector buildings	83,345	5,368	77,977	20,309	14,941	98,286
Package 1.5: Demolish conference center; build new 2-story building	5,559	0	5,559	35,150	35,150	40,709
Package 2: Adaptive reuse, northern and central portions of industrial building, as creative office space	198,365	23,224	175,141	32,182	8,958	207,323
Subtotal	**287,269**	**28,592**	**258,677**	**87,641**	**59,049**	**346,318**
Phase 2						
Former Industrial Building (southern portion) reuse: retail/restaurant/ entertainment	44,555	0	44,555	6,354	6,354	50,909
Phase 3						
Proposed office building plus three-level, 423-space parking structure[1]	0	0	0	107,650	107,650	107,650
Total	**331,824**	**28,592**	**303,232**	**201,645**	**173,053**	**504,877**

[1] The parking structure would total 139,872 square feet and 423 parking spaces on three levels; the square footage in the table above is buildings only and omits the parking structure.

3.3.5 CONSTRUCTION

Construction of Phase 1 began in June 2019 with demolition of the existing conference center and part of the Connector Building already completed. Phase 2 of the Modified Project is anticipated to start in within 3 months of receiving City approval (that is, the second quarter of 2020). Demolition is expected to last two months. Demolition would be followed by grading, which is anticipated to last about one month. Any new construction and all renovations within the existing buildings is expected to be completed by late 2021.

The conceptual construction schedule for Phase 3 would extend approximately 15 months and is expected to occur at the earliest in 2022 or 2023.

3.4 APPROVED PROJECT COMPARED TO MODIFIED PROJECT

The Approved Project permitted 565,159 SF of building area: 250,159 SF of reuse plus 315,000 SF of new construction. The Modified Project permits up to 504,877 SF of building area consisting of 303,232 SF of reuse plus 201,645 SF of net new construction. Thus, the Approved Project permitted 60,300 more SF of building area than the Modified Project. The Approved Project and the Modified Project are compared in Table 2 below.

The demolition of part of the industrial building in Phase 1 of the Approved Project would be reduced in the Modified Project by over 76,000 SF. Construction of the 190,000-square-foot office building in Phase 2 of the Approved Project has been eliminated from the Modified Project. Construction in Phase 2 of the Modified Project would be reduced to 6,354 SF. Phase 2 of the Modified Project consists of retail, restaurant, and entertainment uses and an event space compared to the office uses in Phase 2 of the Approved Project. The two parking structures proposed for Phases 1 and 2 of the Approved Project have been deleted from the Modified Project and replaced by surface parking.

TABLE 2
APPROVED PROJECT COMPARED TO MODIFIED PROJECT

	Building Area (SF)					
	Existing	**Demolition**	**Existing After Demolition**	**New Construction**	**Net Change**	**At Project Completion**
Approved Project						
Phase 1	339,063	88,904	250,159	0	-88,904	250,159
Phase 2	0	0	0	190,000	190,000	190,000
Phase 3	0	0	0	125,000	125,000	125,000
Total	**339,063**	**88,904**	**250,159**	**315,000**	**226,096**	**565,159**
Modified Project						
Phase 1	287,269	28,592	258,677	87,641	59,049	346,318
Phase 2	44,555	0	44,555	6,354	6,354	50,909
Phase 3	0	0	0	107,650	107,650	107,650
Total	**331,824**	**28,592**	**303,232**	**201,645**	**173,053**	**504,877**
Difference, Approved Project less Modified Project						
Phase1	51,794	60,312	-8,518	-87,641	-147,953	-96,159
Phase 2	-44,555	0	-44,555	183,646	183,646	139,091
Phase 3	0	0	0	17,350	17,350	17,350
Total	**7,239**	**60,312**	**-53,073**	**113,355**	**53,043**	**60,282**

3.5 REQUESTED PROJECT ENTITLEMENTS

As part of the Modified Project, the Project Applicant is requesting approval of the following entitlements:

Approved Project

Preliminary Master Plan 17-03 was for the renovation of the former LA Times facility located on a 23.4-acre site into a 1-to-5 story office complex not to exceed 655,000 square feet of floor area. The project was approved to be constructed in the following Phases:

- Phase 1: Repurposing the existing building (former LA Times) for a 339,063-square-foot, two-story open office space with two levels of tiered mezzanine space; a three-level parking structure with 1,277 parking spaces; and 87 surface parking spaces.
- Phase 2: A new five-story building with 190,000 square feet of office space; a four-level parking structure with 697 parking spaces and 220 surface parking spaces.
- Phase 3: A new five-story building with 125,000 square feet of office space; a four-level parking structure with 423 parking spaces and 84 surface parking spaces.

Proposed Amendments

- Planning Application 17-03 A1 is an amendment to the above Preliminary Master Plan to replace the five-story, 190,000 square feet of office space previously approved for Phase 2 with an approximately 50,909 square foot, two-story, indoor retail market hall within the southerly portion of the existing building (facing South Coast Drive). The retail market hall will consist of approximately 40 tenant spaces, the majority of which will be occupied by food-related uses including, but not limited to, sit-down and take-out restaurants, microbreweries, covered and open dining patios, food stalls, cafes, bars and lounges, an event space, and live entertainment. Retail shops and kiosks are also proposed. Additionally, the applicant is proposing approximately 29 State Alcoholic Beverage Control (ABC) License establishments for the sale of alcoholic beverages (beer, wine, and hard liquor) for on-site consumption after 11 PM (closing times no later than 1 AM, 7 days a week proposed), with live entertainment and dancing, not within 200 feet of residentially-zoned properties. A finding of Public Convenience or Necessity (PCN) is also being requested for certain ABC licenses.

  Adjacent to the proposed retail market hall will be a 1.5-acre private park that will have areas for outdoor dining, recreation, and art installation exhibits, as well as two one-story freestanding buildings to be used for café/dining with outdoor seating, each approximately 2,100 square feet in size. Weekend farmer's markets, art and craft fairs, and weekend community and/or special events will also be provided within the 1.5-acre private park area, as well as live entertainment between the hours of 8 AM to 10 PM, seven days a week.
- The applicant is also requesting that COA Number 42 of Preliminary Master Plan 17-03, which requires the removal of the railroad tracks and related equipment within Sunflower Avenue, be deferred until such time as the bikeway improvements are installed at a future date to be determined. Also proposed is an amendment to COA Number 43 with regard to the design of the trail.
- Planning Application 19-30 is a conditional use permit to allow an 1,808 square foot multi-purpose event space within the proposed indoor retail space/market hall for private events (parties, weddings, banquets, etc.) to operate under a State Alcoholic Beverage Control

(ABC) License Type 48 (On-Sale General - Public Premise) with live entertainment and dancing after 11 PM (1 AM closing time, 7 days a week proposed) not within 200 feet of residentially-zoned properties. A finding of Public Convenience or Necessity (PCN) is also being requested for the ABC license.

Zoning Application 18-72 is a minor conditional use permit to allow up to 10 percent of the 1,414 provided on-site parking spaces to be for small car (compact) parking spaces (140 spaces maximum).

SECTION 4.0
ENVIRONMENTAL ANALYSIS

This section of the Addendum examines each environmental topical issue analyzed in Former LA Times Site IS/MND specific to the Modified Project. The Addendum includes additional areas of analysis, including analysis of impacts to energy, tribal cultural resources, and wildfire hazards, pursuant to the 2018 amendments to the State CEQA Guidelines. The focus of this Addendum to the *Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) IS/MND* is to evaluate the potential for changes in the impacts as a result of modifications to the proposed site plan. The Modified Project consists of the following:

Phase 1: 346,318 SF Office Development
Phase 2: 50,909 SF Commercial/Retail Development
Phase 3: 107,650 SF Office Development
Total: 504,877 SF (Combined Office and Commercial/Retail Development)

This evaluation includes a determination as to whether the changes proposed for the Former LA Times site would result in any new significant impacts or a substantial increase in a previously identified significant impact.

The topical areas identified in the CEQA Environmental Checklist (Checklist) were used as guidance for this Addendum. For each section, brief summaries of the findings of Former LA Times Site IS/MND are provided. This comparative analysis provides the City with the factual basis for determining if any changes in the project, any changes in circumstances, or any new information since the Former LA Times Site IS/MND was adopted require additional environmental review or preparation of a subsequent or supplemental EIR.

4.1 AESTHETICS

4.1.1 SUMMARY OF PREVIOUS ENVIRONMENTAL ANALYSIS

Preliminary Master Plan for Former LA Times Site Planning Application-17-30) Initial Study/Mitigated Negative Declaration

As set forth in the Initial Study prepared for the Former LA Times Site project, the Approved Project would not have an adverse effect on a scenic vista nor would it damage scenic resources. It was determined that the site is not designated as a scenic vista and is not located in a scenic preservation zone. No State scenic highways have been identified adjacent to or in the vicinity of the project site. Therefore, development of the Approved Project would not substantially damage scenic resources within a State scenic highway. The development of the adjacent bare land may impact the visual character or quality of the site through the introduction of additional development; however, the Approved Project would be consistent with the Land Use Element of the GP FEIR and all related policies that promote quality commercial and industrial/business park development. Therefore, it was determined that, although the project would alter the existing visual character, the Approved Project would not degrade the character or quality of the site; and impacts would be less than significant. implementation of the Approved Project would add additional sources of light; however, all new exterior lighting sources and building finishes would be in accordance with the GP FEIR. Therefore, impacts associated with the Approved Project pertaining to light or glare would be less than significant, and no mitigation is required.

4.1.2 PROJECT ENVIRONMENTAL REVIEW

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No Substantial Change from Previous Analysis. Modified Project development would not impact a scenic vista. Vistas of the San Gabriel Mountains to the north are visible from west of the existing building and from portions of the west part of the site and vistas of the Santa Ana Mountains to the east are visible from the north end of the site along Sunflower Avenue and the south end of the site along South Coast Drive. However, the Modified Project would not obstruct public views of scenic vistas due to intervening development. An existing green fence separates the west part of the site (the former baseball field) from the Automobile Club property to the south that blocks scenic vistas of the San Gabriel Mountains from the Automobile Club property; thus, construction of the proposed office building, up to five stories high, on the site of the existing bare land would not block vistas from the Automobile Club property. No new significant impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway or local scenic expressway, scenic highway, or eligible scenic highway?

No Substantial Change from Previous Analysis. Consistent with the previous analysis for the Approved Project, no scenic resources are present on site. Ornamental trees are located in the parking lot and next to the northernmost part of the building; however, the trees are ornamental landscape trees in an urban setting and are not considered scenic resources. Additionally, the nearest designated State scenic highway to the project site is State Route 91 (SR-91) about 12 miles to the north and is not visible from the site. Modified Project development would not impact scenic resources in SR-91. No new impact would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Substantial Change from Previous Analysis. The Modified Project site is designated Commercial Center under the City of Costa Mesa General Plan and zoned PDC – (Planned Development Commercial). The intent of the PDC zoning district is for the creation of a spacious environment in a park-like setting. The Modified Project would involve a net increase of about 34,198 SF in building footprint for development of the office building northwest of the existing building, plus some additional square footage for development of the office building on the existing bare land.[1] The increase in building footprint would not be substantially greater than the increase in footprint in the Approved Project and would not considerably detract from the project site setting compared to development of the Approved Project. No new significant impact would occur.

[1] The office building would be up to five stories and up to 107,650 square feet; the building footprint has not yet been determined.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Substantial Change from Previous Analysis. Modified Project development would involve installation of parking lot lighting and exterior building lighting, similar to the Approved Project. The new lighting would be generally similar to existing lighting on site and would not generate a new source of substantial glare adversely affecting nighttime views. The Modified Project proposes a new private park in Phase 2 of the project next to the renovated building area proposed in Phase 2. The private park would close at 10 PM; and no light-sensitive uses are near the private park; thus, outdoor lighting in the private park would not adversely affect nighttime views in the area.

As with the Approved Project, the exteriors of new and reused buildings would consist of low-glare materials and would not substantially impact daytime views. No new significant impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; and (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the aesthetics analysis provided in the IS/MND are required.

Mitigation Program

No mitigation for aesthetics impacts was required in the 2017 IS/MND.

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 SUMMARY OF PREVIOUS ENVIRONMENTAL ANALYSIS

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

As discussed in the IS/MND for the Approved Project, no areas within the City contain land designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. It was determined that the project site is not used for agricultural purposes and is not under Williamson Act contract. Further, the IS/MND stated that areas existed in the vicinity of the project site that were used for agricultural purposes at the time the analysis was prepared; however, it was determined that the Approved Project actions would not convert these areas to non-agricultural use. Therefore, no impacts would occur and no mitigation is required. According to the GP FEIR, no forest lands or timberlands are within the City or in the vicinity of the project site. Therefore, the Approved Project would have no impact to forest lands or timberlands, and no mitigation was identified.

4.2.2 PROJECT ENVIRONMENTAL REVIEW

Would the project:

a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No Substantial Change from Previous Analysis. Consistent with the Approved Project, the Modified Project site is mapped as Urban and Built-Up Land, not as farmland, on the California Important Farmland Finder maintained by the Division of Land Resource Protection (DLRP 2019). The site is mostly developed with vacant industrial use, the balance of the site is bare land, and the site is not in agricultural use. Therefore, as with the Approved Project, the Modified Project would not convert farmland to non-agricultural use. No new impact would occur.

b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

No Substantial Change from Previous Analysis. The Modified Project site is zoned Planned Development Commercial (PDC)and is not zoned for agricultural use. The Modified Project site is not subject to a Williamson Act contract. Therefore, consistent with the Approved Project, the Modified Project would not conflict with existing agricultural zoning or a Williamson Act. No new impact would occur.

c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in *Public Resources Code* section 12220(g)), timberland (as defined in *Public Resources Code* section 4526), or timberland zoned Timberland Production (as defined by *Government Code* section 51104(g))?**

No Substantial Change from Previous Analysis. The Modified Project site is not zoned for forest land, timberland, or timberland production. Therefore, consistent with the Approved Project, the Modified Project would not conflict with such zoning, and no new impact would occur.

d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

No Substantial Change from Previous Analysis. The Modified Project site is not cultivated for forest resources. The trees on site are ornamental landscape trees and are not grown for forest resources. Consistent with the Approved Project, a significant impact would not occur and no new impact would occur.

e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No Substantial Change from Previous Analysis. The nearest mapped farmland to the site is about 460 feet east of the south end of the project site (DLRP 2019), which exists as one of a few small islands of farmland in a large urbanized region. The Modified Project site is currently developed with vacant industrial buildings. Reuse of most of the existing buildings and construction of some office space on site would not indirectly cause conversion of farmland to non-agricultural use, and no new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the agriculture and forestry resources analysis provided in the IS/MND are required.

Mitigation Program

No mitigation for agricultural and forestry resources impacts was required in the 2017 IS/MND.

4.3 AIR QUALITY

4.3.1 SUMMARY OF PREVIOUS ENVIRONMENTAL ANALYSIS

Preliminary Master Plan for Former LA Times Site Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND for the Approved Project determined that construction and operation of the Approved Project would not have generated emissions exceeding South Coast Air Quality Management District (SCAQMD) project significance thresholds. Although there would be an increase in trips with the Approved Project compared to the previous Industrial Park designation of which the SCAQMD's 2016 AQMP was based, the Approved Project emissions would be less than half of the SCAQMD's thresholds. Thus, the IS/MND concluded that the Approved Project would not have conflicted with SCAQMD's 2016 Air Quality Management Plan.

The IS/MND concluded that emissions from Approved Project construction would not have exceeded SCAQMD regional construction emission significance thresholds or localized construction emission significance thresholds, and thus Approved Project construction emissions impacts would have been less than significant.

The IS/MND identified that total operational emissions from area, energy, and mobile sources would not have exceeded SCAQMD significance thresholds and that Approved Project operational emissions impacts would have been less than significant.

The IS/MND determined that Approved Project construction and operation would not expose persons to substantial concentrations of criteria pollutants, toxic air contaminants, or carbon monoxide hotspots, and that Approved Project impacts regarding exposure of persons to substantial pollutant concentrations would have been less than significant.

4.3.2 PROJECT ENVIRONMENTAL REVIEW

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Substantial Change from Previous Analysis. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. It is directly responsible for reducing emissions from stationary (area and point), and indirect sources and has prepared an Air Quality Management Plan (AQMP) that establishes a program of rules and regulations directed at attaining the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

The SCAQMD adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2017). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the SCAQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

In order to be consistent with the AQMP, the following analysis compares the Modified Project's construction and operational emissions with the SCAQMD CEQA air quality significance thresholds. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The SCAQMD has developed construction and operations thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards. The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The City uses the current SCAQMD thresholds to determine whether a Modified Project would have a significant impact. These SCAQMD thresholds are identified in Table 3, South Coast Air Quality Management District Air Quality Significance Thresholds.

TABLE 3
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds (lbs/day)		
Pollutant	**Construction**	**Operation**
VOC	75	55
NOx	100	55
CO	550	550
PM10	150	150
PM2.5	55	55
SOx	150	150
Lead	3	3

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SOx: sulfur oxides.

Source: SCAQMD 2019.

Air pollutant emissions for the Modified Project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (CAPCOA 2017). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and county-specific information. For air quality modeling purposes, construction of the Project was based on the Modified Project's construction assumptions and default assumptions derived from CalEEMod.

Construction Emissions

Air pollutant emissions would occur from: construction equipment exhaust; fugitive dust from demolition, site preparation, and grading; exhaust and particulate emissions from trucks hauling demolition and construction debris, soil, and building materials to and from the Project site; from automobiles and light trucks driven to and from the Project site by construction workers; and VOCs from painting and asphalt paving operations. The model also includes dust-control measures in accordance with the requirements of SCAQMD Rule 403, Fugitive Dust. As shown in Table 4, Estimated Maximum Daily Construction Emissions, all Modified Project construction emissions would be less than SCAQMD thresholds. It is also noted that the analysis includes Phases 1,2, and 3 of the Modified Project. Model details are included in Appendix A. Estimated construction emissions are shown in Table 4.

TABLE 4
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS
(LBS/DAY)

Year of Construction	VOC	NOx	CO	PM10	PM2.5
2019	4	36	25	4	2
2020	24	63	47	5	3
2021	21	12	11	1	1
2022	2	18	14	1	1
2023	25	6	7	1	<1
Maximum	**25**	**63**	**47**	**5**	**3**
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*55*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

ROG: reactive organic gases; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District.

Source: CalEEMod and architectural coating data in Appendix A.

As shown in Table 4, construction emissions would be less than the applicable significance thresholds.

Construction Emissions – Local/Ambient Air Quality

The localized effects from the on-site portion of daily emissions were evaluated at receptor locations potentially impacted by the project according to the SCAQMD's localized significance threshold (LST) method, which utilizes on-site emissions rate look up tables and project-specific modeling, where appropriate. LSTs are applicable to the following criteria pollutants: NO_2, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest receptor; all receptors are considered, not just the sensitive receptors described above. For the LST of CO and NO_2 exposure analysis, receptors who could be exposed for one hour or more are considered. For initial demolition and construction, the commercial building south of the western portion of the site is considered. For later construction phases, the existing uses on the project site have been considered for CO and NO_2 analyses. For PM10 and PM2.5 exposure analysis, receptors who could be exposed for 24-hours are considered. Residences 200 meters east of the Project site were considered for PM10 and PM 2.5 analyses. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres, which means this is the appropriate method for the project. LST analyses for the Project site are shown in Table 5. For a conservative air quality analysis, total maximum peak daily on-site and off-site emissions are provided, even though the SCAQMD only calls for on-site emissions to the closest sensitive land uses. This conservative approach was taken to account for overlapping construction phases. As shown in Table 5, localized emissions for all criteria pollutants would be less than their respective SCAQMD LST significance thresholds for all pollutants.

TABLE 5
MAXIMUM LOCALIZED CONSTRUCTION POLLUTANT EMISSIONS
(LBS/DAY)

Maximum Daily Emissions	**NOx**	**CO**	**PM10**	**PM2.5**
2019	36	25	4	2
2020	63	47	5	3
2021	12	11	1	1
2022	18	14	1	1
2023	6	7	1	<1
Maximum Peak Day Emissions	**63**	**47**	**5**	**3**
SCAQMD LSTs*	112	805	58	24
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District; LST: Local Significance Threshold.

* Thresholds for Source Receptor Area 18, North Coastal Orange County, 1.5-acre site, 25-meter receptor distance for NOx and CO, 200-meter receptor distance for PM10 and PM2.5

Source: SCAQMD 2009.

Operational Emissions

Operational emissions are composed of area, energy, and mobile (i.e., vehicle) source emissions. Emissions were calculated with CalEEMod for the assumed Project buildout of the totality of uses for Phases 1, 2, and 3. The primary source of operational criteria pollutant emissions from the Modified Project would be vehicles used by Project employees, customers, and vendors. The Modified Project's mobile source emissions are based on the Project-related trip generation rate, as contained in the Project's traffic analysis for full development in 2023 (LLG 2020). Estimated peak daily operational emissions are shown in Table 6.

As presented in Table 6, operational emissions generated by the Modified Project would be below the SCAQMD regional thresholds of significance.

TABLE 6
PEAK DAILY OPERATIONAL EMISSIONS

Emissions Source	**Emissions (lbs/day)**				
	VOC	**NOx**	**CO**	**PM10**	**PM2.5**
Area sources	12	<1	<1	<1	<1
Energy sources	<1	4	4	<1	<1
Mobile sources	11	16	130	48	13
Total Operational Emissions	**23**	**20**	**134**	**48**	**13**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*55*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District.

Totals may not add due to rounding.

Notes: Emissions are the higher of summer or winter seasons.
SOx and lead emissions are not shown; these emissions would be negligible for the Project.
CalEEMod model data sheets are included in Appendix A.

Combined Construction and Operational Emissions during Development

During Project development, Phase 1 of the Project could potentially be occupied while construction continues Phase 2, for a possible overlap of three months of concurrent construction and operations. Additionally, Phase 1 and 2 could potentially be occupied during construction of Phase 3. In accordance with recent SCAQMD recommendations, a calculation of combined construction and operational emissions is provided for informational purposes. For the purposes of providing a conservative air quality analysis, the peak daily emissions from Phase 2 construction are combined with the operational emissions calculated for Phase 1. Additionally, Peak daily emissions of Phase 3 construction emissions are combined with operational emissions of Phases 1 and 2. These emissions for the interim conditions prior to full project build-out are compared to the SCAQMD's operational thresholds in Table 7.

TABLE 7
ESTIMATED MID-PROJECT COMBINED EMISSIONS

Source	Emissions (lbs/day)				
	VOC	NOx	CO	PM10	PM2.5
Phase 1 Operational Emissions	13	10	68	23	6
Phase 2 Peak Day Construction Emissions	5	25	15	2	1
Combined Operations and Construction Emissions	**17**	**34**	**83**	**25**	**7**
SCAQMD Operations Significance Thresholds	**55**	**55**	**550**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**
Phases 1 and 2 Operational Emissions	21	21	131	41	11
Phase 3 Peak Day Construction Emissions	25	18	14	1	1
Combined Operations and Construction Emissions	**46**	**39**	**145**	**42**	**12**
SCAQMD Operations Significance Thresholds	**55**	**55**	**550**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less.

Note: Totals may not add due to rounding.

Sources: SCAQMD 2019 (thresholds). Emissions calculations can be found in Appendix A.

As shown in Table 7, combined construction and operations emissions would not exceed the operational emissions thresholds established by the SCAQMD. The finding of less than significant impacts for the combined construction and operations phases are consistent with the finding of significant impacts for emissions occurring for solely for the operations phase of the Modified Project.

With respect to criterion 1, the analysis above and the response to threshold "b" of this Section, construction and operational direct and cumulative emissions would not exceed applicable SCAQMD air quality thresholds. Therefore, the Modified Project would not increase the frequency or severity of an air quality standards violation or cause a new violation, and the impact would be less than significant, which is consistent with the findings of the Approved Project.

With respect to criterion 2, the Project site's General Plan designation was Industrial Park prior to adoption of the 2015-2035 General Plan, which changed the designation to Commercial Center. The assumptions for the 2016 AQMP are based on the prior Industrial Park designation.

Commercial land uses generate more vehicle trips than industrial land uses of the same size. Therefore, the Modified Project is not consistent with the growth assumptions for the 2016 AQMP. However, as shown above, the net increase in long-term emissions would be less than half of the SCAQMD's project significance thresholds. Therefore, the increase is not considered considerable, nor does it constitute a conflict with the 2016 AQMP. There would be no substantial change from the previous analysis. No new impact would occur.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

No Substantial Change from Previous Analysis. The region is a nonattainment area for PM10, PM2.5, and O_3. SCAQMD's policy with respect to cumulative impacts associated with the above referenced pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant (SCAQMD 2003). Therefore, the Modified Project's long-term operational emissions of the nonattainment pollutants would be cumulatively less than significant.

As discussed in response to threshold "a", short-term construction emissions would be less than the SCAQMD's thresholds of significance. Therefore, consistent with SCAQMD policy, the cumulative construction impact of nonattainment pollutants would be less than significant. As shown in Table 6, Project long-term operational emissions of PM10, PM2.5, and the O_3 precursors (VOC and NO_x) would be less than the SCAQMD's operational thresholds. Therefore, the Modified Project's long-term operational emissions of the nonattainment pollutants would be cumulatively less than significant, consistent with the findings of the Approved Project. No new impact would occur.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Substantial Change from Previous Analysis.

Concentrations of Criteria Pollutants

Exposure of persons to construction period NO_2, CO, PM10, and PM2.5 emissions is discussed in response to Threshold "a" above for the construction phases of the Project. There would be no significant impacts, and no mitigation is required. There would be no notable operational criteria pollutant sources that could expose sensitive receptors to substantial criteria pollutant concentrations. No new impact would occur.

Toxic Air Contaminants

The majority of health risk from toxic emission sources within the SoCAB is from diesel particulate matter and pollutants associated with industrial uses. The proposed office and commercial uses would not involve emission sources that would generate substantial levels of toxic emissions due to a lack of emission sources that emit toxic air contaminants. The Modified Project would likewise not develop industrial uses nor would it place sensitive receptors near industrial uses. The impact would be less than significant, consistent with the Approved Project. No new impact would occur.

Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate state and federal CO standards at intersections, even if the broader Basin is

in attainment for federal and state levels. The *City of Costa Mesa Year 2015 - 2035 General Plan EIR* states, "Pursuant to existing regulations, future development projects associated with buildout of the proposed General Plan will be screened and analyzed pursuant to the CO Protocol to determine if a CO hotspot may occur at congested intersections." The California Department of Transportation *Project-Level Carbon Monoxide Protocol* (CO Protocol) indicates that there is a potential impact if a project worsens traffic at intersections operating at level of service (LOS) E or F (UCD ITS 1997). The Project traffic analysis forecasts that no intersections would operate at LOS E or F in the existing plus Project full-buildout scenario (including Phases 1, 2, and 3) (LLG 2020). As such, there would be no potential for a CO hotspot and the impact would be less than significant. No new impact would occur.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Substantial Change from Previous Analysis.

During construction, the Modified Project would require the use of equipment that may generate odors. Potential construction odors would result from on-site construction equipment's diesel exhaust emissions, roofing, or paving operations. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. The generation of these emissions would not rise to the order of a public nuisance. Construction odors would be considered less than significant. Furthermore, according to the SCAQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Modified Project does not include any uses identified by the SCAQMD as being associated with odors and, therefore, would not produce objectionable odors. The Project uses are also regulated from nuisance odors or other objectionable emissions by SCAQMD Rule 402. Rule 402 prohibits any the discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. As such, the Modified Project would have a less than significant impact with regard to other emissions which may adversely affect a substantial number of people. No mitigation is required. No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the Approved Project. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the Project is undertaken; and (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the air quality analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for air quality impacts.

4.4 BIOLOGICAL RESOURCES

4.4.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND for the Approved Project identified that the project site is located within an urban area and is fully developed. The IS/MND concluded, based on a review of the site's existing conditions and according to the GP FEIR, that the site did not contain habitat which would support candidate, sensitive, or special status (i.e., threatened or endangered) species. Additionally, it was determined that the site does not support any riparian habitat, wetlands, or other sensitive natural community. The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Additionally, the site does not support native wildlife and does not serve as a native wildlife nursery site. Therefore, the IS/MND concluded that the Approved Project would not result in a significant impact related to biological resources. No impacts would occur, and no mitigation was identified.

4.4.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

No Substantial Change from Previous Analysis. Since 2017, nearly the entire site other than the former LA Times building, including the baseball field, has been cleared and graded and is bare land. No native habitat or other habitat suitable for sensitive species is present on site; therefore, consistent with the Approved Project, development of the Modified Project would not have a substantial effect on a candidate, sensitive, or special status species and no new impact would occur.

b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

No Substantial Change from Previous Analysis. Based on a site visit, the Modified Project site contains vacant buildings and cleared land. no riparian habitat (that is, habitat occurring along the banks of rivers and streams) or sensitive natural community are present on site. The nearest riparian habitat to the Modified Project Site mapped on the National Wetlands Mapper maintained by the U.S. Fish and Wildlife Service is the Greenville-Banning Channel about 630 feet south of the site (USFWS 2019). Consistent with the Approved Project, the Modified Project would not result in an adverse effect on riparian habitat or other sensitive natural community. No new impact would occur.

c) **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Substantial Change from Previous Analysis. The Modified Project site contains vacant buildings and cleared land. As with the findings of the 2017 IS/MND, no State- or federally protected wetlands are present on site, and no new impact to wetlands would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Substantial Change from Previous Analysis. The Modified Project site consists of a construction site encompassing the former LA Times building property and bare land. The project site is fenced and located in a built-out urban region and thus is unsuitable for overland wildlife movement. As identified in the IS/MND for the Approved Project, the site does not contain suitable habitat for burrowing owl (*Athene cunicularia*), and Modified Project development would not trigger the requirement for a focused survey for burrowing owl set forth in City of Costa Mesa GP FEIR Mitigation Measure 4.3.A-1. No new impact would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Substantial Change from Previous Analysis. City of Costa Mesa Municipal Code Section 15-132 protects trees on City property during construction, and Section 15-138 protects landmark trees designated by the City Parks, Recreation Facilities and Parkways Commission pursuant to voluntary applications by property owners. Consistent with the Approved Project, Modified Project construction would protect City parkway trees on Sunflower Avenue, South Coast Drive, and Harbor Boulevard in accordance with Section 15-132. No landmark trees are present on site. No new impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Substantial Change from Previous Analysis. The project site is outside the Plan area of the Orange County Central-Coastal Natural Community Conservation Plan (NCCP). Consistent with the Approved Project, Modified Project development would not conflict with the NCCP, and no new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the biological resources analysis provided in the IS/MND are required.

Mitigation Program

No mitigation for biological resources impacts was required in the 2017 IS/MND.

4.5 CULTURAL RESOURCES

4.5.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

According to the IS/MND prepared for the Approved Project, the project site does not contain any known historically significant resources (Costa Mesa 2016a, 2016b), and no other historic resources were identified that would be impacted by the development of the Modified Project. Therefore, no impacts to historic resources were identified, and no mitigation was required.

The IS/MND determined that Due to the location of the project site in a developed, urban area that has been subjected to previous disturbance, the potential for discovery of archaeological resources or disturbances of human resources is low. However, grading and excavation activities related to the development of the Modified Project have the potential to result in the disturbance of undiscovered archaeological resources, thereby resulting in a potentially significant impact. Potential effects to unknown resources would be reduced to less than significant levels through the implementation of **MM CULT-1**.

The IS/MND concluded that no known formal cemeteries are present on the project site; but identified some potential for encountering undiscovered human remains during development activities. The IS/MND concluded that compliance with Section 7050.5 of the *California Health and Safety Code* and Section 5097.98 of the *California Public Resources Code*, which require the County Coroner to be notified immediately if any human remains are encountered, would reduce potential impacts to less than significant levels. No mitigation is required.

Pursuant to Assembly Bill (AB) 52, during preparation of the IS/MND, the City contacted 14 Native American Tribes regarding the Approved Project. One tribe, the Gabrielino Band of Mission Indians – Kizh Nation, responded and requested consultation. In their response letter, the Tribe requested that a Certified Native American Monitor be present during any and all ground disturbance in an effort to protect any cultural resources that may be affected. The IS/MND concluded that project grading and excavation activities could result in the disturbance of undiscovered Tribal Cultural Resources; and that potential effects to unknown resources would be reduced to less than significant levels through the implementation of **MM CULT-1**.

4.5.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) **Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?**

No Substantial Change from Previous Analysis. No historic resources on or next to the project site were identified in the City of Costa Mesa General Plan and GP FEIR, as stated in the IS/MND for the Approved Project. Additionally, the IS/MND identified the nearest resources eligible for listing on the National Register of Historic Places (NRHP) and/or the City's Local Register of Historic Places as the Segerstrom House and Segerstrom Barn, both about 0.5 mile southeast of the project site and which are both eligible for listing on the NRHP. Modified Project development would not diminish the historical significance of those resources. Consistent with the previous IS/MND for the Approved Project, the project site is shown as farmland in historical aerial photographs dated 1953 and 1963 (NETR.com 2019); therefore, Modified Project development

would not degrade the significance of a historical resource, and no new significant impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

No Substantial Change from Previous Analysis. The Approved Project included a planned five-story office building on the sites of the existing Sunflower and Connector buildings in the north part of the project site; that planned building is omitted from the Modified Project. Thus, the Modified Project would involve less grading than previous evaluated for the Approved Project. Potential impacts of the Modified Project to buried archaeological resources would be reduced due to the smaller grading footprint compared to impacts of the Approved Project. However, potential impacts of the Modified Project to archaeological resources would remain potentially significant. Mitigation Measure CULT-1 from the IS/MND is incorporated into this Addendum; impacts of the Modified Project would be less than significant after implementation of Mitigation Measure CULT-1. No new impact would occur.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Substantial Change from Previous Analysis. As explained in response to threshold "b", the Modified Project would involve somewhat less disturbance of previously undisturbed soil than the Approved Project would have. Thus, the potential for disturbance of human remains by Modified Project development is somewhat reduced compared to the Approved Project. The Modified Project would comply with the same State laws governing accidental discoveries of human remains identified in the IS/MND, and no new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact and it would not create a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the cultural resources analysis provided in the IS/MND are required.

Mitigation Program

The mitigation program for the IS/MND for the former LA Times Site includes measures to reduce potential impacts associated with the Preliminary Master Plan for the former LA Times Site project to less than significant levels. The following measure from the IS/MND would also be applicable to the Modified Project.

MM CULT-1 Prior to approval of each grading plan, the Property Owner/Developer shall submit a letter to the Development Services Department, Planning Division, which identifies the Archaeologist who has been hired to ensure that the following actions are implemented:

a. All on-site demolition, excavation, and grading activities shall be monitored by a qualified Archaeologist and Certified Native American Monitor. The Archaeologist must be present at the pre-grading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of artifacts if potentially significant artifacts are uncovered. If artifacts are uncovered and determined to be significant, the archaeological monitor shall determine appropriate actions in cooperation with the Property Owner/Developer and Certified Native American Monitor for exploration and/or salvage.

b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.

c. Any archaeological work at the site shall be conducted under the direction of the certified Archaeologist. If any artifacts are discovered during grading operations when the archaeological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.

d. A final report detailing the findings and disposition of the specimens shall be submitted to the City Engineer. Upon completion of the grading, the Archaeologist shall notify the City as to when the final report will be submitted.

4.6 ENERGY

4.6.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND noted that the proposed new and renovated buildings under the Approved Project would be designed to achieve a minimum of Leadership in Energy and Environmental Design (LEED) Silver certification.[2] Project construction and operation would also comply with the 2016 *California Green Building Code* (CALGreen; *California Code of Regulations* Title 24 Part 11). The Greenhouse Gas Emissions (GHG) section of the IS/MND concluded that the GHG efficiency of project operations, measured in metric tons of carbon dioxide (CO_2) equivalent per service population per year ($MTCO_2e$/SP/year), would be 3.69 $MTCO_2e$/SP/year, less than the South Coast Air Quality Management District's (SCAQMD's) recommended project-level significance threshold of 4.56. Approved Project development would not have involved wasteful or inefficient energy consumption and would not have conflicted with State or local plans for renewable energy or energy efficiency.

[2] LEED certifications for Building Design & Construction apply to new construction and major renovations.

4.6.2 PROJECT ENVIRONMENTAL REVIEW

Would the project:

a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? and**

b) **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Building Energy Use

Consistent with the analysis in the IS/MND, the proposed new and renovated buildings would be designed to achieve a minimum LEED Silver certification. The buildings would also comply with the 2019 CALGreen, which took effect on January 1, 2020. With achievement of LEED Silver or higher rating and compliance with the 2019 CALGreen, the Modified Project would not involve wasteful, inefficient, or unnecessary energy consumption.

The Modified Project is reduced by 60,282 SF, or approximately 11 percent, compared to the total 565,159 SF for the Approved Project. Operational energy use by the Modified Project is expected to be reduced compared to that for the Approved Project due to the reduced project size as well as the improvements in energy efficiency associated with the 2019 CALGreen code.

Appliance Energy Use

Appliances installed in the Modified Project would be required to meet California appliance energy efficiency standards set forth in California Code of Regulations (CCR) Title 20 Parts 1600-1608; and in the 2019 CALGreen (which took effect on January 1, 2020). Appliances in the Approved Project would have been required to meet efficiency standards in CCR Title 20 and in the 2016 CALGreen. Modified Project development would not reduce appliance energy efficiency compared to Approved Project development.

Transportation Energy Use

Operational trip generation for the Modified Project is increased by 2,068 daily trips compared to the Approved Project (see Table 8 below).[3] The increase is due to the substitution of retail, restaurant, entertainment, and event uses in Phase 2 of the Modified Project for office uses in Phase 2 of the Approved Project; the land uses in Phase 2 of the Modified Project generate far greater numbers of trips per thousand SF than do the office uses that were proposed in the Approved Project. Vehicles used during operation of the Modified Project would still meet the same federal Corporate Average Fuel Economy (CAFÉ) standards that vehicles used during operation of the Approved Project would have. Thus, Modified Project development would not adversely affect transportation energy efficiency per vehicle trip compared to the Approved Project. To the contrary, the Modified Project is estimated to result in internal capture of 587 trips per day; that is, trips avoided due to people using multiple land uses onsite (for instance, workers at onsite offices using a restaurant or drinking place onsite) rather than making vehicle trips offsite. Internal capture for the Modified Project is reflected in the trip generation estimates for the Modified Project below in Table 8.

[3] A more detailed estimate of Modified Project trip generation is provided in Section 4.17, *Transportation*, of this Addendum.

Changes to a project could reduce transportation energy efficiency by inducing a greater proportion of project-generated trips to be made by automobile rather than by public transportation, bicycling, and walking. For example, changes to a project in a remote area where that blocked or impeded the use of public transit, bicycle facilities, and sidewalks were not available would be expected to generate a greater number of automobile trips as a proportion of total trips than would a project in an area with plentiful public transit, bicycle facilities, and sidewalks. The Modified Project does not propose changes to the project that would induce a shift from public transit, bicycling, and walking to automobile travel. The same public transit services, bicycle facilities, and sidewalks that were in place when the IS/MND was adopted in 2017 are still in place with such effects; see Section 4.17, *Transportation*, of this Addendum for further analysis of project impacts to alternative transportation. Modified Project plans include electric vehicle charging stations which would contribute to efficient use of energy for project-generated trips. The Modified Project is comparable to the majority of development in southern California in that most workers and customers would travel to and from the development by car. Thus, while the Modified Project would increase Project trip generation, the increased transportation energy use would not be wasteful, inefficient, or unnecessary.

TABLE 8
ESTIMATED TRIP GENERATION SUMMARY, MODIFIED PROJECT COMPARED TO APPROVED PROJECT

Phase	Modified Project	Approved Project	Difference, Modified Project less Approved Project
Phase 1	3,376	3,750	-374
Phase 2	4,869	2,096	2,773
Phase 3	1,048	1,379	-331
Total	**9,293**	**7,225**	**2,068**
Sources: Linscott, Law, & Greenspan 2020; Stantec 2017.			

Construction Energy Use

The construction effort for the Modified Project is also reduced compared to the corresponding phases of the Approved Project because, 1, the proposed new building construction is reduced from 315,000 SF to 201,645 SF, a reduction of approximately 36 percent; and, 2, all proposed parking for Phases 1 and 2 of the Modified Project would be surface parking compared to two proposed parking structures for the Approved Project. Phases 1 and 2 of the Modified Project would include construction of 1,414 surface parking spaces. Phases 1 and 2 of the Approved Project would have included construction of 1,974 parking spaces in parking structures plus 307 surface parking spaces, for a total of 2,281 spaces which are 867 spaces more than Phases 1 and 2 of the Modified Project. Construction of parking structures uses more construction materials and construction equipment hours per parking space than construction of a surface parking lot does. Thus, the Modified Project would result in less construction related energy than the Approved Project.

No new or increased impact would occur; no mitigation is required; and no subsequent analysis is needed.

Conclusion

In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. Because the Project would not result in significant impacts related to energy use, no new information of substantial importance is provided related to new significant impacts.

Mitigation Program

Potential impacts related to energy use was not evaluated previously in the IS/MND. Less than significant energy related impacts were found for the Modified Project. As such, no mitigation measures are required or recommended.

4.7 GEOLOGY AND SOILS

4.7.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND determined that the Approved Project would not subject people or structures to risks from surface rupture of a known active fault. The IS/MND concluded that several active faults are present in the project region, and thus strong ground shaking is likely in the design lifetime of the proposed buildings and that hazards from ground shaking would be less than significant after compliance with the adopted *California Building Code* (CBC) seismic safety requirements. The IS/MND determined that Approved Project development would not cause substantial hazards arising from liquefaction after compliance with CBC requirements and City of Costa Mesa General Plan policies.

The IS/MND concluded that soil erosion impacts of Approved Project development would be less than significant because the Approved Project would not leave areas of bare land vulnerable to erosion and because the Approved Project would comply with regulatory requirements minimizing soil erosion during project construction and operation.

The IS/MND determined that Approved Project development would not cause hazards arising from unstable soils or expansive soils after compliance with CBC requirements and City of Costa Mesa Genera Plan policies and that impacts would be less than significant.

The IS/MND concluded that, while the majority of the project site has previously been disturbed, paleontological resources may possibly be buried in site soils; and that impacts to paleontological resources would be reduced to less than significant levels through the implementation of **MM CULT-2**.

4.7.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) Directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction? and

iv) Landslides?

The geotechnical investigation report for the Approved Project comprehensively analyzed seismic risks and nothing has changed related to local geologic conditions or impacts related seismic hazards, including rupture of a known earthquake fault, strong seismic ground shaking, liquefaction, and landslides. The Modified Project site is still in an area that may be subject to strong ground shaking due to seismic activity anticipated in the region; however, the Modified Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active fault is mapped in or next to the site. Construction on the site has historically been conducted consistent with City and State codes. The geotechnical investigation for the Approved Project calculated seismic design parameters pursuant to the 2016 CBC.

Consistent with the IS/MND for the Approved Project, the project applicant would comply with all recommendations identified in any future geotechnical investigation report, potentially prepared to support the Modified Project building plans.

All future development associated with the Modified Project would comply with applicable City and State codes; therefore, impacts related to exposure of people or structures to seismic-related hazards would be the same for the Modified Project. The Modified Project would not create a new significant impact, nor would it create a substantial increase in the severity of previously identified effects.

The project site is in a liquefaction hazard zone mapped by the California Geological Survey (CGS 2019). The geotechnical investigation report for the Approved Project included a liquefaction analysis and provided recommendations for foundation design to minimize hazards from liquefaction, pursuant to the Seismic Hazards Mapping Act, California Public Resources Code Sections 2690 et seq. The designs of the proposed new buildings under the Modified Project would comply with recommendations for foundation design in the geotechnical investigation report prepared for the Approved Project. Liquefaction hazards would be less than significant after compliance with such recommendations, and no new significant impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

No Substantial Change from Previous Analysis. Modified Project development would involve less ground disturbance than Approved Project due to the reduced development footprint.

The Stormwater Pollution Prevention Plan (SWPPP) for the Approved Project would be revised for the Modified Project reflecting the revised ground disturbance area. Construction of the Modified Project would involve implementation of erosion control and sediment control Best

Management Practices (BMPs), consistent with the Approved Project. Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. Modified Project erosion impacts would be less than significant after implementation of BMPs, and no new significant impact would occur.

Consistent with the Approved Project, the Modified Project would develop the entire site with buildings, pavement, and landscaping. No substantial area of exposed soil vulnerable to erosion would remain, and no substantial erosion impact would occur.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Substantial Change from Previous Analysis. No new liquefaction or landslide impacts would occur, as substantiated above in Sections 4.7.2.a.iii and 4.7.2.a.iv. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. Compliance with recommendations in the Approved Project geotechnical investigation report for foundation design would minimize hazards arising from lateral spreading.

Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. The project site is in an area of ground subsidence mapped by the U.S. Geological Survey (USGS 2019). The project site is over the Main Orange County Groundwater Basin (Basin). Groundwater levels in the Basin are managed by the Orange County Water District (OCWD) within a safe operating range to prevent permanent and significant adverse impacts of groundwater withdrawal, pursuant to State law. Thus, there is little potential for widespread permanent, irreversible subsidence within OCWD's jurisdictional area (OCWD 2015). Modified Project development would not cause soil instability due to ground subsidence, and no new impact would occur.

Collapsible Soils

The proposed building and parking structure in Phase 3 of the Modified Project would be built in the project site parcel consisting of bare land, which is the same parcel where the proposed building and parking structure in Phase 3 of the Approved Project would have been constructed. As with the Approved Project, the Project Applicant would obtain any needed updates to the geotechnical investigation report, such as recommendations to minimize hazards from collapsible soils consistent with CBC standards and other regulations (such as for remedial grading and foundation design), before the City of Costa Mesa would issue a building permit for the proposed buildings and parking structure in the Modified Project. Modified Project development would not cause substantial hazards arising from collapsible soils, and no new impact would occur.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Substantial Change from Previous Analysis. Expansive soils contain substantial amounts of clay that swells when wetted and shrinks when dried; the swelling or shrinking can shift, crack, or break structures built on such soils. The geotechnical investigation report for the Approved Project assessed expansion potential of site soils and provided recommendations as needed for remedial grading, soil moistening before and after construction, and foundation design. Consistent with the IS/MND for the Approved Project, the project applicant would comply with all recommendations identified in any future geotechnical investigation report, potentially prepared

to support the Modified Project building plans. Modified Project development would not cause substantial hazards arising from expansive soils, and no new impact would occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Substantial Change from Previous Analysis. The Modified Project would include installation of sewer laterals connecting to existing sewer mains next to the project site and would not use septic tanks. Consistent with the IS/MND for the Approved Project, the Modified Project would not result in impacts related to soils incapable of supporting septic tanks or alternative wastewater disposal systems. No new impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Substantial Change from Previous Analysis. As discussed previously, the Modified Project involves less ground disturbance than the Approved Project. Thus, the Modified Project would have a reduced potential to damage fossils than the Approved Project. Modified Project impacts to fossils would remain potentially significant, consistent with the finding of the IS/MND. Implementation of Mitigation Measure CULT-2 from the Mitigation Monitoring, and Reporting Program (MMRP) for the IS/MND would reduce impacts to paleontological resources to less than significant. Therefore, no new significant impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact, nor would it create a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the geology and soils analysis provided in the IS/MND are required.

Mitigation Program

The mitigation program for the IS/MND for the former LA Times Site includes measures to reduce potential impacts associated with the Preliminary Master Plan for the former LA Times Site project to less than significant levels. The following measure from the IS/MND would also apply to the Modified Project.

MM CULT-2 Prior to approval of each grading plan, the Property Owner/Developer shall submit a letter to the Development Services Department, Planning Division, identifying the Paleontologist that has been hired to ensure that the following actions are implemented:

a. Site excavation and grading that would disturb soils at a depth of 5 feet or more and in areas deemed sensitive by the Paleontologist shall be monitored by a qualified Paleontologist. The Paleontologist must be

present at the pre-grading conference in order to establish procedures to temporarily halt or redirect work to permit the sampling, identification, and evaluation of fossils if potentially significant paleontological resources are uncovered. If artifacts are uncovered and found to be significant, the paleontological monitor shall determine appropriate actions in cooperation with the Property Owner/Developer for exploration and/or salvage.

b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.

c. Any paleontological work at the site shall be conducted under the direction of the certified Paleontologist. If any fossils are discovered during grading operations when the paleontological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.

d. A final report detailing the findings and disposition of the specimens shall be submitted. Upon completion of the grading, the Paleontologist shall notify the City as to when the final report will be submitted.

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17--30) Initial Study/Mitigated Negative Declaration

The IS/MND concluded that Approved Project greenhouse gas (GHG) emissions would be below the SCAQMD's project-level significance threshold of 4.56 metric tons of CO_2 equivalent per service population per year and would thus be less than significant. The IS/MND also determined that the Approved Project would comply with plans, policies, and regulations intended to reduce GHG emissions.

4.8.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

No Substantial Change from Previous Analysis. Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. The Working Group was scheduled to meet once per month. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of CO_2 equivalent per year ($MTCO_2e$/year) for industrial projects where the SCAQMD is the lead agency. The policy objective for establishing this significance threshold is to capture projects that represent approximately 90 percent of GHG emissions from new sources and to avoid Environmental Impact Report (EIR)-level analysis for relatively small impacts (SCAQMD 2008).

In September 2010, the Working Group proposed extending the 10,000 $MTCO_2e$/year screening threshold currently applicable to industrial projects where the SCAQMD is the lead agency, described above, to other lead agency industrial projects. For all other projects, SCAQMD staff proposed a multiple tier analysis to determine the appropriate threshold to be used. The draft proposal suggests the following tiers: Tier 1 is any applicable CEQA exemptions, Tier 2 is consistency with a GHG reduction plan, Tier 3 is a screening value or bright-line, Tier 4 is a

performance-based standard, and Tier 5 is GHG mitigation offsets.[4] According to the presentation given at the September 28, 2010, Working Group meeting, SCAQMD staff proposed a Tier 3 draft threshold of 1,400 to 3,500 $MTCO_2e$/year depending on whether the project was commercial, mixed use, or residential. For the Tier 4 draft threshold, SCAQMD staff presented a percent emission reduction target option but did not provide any specific recommendation for a numerical target; instead, it referenced the San Joaquin Valley Air Pollution Control District (SJVAPCD) approach. The percent reduction target is based on consistency with AB 32 as it was based on the same numeric reductions calculated in the Scoping Plan to reach 1990 levels by 2020. The second Tier 4 option is to utilize efficiency targets: 2020 targets are 4.8 $MTCO_2e$/year per service population (SP) for project-level thresholds where SP is project residents plus employees and 6.6 $MTCO_2e$/year per SP for a plan-level threshold (SCAQMD 2010). Targets for 2035 are 3.0 $MTCO_2e$/year per SP for project-level thresholds and 4.1 $MTCO_2e$/year per SP for plan-level thresholds. The Working Group has not convened since the fall of 2010. As of the publication of this EIR, the proposal to establish a GHG threshold for developments like the Project has not been considered or approved for use by the SCAQMD Board, but the methodology has been used by lead agencies to evaluate GHG impacts under CEQA.

Buildout of the Modified Project is anticipated in late 2023. Therefore, a project-level threshold of 4.44 $MTCO_2e$/year per SP, interpolated from the 2020 and 2035 values noted above, is used for this impact analysis. This methodology is consistent with the approach for GHG emissions used for the Approved Project.

Short-Term Emissions

Construction GHG emissions for the uses of Phases 1, 2, and 3 were calculated using the CalEEMod program described in Section 4.3, Air Quality, and are shown in Table 9.

TABLE 9
ESTIMATED GREENHOUSE GAS EMISSIONS
FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2019	294
2020	601
2021	64
2022	189
2023	112
Total	1,261
Amortized over 30 years	**42**

$MTCO_2e$: metric tons of carbon dioxide equivalent
Notes: Totals may not add due to rounding variances.
Detailed calculations in Appendix A.

Because construction activity impacts are relatively short-term, they contribute a relatively small portion of the total lifetime GHG emissions of a project. In addition, GHG emission-reduction measures for construction equipment are relatively limited. Therefore, as originally proposed by the SCAQMD, it has become current practice that construction emissions are amortized over a

[4] A bright-line is a single value, applicable to all projects of one type, regardless of size. Thus, a bright-line is different from performance standards or efficiency standards that are generally based on a per-unit basis.

project lifetime, typically 30 years (SCAQMD 2008). Thus, the amortized construction GHG emissions would be 42 $MTCO_2e$/year.

Long-Term Emissions

The Modified Project would generate GHGs, primarily from mobile sources (i.e., the vehicles used by Project employees, customers, and vendors) and energy sources (i.e., purchased electricity and the combustion of natural gas). Operational GHG emissions were calculated with CalEEMod for the assumed 2023 Project buildout of Phases 1-3, as described in Section 4.3, Air Quality. Estimated GHG operational emissions are shown in Table 10.

TABLE 10
ESTIMATED PROJECT
GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e$/yr)
Area	<1
Energy	3,569
Mobile	5,623
Waste	222
Water	35
Modified Project Total Operations	9,449
Construction Amortized	42
Modified Project Gross Emissions	**9,491**

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas
[a] Total derived by dividing construction emissions (see Table 9) by 30.
Note: Detailed calculations in Appendix A

As shown in Table 10, the Modified Project would generate GHG emissions of 9,491 $MTCO_2e$ per year, which is less than the emissions calculated for the Approved Project (9,672 $MTCO_2e$/yr). As described above, impact is based on the efficiency of the Project, which is shown in Table 11. It is assumed that the Modified Project would have 2,800 employees at buildout, which would be the service population. As shown in Table 11, both the gross and net GHG efficiencies would be less than the GHG efficiency threshold. The impact would be less than significant, and no mitigation is required. There would be no substantial change from the previous analysis and no new impacts would occur.

TABLE 11
GREENHOUSE GAS EMISSIONS EFFICIENCY

Source	Emissions $MTCO_2e$/year
Modified Project Gross Emissions (Table 10)	9,491
Service Population	2,800
GHG efficiency ($MTCO_2e$/SP/year)	**3.39**
SCAQMD-Recommended Project-level Significance Threshold	4.44
Exceed threshold?	***No***

$MTCO_2e$/year: metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas; SP: service population; SCAQMD: South Coast Air Quality Management District.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Substantial Change from Previous Analysis. State policies and standards adopted for the purpose of reducing GHG emissions include Executive Order (EO) S-3-05, AB 32, SB 375, and EO B-30-15. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020, to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level, and compliance at a project level is not addressed. Therefore, consistent with the Approved Project, the Modified Project also does not conflict with these plans and regulations.

Additional State regulations, plans, and polices adopted for the purpose of reducing GHG emissions that are directly applicable to the Modified Project include California Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the Title 24 California Green Building Standards Code (CALGreen Code). New construction and improvements to existing facilities for the Project would be executed in compliance with the requirements of these regulations, thereby supporting and not conflicting with these regulations. Further, the buildings are being designed to achieve a minimum of Leadership in Energy and Environmental Design (LEED) Silver certification, which would likely result in additional GHG emissions reductions. The Modified Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases. No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously Approved Project analyzed in the 2017 IS/MND. The Modified Project would not create a new significant impact, nor would it create a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the GHG analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for greenhouse gas emission impacts.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND concluded that construction under the Approved Project would involve transport, use, and storage of hazardous materials. The IS/MND found that after compliance with existing regulations, hazards from routine use of hazardous materials would be less than significant. The

IS/MND concluded that Approved Project development would not increase the likelihood of accidental release of hazardous materials.

The IS/MND identified three leaking underground storage tank (LUST) incidents on site: one in 1988 and one in 1990, cases for both of which have been closed. The third incident occurred in the early 1990s; groundwater monitoring for that incident was ongoing.

The IS/MND found that the Approved Project site was outside the Safety Compatibility Zones surrounding John Wayne Airport, where land uses are regulated to minimize aviation-related hazards to people on the ground, and that Approved Project development would not cause significant aviation-related hazards.

The IS/MND concluded that Approved Project development would not involve changes to the local circulation system or traffic impacts that would interfere with implementation of the City's Emergency Operations Plan.

The IS/MND determined that the Approved Project site was not in a fire hazard severity zone, and Approved Project development would not impact wildfire hazards.

4.9.2 PROJECT ENVIRONMENTAL REVIEW

The information in this section is based partly on a regulatory agency environmental database search conducted by Environmental Data Resources, Inc. on August 22, 2019, and included as Appendix B to this Addendum.

Would the Project:

a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

No Substantial Change from Previous Analysis. The Modified Project involves some changes to proposed land use compared to the Approved Project, including the replacement of a portion of approved office space with a commercial retail center/market hall with retail stores, restaurants with outdoor dining, an event space, and indoor and outdoor entertainment. The changes in proposed uses are not expected to involve use of substantially larger amounts of hazardous materials than the uses of the same portion of the site under the Approved Project. Consistent with the finding of the IS/MND, compliance with existing local, State, and federal regulations would reduce project hazardous materials impacts to less than significant. No new impacts would occur.

b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

No Substantial Change from Previous Analysis. Consistent with the IS/MND, hazardous materials would be transported and stored during project construction activities in accordance with federal, State, and local regulations, thus reducing hazards; and project operation is not expected to involve use of substantial amounts of hazardous materials; thus, Modified Project development would not cause substantial hazards from accidental release of hazardous materials. No new significant impact would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Substantial Change from Previous Analysis. Consistent with the IS/MND for the Approved Project, no schools are within 0.25 mile of the project site; therefore, the Modified Project would not result in impacts related to emitting or handling hazardous materials near a school. No new impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Substantial Change from Previous Analysis. A regulatory agency environmental database search was conducted by Environmental Data Resources, Inc. on August 22, 2019, to update the database search conducted for the IS/MND. The updated search identified the project site listed on the following databases:

- Leaking Underground Storage Tank (LUST)

Consistent with the determination in the IS/MND, one LUST case was discovered in 1990 and closed in 2013; and a second LUST case was discovered in 1988 and closed in 1990. The third LUST case on site, discovered in 1992, involves release of diesel fuel and gasoline into groundwater other than drinking water; that case is undergoing verification monitoring.

The updated search also identified the project site as listed on the following databases:

- Haznet (hazardous waste shipment manifests)
- Registered Underground Storage Tank (UST) and Historic UST
- Emissions Inventory Data (EMI)
- Aboveground Storage Tank
- Enforcement and Compliance History Information (ECHO), US Environmental Protection Agency
- Small Quantity Generator of hazardous wastes (SQG)
- Cleanup Program Site (CPS-SLIC): release of diesel, other petroleum, tetrachloroethylene (PCE), and trichloroethylene (TCE) affected drinking water aquifer and soil vapor. Site assessment was conducted in 2018; the case is open.
- California Environmental Reporting System (CERS), California Environmental Protection Agency
- EnviroStor

Four of the listings document hazardous materials releases. Two of the listings (LUST cases) are closed cases. Of the two other listings, one (LUST) is undergoing verification monitoring, and the other (CPS) was assessed in 2018, and a Soil Management Plan is in place for the CPS case to minimize exposure of people to hazardous materials. Thus, none of the four listings are considered to be environmental concerns for the Modified Project.

The database search for the Modified Project also identified the following hazardous materials sites on nearby properties:

- Mesa Water Well #7, 3325 Harbor Boulevard, about 104 feet to the west-southwest of the project site, is listed on CERS as a chemical storage facility.
- IKEA US West #167, 1475 South Coast Drive, about 97 feet south-southeast of the project site, is listed on CERS as a hazardous waste generator.

No hazardous materials releases are documented for either of those sites, and those sites are not considered environmental concerns for the Modified Project site. No new impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the Project area?

No Substantial Change from Previous Analysis. As identified in the IS/MND, the Modified Project site is outside the Safety Compatibility Zones for John Wayne Airport, in which land uses are regulated to minimize aviation-related hazards to people on the ground. Therefore, Modified Project development would not cause substantial aviation-related hazards to people on the project site, and no new impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Substantial Change from Previous Analysis. Consistent with the finding in the IS/MND, the Modified Project would not block roadways providing access to surrounding properties and would not impede emergency access to the project site. No new impact would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Substantial Change from Previous Analysis. The Modified Project site is not in or near a fire hazard severity zone mapped by the California Department of Forestry and Fire Protection (CAL FIRE 2019). The Modified Project site is in a built-out urban area lacking wildland vegetation. Modified Project development would not expose people or structures to wildfire risks, consistent with the finding of the IS/MND, and no new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact and it would not create a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the hazards and hazardous materials analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for hazards and hazardous materials impacts.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND determined that Approved Project construction could pollute storm water with sediment, waste construction materials and chemicals, liquid products, and petroleum products. The IS/MND noted that Approved Project construction would comply with the Statewide General Construction Permit through preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would specify BMPs to be used during project construction to minimize storm water pollution. Construction water quality impacts were identified as less than significant after regulatory compliance.

The Approved Project site was mostly impervious; pervious areas were the baseball field and landscaped areas. The IS/MND concluded that Approved Project development would include construction of bio-retention planters that would treat site runoff before runoff was discharged to local storm drains. Approved Project operation would not substantially increase generation of storm water pollutants entering local storm drains, and operational water quality impacts were identified as less than significant.

The IS/MND concluded that the Approved Project site was outside 100-year flood zones or a tsunami inundation zone. The IS/MND determined that the Approved Project site was in the dam inundation area of two dams but that the potential for flooding due to dam failure was low due to regular inspections of the dams.

4.10.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Construction

As previously discussed, the Modified Project involves a reduced amount of construction and ground disturbance than the Approved Project. Thus, while the Modified Project development would generate the same types of pollutants as the Approved Project, the Modified Project development would generate less pollutants that could contaminate storm water, including sediment, than development of the Approved Project.

The Stormwater Pollution Prevention Plan (SWPPP) prepared for the Approved Project would be updated to reflect the revised ground disturbance area. However, as with the Approved Project, implementation of BMPs specified in the SWPPP would reduce construction storm water pollution impacts to less than significant, and no new impact would occur.

Operation

Due to the similarities in proposed uses, operation of the Modified Project would generate the same types of pollutants as the Approved Project. The Conceptual Water Quality Management Plan (WQMP) would be updated to reflect the changes in site plan in the northern part of the project site (Phase 1 of the Modified Project and Phase 2 of the Approved Project) and the western

part of the site (Phase 3 of both scenarios). Consistent with the Approved Project, the Modified Project would include bioretention planters in several areas of the project site that would treat site runoff before runoff is discharged to local storm drains. Therefore, operational water quality impacts of the Modified Project would be less than significant after implementation of BMPs specified in the project WQMP, which is consistent with the IS/MND for the Approved Project, and no new significant impact would occur.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Modified Project site is not used for intentional groundwater recharge. Modified Project development would not increase impervious areas on site and thus would not decrease groundwater recharge, compared to Approved Project development. The Project site is located above the Main Orange County Groundwater Basin (Basin). The Mesa Water District (MWD) provides water to the project site and MWD forecasted water supplies over the 2020-2040 period consist of about 70 percent groundwater from the Basin; 25 percent imported water from northern California and the Colorado River purchased via the Metropolitan Water District of Southern California and the Municipal Water District of Orange County; and about 5 percent recycled water (Psomas 2017). The Water Supply Assessment (WSA) prepared for the Approved Project in 2017 concluded that MWD had sufficient water supplies for the Approved Project as well as other District water demands (Psomas 2017). Due to the substantially similar nature of the Modified Project and the Approved Project, Modified Project water demands would not substantially decrease groundwater supplies, and no new impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site;

No Substantial Change from Previous Analysis. Modified Project development would not change the drainage pattern on site compared to the Approved Project. Similar to the Approved Project, the Modified Project would include construction of bioretention planters in several areas, and runoff would be directed toward the planters for treatment. Thus, Modified Project development would not increase erosion or siltation compared to Approved Project development, and no new impact would occur.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

No Substantial Change from Previous Analysis. Modified Project development would not increase impervious surface area to the project site compared to Approved Project. Both scenarios involve development of the west part of the site with mostly impervious surfaces and reuse of the two parcels containing the LA Times buildings, including construction of bioretention planters. Thus, Modified Project development would not increase the rate or volume of runoff and would not cause flooding on or off site, compared to Approved Project development. The IS/MND determined that Approved Project development would not generate runoff exceeding existing conditions. No new impact would occur.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

No Substantial Change from Previous Analysis. Similar to the Approved Project, the Modified Project would limit discharges of runoff off site to no more than the existing runoff rate, pursuant to OC Public Works requirements. Thus, Modified Project development would not generate runoff exceeding the capacities of stormwater drainage systems, and no new significant impact would occur.

(iv) impede or redirect flood flows?

No Substantial Change from Previous Analysis. As with the Approved Project, the Modified Project site is outside 100-year flood zones, and Modified Project development would not impede or redirect flood flows. No new impact would occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Substantial Change from Previous Analysis. Consistent with the Approved Project, the Modified Project site is outside 100-year flood zones. Modified Project development would not risk release of pollutants due to site flooding in a 100-year flood zone. Additionally, the Modified Project site is outside tsunami hazard zones (CGS 2019), and Modified Project development would not risk release of pollutants due to site flooding in a tsunami hazard zone.

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. Consistent with the IS/MND for the Approved Project, no water bodies are close enough to the Modified Project site to pose a flood hazard to the site due to a seiche. No new impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Water Quality Control Plan for the Santa Ana Basin was updated by the Santa Ana Regional Water Quality Control Board in 2016. Consistent with the Approve Project, Modified Project development would comply with the Water Quality Control Plan through implementation of the project WQMP. The Groundwater Management Plan (GWMP) for the Main Orange County Groundwater Basin was updated by the Orange County Water District in 2015. Modified Project development would not impact groundwater recharge or groundwater supply and would not substantially impact groundwater quality and thus would not conflict with the GWMP. No new impact would occur.

<u>Conclusion</u>

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the

previous documents. For these reasons, no major revisions to the hydrology and water quality analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for hydrology and water quality impacts.

4.11 LAND USE AND PLANNING

4.11.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

As discussed in the IS/MND for the Approved Project, the previously approved project would neither physically divide an established community nor would it conflict with a habitat conservation plan or natural community conservation plan. No impact would occur, and no mitigation is required.

The project site is in the City of Costa Mesa, and the 2015-2035 General Plan designates the project site as Commercial Center. The Approved Project would be consistent with the General Plan land use designation for the project site. Additionally, and as discussed throughout the IS, the project would incorporate, or be consistent with, all applicable 2015-2035 General Plan goals, policies, and objectives. The current zoning for the project site is Planned Development Commercial (PDC). Implementation of the Modified Project would be consistent with existing zoning and would not conflict with applicable plans, policies, and regulations. Land use and planning impacts were determined to be less than significant.

The City does not participate in the County of Orange Natural Community Conservation Plan (NCCP)/habitat conservation plan (HCP), and no other HCPs or NCCPs apply to the project site. Therefore, the Modified Project would not conflict with any applicable HCP or NCCP, and no impact was identified.

4.11.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) Physically divide an established community?

Consistent with the analysis presented in the IS/MND for the Approved Project, development of the Modified Project would occur on a vacant site that is not in a residential area and would, therefore, not divide an established community. Further, the project site is private property and is not used for access between surrounding areas. No new impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The existing General Plan land use designation for the project site is Commercial Center and the zoning designation is Planned Development Commercial (PDC). The Planned Development Commercial (PDC) zoning district is intended for large, concentrated commercial areas where the aim of development is to create a spacious environment in a park-like setting. The intent of the General Plan designation for the Modified Project site set forth in the City of Costa Mesa General

Plan is to create opportunities for either office or commercial retail development at a strategic location (City of Costa Mesa 2016). The project site is in the North Costa Mesa Specific Plan (NCMSP) area. The project site is designated Planned Development Commercial (PDC) in the NCMSP. Typical uses in the Planned Development Commercial (PDC)designation are a wide variety of compatible office and support commercial uses (City of Costa Mesa 2016b). The Modified Project would not conflict with a land use policy adopted to avoid or mitigate an environmental impact, and no new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact, nor would it create a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the land use and planning analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for land use and planning impacts.

4.12 MINERAL RESOURCES

4.12.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

According to the IS/MND prepared for the Approved Project, no mineral resources were identified on site. The IS/MND noted that most of the City of Costa Mesa, including the Approved Project site, is mapped Mineral Resource Zone 3 (MRZ-3), indicating that the areas contain mineral deposits, the significance of which cannot be determined from available data. The IS/MND noted that the Approved Project site is developed and thus unavailable for mining.

Project Environmental Review

Would the Project:

a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

b) **Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Consistent with the Approved Project, the Modified Project site is mapped MRZ-3 by the California Geological Survey, indicating that the site is in an area containing mineral deposits, the significance of which cannot be determined from available data (CGS 1995). The project site is mostly developed and is surrounded by land uses (including educational and office uses)

incompatible with mining. No mineral resources are identified on or near the project site in the City of Costa Mesa General Plan (Costa Mesa 2016). Therefore, development of the Modified Project would not cause a loss of availability of mineral resources, and no new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the mineral resources analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for mineral resources impacts.

4.13 NOISE

4.13.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND concluded that Approved Project construction would not generate noise exceeding construction noise thresholds at the nearest noise-sensitive land uses and that Approved Project operation would not generate noise exceeding City of Costa Mesa standards at the nearest residences. The IS/MND determined that groundborne vibration and groundborne noise impacts would be less than significant. Operational traffic noise impacts at the nearest noise-sensitive land uses were identified as less than significant. No airport-related noise impact was identified.

4.13.2 PROJECT ENVIRONMENTAL REVIEW

Noise Metrics

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise have been developed. According to the California General Plan Guidelines for Noise Elements, lists the following are common metrics for measuring noise:

- **A-weighted Level:** A-weighting de-emphasizes the very low and very high frequency components of sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.
- **L_{eq} (Equivalent Energy Noise Level):** The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. L_{eq} is typically computed over 1-, 8-, and 24-hour sample periods.

- **CNEL (Community Noise Equivalent Level):** The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 PM to 10:00 PM and of ten decibels to sound levels occurring at night from 10:00 PM to 7:00 AM.

Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. The nearest sensitive receptors to the project site are:

- National University – the building at the southeast corner of Harbor Boulevard and Sunflower Avenue is approximately 200 feet west of the project site,
- Multi-family residences east of Susan Street are approximately 630 feet east of the project site, and
- California Southern University – the building at the northeast corner of Harbor Boulevard and South Coast Drive is approximately 210 feet west of the project site.

City of Costa Mesa Noise Ordinances

The City of Costa Mesa Municipal Code, 13-280, Exterior Noise Standards, requires that noise generated from a property not to exceed, for more than 30 minutes in an hour, 55 decibels (dba) between 7:00 am and 11:00 pm and 50 dba between 11:00 pm and 7:00 am at a residential property.

Municipal Code Section 13-279 exempts construction work conducted under all required City permits from the requirements of Municipal Code Title 13 Chapter 13, *Noise Control,* between the hours of 7:00 AM to 7:00 PM Monday through Friday except certain federal holidays; and 9:00 AM to 6:00 PM on Saturdays.

The EIR for the City of Costa Mesa General Plan Amendment states that noise levels at sensitive receptors should be analyzed on a case-by-case basis and appropriate mitigation should be applied to bring noise levels down to acceptable levels.

Impact Analysis

Would the Project:

a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

No Substantial Change from Previous Analysis.

Construction

As with the Approved Project, noise from construction activity would be generated during the demolition and development of the Modified Project. Noise from the construction phase of the Modified Project would be primarily generated by construction vehicle engines, treads, exhaust, worker and truck commutes, back-up bells and demolition activities. Noise levels produced from

construction activities are affected by the type of activity performed, the number of construction equipment, the magnitude of noise sources and the proximity of the nearest noise sensitive uses.

Residential uses are considered to be noise sensitive uses, whereas commercial and industrial uses are generally not considered to be noise sensitive uses. Two higher education facilities within approximately 250 feet of the project site are considered sensitive receptors and are listed above. Higher education facilities are considered here in the same category as schools respecting land use compatibility.

Noise levels associated with Project-related construction activities have been quantified at the nearest noise sensitive uses for each construction phase. Noise calculations are included as Appendix C to this Addendum. Noise levels were evaluated against the construction noise criteria developed by the Federal Transit Administration for construction noise exposure at residential uses. These noise levels are shown under worst-case conditions with construction activities occurring closest to each noise sensitive use as well as under typical conditions with noise sources at the approximated center of the project site. Calculated noise levels are shown in Table 12. As shown in Table 12, construction noise associated with the Modified Project would not exceed the construction noise criteria at the nearest noise sensitive uses, which are the two higher education facilities near the west Project site boundary: National University approximately 200 feet west of the Project site and California Southern University approximately 210 feet west of the Project site.[5] Because noise levels would not exceed the construction noise criteria, the Modified Project would not result in significant impacts related to construction noise exposure at the nearest noise sensitive use, which is consistent with the findings for the Approved Project.

TABLE 12
CONSTRUCTION NOISE LEVELS

Noise Levels at the Residential Uses Located Along Susan Street			
Worst-Case Noise Levels at 630 Feet Away			
Construction Phase	**All Applicable Equipment in Use (dBA L_{eq})**	**Noise Threshold (dBA L_{eq})**	**Exceeds?**
Ground Clearing/Demolition	62	80	No
Excavation	67	80	No
Foundation Construction	56	80	No
Building Construction	65	80	No
Finishing and Site Cleanup	67	80	No
Typical Noise Levels at 1,250 Feet Away			
Construction Phase	**All Applicable Equipment in Use**	**Noise Threshold**	**Exceeds?**
Ground Clearing/Demolition	56	80	No
Excavation	61	80	No
Foundation Construction	50	80	No
Building Construction	59	80	No
Finishing and Site Cleanup	61	80	No

dBA: A-weighted decibels; L_{eq}: Equivalent Energy Noise Level

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.

[5] The distances from the site to National University and California Southern University reported here are to the site of Phases 1 and 2 of the Modified Project. The distances from the two university buildings to the site of Phase 3 are greater (304 feet to California Southern University and 340 feet to National University), and thus are not analyzed above.

Operation

Stationary Sources

The City of Costa Mesa Municipal Code, Title XIII, Planning, Zoning, and Development, Chapter XIII, Noise Control, Section 13-280, Exterior Noise Standards, requires that noise generated from a property not to exceed, for more than 30 minutes in an hour, 55 decibels (dBA) between 7:00 AM and 11:00 PM and 50 dBA between 11:00 PM and 7:00 AM at a residential property. As with the analysis in the IS/MND for the Approved Project, the Modified Project's primary operational noise sources would be heating, ventilating, and air conditioning (HVAC) units. The nearest residential property is properties are approximately 630 feet from the project site. Large HVAC equipment typically have sound power ratings of 85 to 90 decibels, which is equivalent to sound pressure levels of 53 to 58 dBA at a distance of 50 feet.[6] At a distance of at least 630 feet without assuming any reduction for the buildings between the project site and the off-site residences, the noise level from one large HVAC unit would be 35 dBA L_{eq}, and from four units would be 41 dBA, which is less than the 50 dBA L_{eq} nighttime exterior noise standard. Because there are buildings between the project site and the residences, HVAC noise levels would be less than the values quoted above.

The Modified Project would also involve the development of outdoor patio uses associated with restaurant uses. Potential noise associated with these uses includes ambient music and people speaking. Noise levels from these uses are anticipated to be less than that analyzed for HVACs and would likewise be attenuated by the large distance between these activities and the nearest noise-sensitive residential uses. With a separation distance of at least 630 feet from the Project site and the nearest residential uses, noise associated with use of the outdoor patios would likewise result in noise levels that are below the City's noise limits as identified within the Municipal Code.

Future Noise Levels along Existing Roadway Segments

At full development, the Modified Project would generate 9,293 average daily trips (ADT) (LLG 2020). These vehicle trips would contribute to the overall increase in vehicle traffic along local roadways proximate to the Project site. Table 13, Modified Project Trip Generation on Selected Roadway Segments, shows the projected increases in traffic volumes related to the Project, which range between 1.9% - 19.0%. The maximum increase in traffic volumes of 19.0% would result in a traffic noise level increase of 1 decibel above conditions without the Project. The other analyzed roadways shown in Table 13 have less projected traffic volume increases and would consequently result in traffic noise increases of less than 1 decibel. A change of 3 decibels is the minimum change in noise levels in outdoor environments that is audible with human hearing. A 5-decibel change is clearly noticeable in outdoor environments. A 1-decibel change in noise levels in outdoor environments is not perceptible with human hearing. Because the Modified Project would not result in an audible change in traffic noise levels, similar to the Approved Project, traffic noise increases attributable to the Modified Project would result in less than significant noise impacts.

[6] The noise levels described above and in most of this section are sound pressure levels. However, sound power is often used to describe stationary noise sources. Sound power describes the total sound energy emitted by a source, also in decibels; sound power does not change with distance.

TABLE 13
MODIFIED PROJECT TRIP GENERATION ON SELECTED ROADWAY SEGMENTS

Roadway Segment	PM Peak Hour Project Trips	PM Peak Hour Year 2021 Cumulative without Project Trips	Percent of Project Trips to Non-Project Trips	Project ADT
Harbor Boulevard				
Harbor Boulevard north of MacArthur Boulevard	95	3,728	2.5%	929
Harbor Boulevard between MacArthur Boulevard and Scenic Avenue	108	4,099	2.6%	1,075
Harbor Boulevard between Scenic Avenue and Sunflower Avenue	108	4,224	2.6%	1,075
Harbor Boulevard between Sunflower Avenue and South Coast Drive	197	4,950	4.0%	1,868
Harbor Boulevard between South Coast Drive and Gisler Avenue	295	5,757	5.9%	3,472
Harbor Boulevard between Gisler Avenue and Baker Street	177	6,173	2.9%	1,779
Harbor Boulevard south of Baker Street	169	5,827	2.9%	1,682
Sunflower Avenue				
Sunflower Avenue west of Harbor Boulevard	33	1,407	2.3%	328
Sunflower Avenue between Harbor Boulevard and Susan Street	127	1,661	7.6%	1,040
Sunflower Avenue between Susan Street and Fairview Road	89	1,935	4.6%	752
Sunflower Avenue east of Fairview Road	95	1,957	4.9%	929
South Coast Drive				
South Coast Drive west of Harbor Boulevard	90	2,208	4.1%	619
South Coast Drive between Harbor Boulevard and Susan Street	448	2,355	19.0%	4,012
South Coast Drive between Susan Street and Fairview Road	181	2,135	8.5%	1,899
South Coast Drive east of Fairview Road	39	2,044	1.9%	367

ADT: Average Daily Trips
Source: LLG 2020

b) Generation of excessive groundborne vibration or ground borne noise levels?

No Substantial Change from Previous Analysis

Construction

The Modified Project would not generate or expose persons or structures to excessive groundborne vibration from the construction. There are no applicable City standards for vibration-induced annoyance or building damage from vibration. The California Department of Transportation (Caltrans) vibration damage potential guideline thresholds are shown in Table 14.

TABLE 14
VIBRATION DAMAGE THRESHOLD CRITERIA

Building Class	Continuous Source PPV (in/sec)	Single-Event Source PPV (in/sec)
Class I: buildings in steel or reinforced concrete, such as factories, retaining walls, bridges, steel towers, open channels, underground chambers and tunnels with and without concrete alignment	0.5	1.2
Class II: buildings with foundation walls and floors in concrete, walls in concrete or masonry, stone masonry retaining walls, underground chambers and tunnels with masonry alignments, conduits in loose material	0.3	0.7
Class III: buildings as mentioned above but with wooden ceilings and walls in masonry	0.2	0.5
Class IV: construction very sensitive to vibrations; objects of historic interest	0.12	0.3
ppv: peak particle velocity; in/sec: inches per second Source: Caltrans 2013.		

The building damage threshold for “Class II Buildings” of 0.3 peak particle velocity (ppv) inch per second (in/sec) is selected for retail/office buildings and Class III buildings are selected residential buildings for this analysis. These thresholds represent the vibration limits for damage to adjacent buildings to the Project site from continuous sources of vibration.

The Caltrans vibration annoyance potential guideline thresholds are shown in Table 15. Based on the guidance in Table 14, the “strongly perceptible” vibration level of 0.9 ppv in/sec is considered as a threshold for a potentially significant vibration impact for human annoyance.

TABLE 15
VIBRATION ANNOYANCE CRITERIA

Average Human Response	ppv (in/sec)
Severe	2.0
Strongly perceptible	0.9
Distinctly perceptible	0.24
Barely perceptible	0.035
ppv: peak particle velocity; in/sec: inch(es) per second Source: Caltrans 2013.	

Pile driving and blasting are generally the sources of the most severe vibration during construction. Neither pile driving nor blasting would be used during Project construction.

Conventional construction equipment would be used for demolition and grading activities. Table 16 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment.

TABLE 16
VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment		ppv at 25 ft (in/sec)
Pile driver (impact)	upper range	1.518
	typical	0.644
Pile driver (sonic)	upper range	0.734
	typical	0.170
Vibratory roller		0.210
Large bulldozer		0.089
Caisson drilling		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003

ppv: peak particle velocity; ft: feet; in/sec: inches per second.
Source: Caltrans 2013; FTA 2006.

Demolition, grading, and construction would occur up to the property lines. Table 17, Vibration Annoyance Criteria at Sensitive Uses, shows the vibration annoyance criteria from construction-generated vibration activities proposed at the Project site. Table 17 shows the ppv relative to uses proximate to the Project site.

TABLE 17
VIBRATION ANNOYANCE CRITERIA AT SENSITIVE USES

	Vibration Levels (ppv)			
	3501 Sunflower Avenue Office Use to the Northwest of the Project Site	National University Building	California Southern University Building	The Hive Office Building
Equipment	(ppv @ 250 ft)[1]	(ppv @ 200 ft)[1]	(ppv @ 210 ft)[1]	(ppv @ 185 ft)[1]
Vibratory roller	0.01	0.01	0.01	0.01
Large bulldozer	0.00	0.00	0.00	0.00
Small bulldozer	0.00	0.00	0.00	0.00
Jackhammer	0.00	0.00	0.00	0.00
Loaded trucks	0.00	0.00	0.00	0.00
Criteria	**0.9**	**0.9**	**0.9**	**0.9**
Exceeds Criteria?	**No**	**No**	**No**	**No**

[1] The distances reported here are to the site of Phase I of the Modified Project; each of the four buildings listed above is farther from the site of Phase 3 of the Modified Project than to the site of Phase I.

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Source: USEPA 1971 (Calculations can be found in Attachment B).

As shown in Table 17, ppv would not exceed the criteria threshold when construction activities occur under maximum (i.e., closest to the receptor) exposure conditions. These vibration levels

represent conditions when construction activities occur closest to receptor locations. Construction-related vibration would be substantially less under average conditions when construction activities are located further away. Because vibration levels would be below the significance thresholds, vibration generated by the Modified Project's construction equipment would not be expected to generate strongly perceptible levels of vibration at the nearest uses and would result in less than significant vibration impacts related to vibration annoyance.

Table 18, Building Damage Criteria at Nearby Uses, shows the peak particle velocity levels (ppv) relative to building damage to sensitive uses from vibration activities.

TABLE 18
BUILDING DAMAGE CRITERA AT NEARBY USES

	Vibration Levels (ppv)[1,2]				
	3501 Sunflower Avenue Office Use to the Northwest of the Project Site	**National University Building**	**California Southern University Building**	**The Hive Office Building**	**Automobile Club of Southern California Building**
Equipment	**(ppv @ 250 ft)**	**(ppv @ 200 ft)**	**(ppv @ 210 ft)**	**(ppv @ 185 ft)**	**(ppv @ 35 ft)**
Vibratory roller	0.01	0.01	0.01	0.01	0.13
Large bulldozer	0.00	0.00	0.00	0.00	0.05
Small bulldozer	0.00	0.00	0.00	0.00	0.00
Jackhammer	0.00	0.00	0.00	0.00	0.02
Loaded trucks	0.00	0.00	0.00	0.00	0.05
Criteria	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
Exceeds Criteria?	**No**	**No**	**No**	**No**	**No**

[1] peak particle velocity (ppv) is often used in monitoring construction vibration; it is related to stresses on buildings and is not used to evaluate human response.

[2] The distances listed are from the Modified Project site boundary to the buildings on the identified land uses.

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Source: USEPA 1971 (Calculations can be found in Attachment B).

As shown in Table 18, all ppv levels associated with the Modified Project would be below the building damage threshold at adjacent off-site structures. Because vibration levels would be below the significance thresholds, vibration generated by the Modified Project's construction equipment would not be expected to generate building damage at the nearest uses and would result in less than significant vibration impacts related to vibration induced building damage.

<u>Operation</u>

The Modified Project would not include any operations that would generate notable vibration. Consistent with the findings of the IS/MND for the Approved Project, the proposed office and other commercial uses would not generate substantial groundborne vibration or groundborne noise. No new or increased impact would occur; no mitigation is required; and no subsequent analysis is needed.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Substantial Change from Previous Analysis. Consistent with the finding of the IS/MND for the Approved Project, the project site is more than two miles from John Wayne Airport and is outside of the 60 dBA CNEL noise contour for John Wayne Airport. There are no private airstrips in the vicinity of the project site. No new or increased impact would occur; no mitigation is required; and no subsequent analysis is needed.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the noise analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for noise and vibration impacts.

4.14 POPULATION AND HOUSING

4.14.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND for the Approved Project estimated that Approved Project operation would generate about 2,600 jobs and that forecasted employment generation would be consistent with employment projections for the City. The IS/MND did not address direct Approved Project impact on population; however, Approved Project development, which would consist of commercial uses, would not directly increase population or housing in the region. The IS/MND noted that the Approved Project site did not contain housing, and thus Approved Project development would not displace housing or residents.

4.14.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Substantial Change from Previous Analysis. The Modified Project would reduce total building area at project buildout from about 565,159 SF to 504,877 SF; that is, a decrease of about 11 percent from the Approved Project. Pro-rating from the operational employment projection of 2,600 for the Approved Project, the Modified Project is estimated to generate about 2,323 jobs at completion. As the operational employment estimate for the Modified Project is lower than that for the Approved Project; and the IS/MND determined that forecasted Approved Project

employment is within projections for the City; forecasted Modified Project employment would also be consistent with projections for the City. Modified Project development would not directly add population or housing to the Project region. No new impact would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Substantial Change from Previous Analysis. No housing or residents are present on site, and, consistent with the findings for the Approved Project, Modified Project development would not displace housing or residents. No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the population and housing analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for population and housing impacts.

4.15 PUBLIC SERVICES

4.15.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND concluded that Approved Project development would generate increased demands for fire protection and police protection due to increased employment on site and increased traffic generation by on-site land uses. Project employment generation would be consistent with General Plan projections used for planning future fire and police facilities. The IS/MND determined that Approved Project development would not add population or housing and thus would not generate demands for schools, parks, or libraries. Impacts to public services were identified as less than significant.

4.15.2 PROJECT ENVIRONMENTAL REVIEW

a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, and other public facilities?

Fire Protection and Police Protection

No Substantial Change from Previous Analysis. Demands for fire protection and police protection depend on both the population and the total building area in the agencies' service areas. Modified Project development would reduce building area at project completion by about 4 percent compared to Approved Project development. Thus, Modified Project buildout would generate slightly lower demands for fire protection and police protection than would Approved Project development While the Modified Project would create a large number of establishments serving alcohol, and live entertainment, the Costa Mesa Police Department concluded that no adverse impacts to Costa Mesa Police Department police services or facilities are anticipated providing the applicant provides adequate on-site security services.[7] No new impact would occur.

Schools, Parks, and Libraries

No Substantial Change from Previous Analysis. Demands for schools are estimated based on the numbers of households in the schools' service areas and demands for parks and libraries are generated by the populations in the facilities' service areas. Modified Project development would not add population or households and thus would not generate demands for schools, parks, or libraries. No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact and it would not create a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the public services analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for public services impacts.

4.16 RECREATION

4.16.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application -17-30) Initial Study/Mitigated Negative Declaration

As set forth in the IS/MND for the Approved Project, it was determined that the Approved Project would not directly induce population growth; therefore, it would not increase use of any local recreational facilities. Impacts related to demand or use of recreational facilities were identified as less than significant.

[7] The information from the Costa Mesa Police Department was conveyed in a written comment by Mel Lee, Senior Planner, City of Costa Mesa, in an email dated February 3, 2020.

4.16.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

b) **Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No Substantial Change from Previous Analysis. Consistent with the Approved Project, Modified Project development would not add population in the City of Costa Mesa and thus would not generate demands for new or expanded parks or increase the use of existing parks. No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the recreation analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for recreation impacts.

4.17 TRANSPORTATION

4.17.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated Negative Declaration

The IS/MND for the Approved Project analyzed traffic conditions in three with-project scenarios: Opening Year 2018; Interim Year 2022; and long-range (2035). The Traffic Impact Analysis (TIA) for the IS/MND analyzed 18 intersections: 16 in Costa Mesa including 5 intersections with ramps to or from the I-405; and 2 in Santa Ana. Intersection operations were characterized in terms of Level of Service (LOS), a qualitative rating of intersection operation ranging from LOS A, indicating free flow conditions, to LOS F, indicating severe congestion. All traffic impacts of the Approved Project were determined to be less than significant for each of the three with-project scenarios analyzed.

Note that the TIA for the IS/MND estimated project trip generation for 655,000 SF of land uses.

The IS/MND determined that the Approved Project would not involve modifications to the local circulation system and thus would not cause hazards due to a design feature. The IS/MND determined that Approved Project construction and operation would not cause inadequate emergency access to the project site or surrounding areas. Transportation and traffic impacts were identified as less than significant.

4.17.2 PROJECT ENVIRONMENTAL REVIEW

The information in this section is based on the Revised Traffic Impact Analysis (TIA) Report for The Press Site Phase I completed by Linscott Law & Greenspan on January 7, 2020; a complete copy of this report is included as Appendix D to this Addendum.

Would the Project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Substantial Change from Previous Analysis.

<u>Modified Project Phase 1</u>

Existing Conditions

Existing study area roadways are described below in Table 19.

TABLE 19
EXISTING ROADWAYS

Roadway	Direction	Lanes[1]	Speed Limit, mph
Harbor Boulevard	NS	7D	40
Susan Street	NS	4D	35
Fairview Road	NS	6D	45
MacArthur Boulevard	EW	6D	40
Sunflower Avenue	EW	4D	40
South Coast Drive	EW	4D	45

N: north; S: south; E; east; W:west

[1] D = divided roadway. For north-south roadways, the number of lanes applies to the segments of each roadway nearest to the Project site; that is, Sunflower Avenue to South Coast Drive. See the TIA for the numbers of lanes in other parts of the traffic study area. For east-west roadways the number of lanes applies to the whole traffic study area.

Source: Linscott, Law, & Greenspan 2020

The TIA evaluated 18 intersections listed below with their respective jurisdictions; all the intersections are signalized.

1. Harbor Boulevard at MacArthur Boulevard (Costa Mesa/Santa Ana)
2. Harbor Boulevard at Scenic Avenue/Lake Center Drive (Costa Mesa)
3. Harbor Avenue at Sunflower Avenue (Costa Mesa/Santa Ana)
4. Harbor Avenue at South Coast Drive (Costa Mesa)
5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp (Costa Mesa/Caltrans)
6. Harbor Avenue at I-405 NB Ramps (Costa Mesa/Caltrans)

7. Harbor Avenue at I-405 SB Ramps (Costa Mesa/Caltrans)
8. Harbor Avenue at Gisler Avenue (Costa Mesa)
9. Harbor Avenue at Baker Street (Costa Mesa)
10. Susan Street at Sunflower Avenue (Costa Mesa)
11. Susan Street at South Coast Drive (Costa Mesa)
12. Fairview Road at MacArthur Boulevard (Santa Ana)
13. Fairview Road at Sunflower Avenue (Costa Mesa/Santa Ana)
14. Fairview Road at South Coast Drive (Costa Mesa)
15. Fairview Road at I-405 NB Ramps (Costa Mesa/Caltrans)
16. Fairview Road at I-405 SB Ramps (Costa Mesa/Caltrans)
17. Fairview Road at Paularino Avenue (Costa Mesa)
18. Fairview Road at Baker Street (Costa Mesa)

Sidewalks are located on both sides of Harbor Boulevard, Sunflower Avenue, and South Coast Drive along the site frontage. Striped (Class II) bicycle lanes are on both sides of Sunflower Avenue and South Coast Drive near the project site as well as on Susan Street, which extends north-south about 500 feet east of the project site.

The Orange County Transportation Authority (OCTA) provides public transit bus service in the project region; bus routes near the project site are described below in Table 20.

TABLE 20
ORANGE COUNTY TRANSPORTATION AUTHORITY BUS ROUTES NEAR PROJECT SITE

Route	General Direction of Travel	Operation		
		Roadways Near Project Site	Days Per Week	Frequency, Weekday Peak Hours
43	North-south, Fullerton to Costa Mesa	Harbor Boulevard	7 days	15 minutes
211	East-west, Huntington Beach to Irvine	Harbor Boulevard, Sunflower Avenue	Monday-Friday	40 minutes
794	East-west, Riverside to Costa Mesa	Sunflower Avenue,	Monday-Friday	35 minutes average
Source: OCTA 2019				

Intersection Operations

Operation of signalized intersections was evaluated using the Intersection Capacity Utilization (ICM) method; see the TIA for further description.

Intersection operation is described using Levels of Service (LOS), a six-point qualitative scale where LOS A indicates free flow conditions and LOS F indicates severe congestion. The cities of Costa Mesa and Santa Ana consider LOS D to be the minimum acceptable condition. LOS are defined in detail in the TIA.

All 18 intersections operate at acceptable LOS of D or better in existing conditions (see Table 21 below).

TABLE 21
EXISTING INTERSECTION LEVELS OF SERVICE

Intersection	Jurisdiction	Peak Hour	ICU	LOS
Harbor Boulevard at MacArthur Boulevard	(Costa Mesa/Santa Ana)	AM PM	0.748 0.814	C D
Harbor Boulevard at Scenic Avenue/Lake Center Drive	(Costa Mesa)	AM PM	0.561 0.707	A C
Harbor Avenue at Sunflower Avenue	(Costa Mesa/Santa Ana)	AM PM	0.601 0.798	B C
Harbor Avenue at South Coast Drive	(Costa Mesa)	AM PM	0.546 0.690	A B
Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	(Costa Mesa/Caltrans)	AM PM	0.271 0.558	A A
Harbor Avenue at I-405 NB Ramps	(Costa Mesa/Caltrans)	AM PM	0.509 0.632	A B
Harbor Avenue at I-405 SB Ramps	(Costa Mesa/Caltrans)	AM PM	0.446 0.579	A A
Harbor Avenue at Gisler Avenue	(Costa Mesa)	AM PM	0.616 0.773	B C
Harbor Avenue at Baker Street	(Costa Mesa)	AM PM	0.516 0.601	A B
Susan Street at Sunflower Avenue	(Costa Mesa)	AM PM	0.487 0.776	A C
Susan Street at South Coast Drive	(Costa Mesa)	AM PM	0.321 0.513	A A
Fairview Road at MacArthur Boulevard	(Santa Ana)	AM PM	0.673 0.827	B D
Fairview Road at Sunflower Avenue	(Costa Mesa/Santa Ana)	AM PM	0.661 0.678	B B
Fairview Road at South Coast Drive	(Costa Mesa)	AM PM	0.681 0.704	B C
Fairview Road at I-405 NB Ramps	(Costa Mesa/Caltrans)	AM PM	0,.668 0.690	B B
Fairview Road at I-405 SB Ramps	(Costa Mesa/Caltrans)	AM PM	0.614 0.587	B A
Fairview Road at Paularino Avenue	(Costa Mesa)	AM PM	0.620 0.497	B A
Fairview Road at Baker Street	(Costa Mesa)	AM PM	0.647 0.632	B B
Source: Linscott, Law, & Greenspan 2020				

The TIA analyzed traffic conditions in six scenarios:

1. Existing (2018) conditions
2. Existing plus project conditions
3. Near-term (2021) without-project conditions
4. Near-term (2021) with-project conditions
5. Long-term (2035) buildout without-project conditions
6. Long-term (2035) buildout with-project conditions

Long-term (2035) without-project traffic forecasts were based on Year 2035 volumes from the Tribune Property Traffic Analysis prepared by Stantec in 2016.

Modified Project Trip Generation

The Modified Project is estimated to generate 9,293 trips per day including 877 in the AM peak hour and 951 in the PM peak hour; forecast Modified Project trip generation by phase and land use is shown below in Table 22. Estimated Modified Project trip generation is greater than the 7,225 trips per day generation estimated for the Approved Project in the IS/MND by 2,068 trips per day or approximately 29 percent.

Estimated Project-generated trips were distributed onto study area roadways and assigned to intersection turning movements (refer to the TIA for the criteria for trip distribution).

TABLE 22
MODIFIED PROJECT FORECAST TRIP GENERATION

Land Use	Daily 2-Way	AM Peak Hour, Total	PM Peak Hour, Total
Phase I			
Office (346,594 SF)[1]	3,376	402	399
Phase II			
Fast Food Restaurant without Drive-Through Window (3,528 SF)	1,221	89	100
Internal capture (10%)	-122	-9	-10
Subtotal	1,099	80	90
Pass-by (25% Daily, 10% AM, 43% PM)	-275	-8	-39
Total Fast Food Without Drive-Through Window Trips	824	72	51
High Turnover Sit Down Restaurant (34,149 SF)	3,831	339	334
Internal capture (10%)	-383	-34	-33
Subtotal	3,448	305	301
Pass-by (10% Daily, 10% AM, 10% PM)	-345	-31	-30
Total High Turnover Sit Down Restaurant	3,103	274	271
Specialty Retail (3,966 SF)	176	4	11
Pass-by (10% Daily, 10% AM, 10% PM)	-18	0	-1
Total, Specialty Retail	158	4	10
Meeting Space (1,808 SF)	46	0	23
Drinking Place (7,182 SF)	820	0	82
Internal capture (10%)	-82	0	-8

TABLE 22
MODIFIED PROJECT FORECAST TRIP GENERATION

Land Use	Daily 2-Way	AM Peak Hour, Total	PM Peak Hour, Total
Total, Drinking Place	738	0	74
Phase 2, subtotal	**4,869**	**350**	**429**
Phase III			
Office (107,650 SF)	1,048	125	123
Total			
Total	**9,293**	**877**	**951**

SF: square feet
[1] The square footage for Phase I includes 276 SF of office space in Phase II.
Source: Linscott, Law, & Greenspan 2020

Project Traffic Impacts

Significance Criteria

The City of Costa Mesa considers a project to have a significant impact at a signalized intersection if the ICU value in with project conditions is 0.91 or greater and the ICU increase due to the project is 0.01 or greater. For unsignalized intersections an impact is considered significant if the project causes an intersection at LOS D or better to degrade to LOS E or F, and the traffic signal warrant analysis determines that a signal is justified.

The City of Santa Ana considers impacts to intersections to be significant if the ICU value is 0.901 or greater (or 1.001 or greater in major development areas), and the ICU increase due to the project is 0.01 or greater. For unsignalized intersections an impact is considered significant if the project causes an intersection at LOS D or better to degrade to LOS E or F, and the traffic signal warrant analysis determines that a signal is justified.

Existing Plus Project Conditions

The TIA for the Modified Project analyzed Existing Plus Project conditions, that is, project-generated traffic volumes added to existing 2018 traffic volumes. That analysis is not discussed in this Addendum because the Approved Project TIA did not analyze that scenario and it is a fictitious scenario (the Modified Project was not built in 2018).

Near Term (2021) Without Project Conditions

Near-term (2021) without-project conditions were analyzed using a combination of two methods:

1. Ambient regional traffic growth was modeled using an ambient traffic growth factor of 1 percent per year for three years (2018 to 2019)

2. Traffic generated by 16 related projects identified by the cities of Costa Mesa, Santa Ana, and Fountain Valley. The locations and land uses for the projects are described below in Table 23. The 16 projects combined are estimated to generate 24,694 trips per day.

Near-term (2021) without-project traffic conditions are shown below in Table 23.

TABLE 23
RELATED PROJECTS

Project	Intensity and Land Use	Location	Estimated Trip Generation, Daily
City of Costa Mesa			
Aura	33 DU SFR	2626 Harbor Boulevard	312
Lucene	56 DU SFR	929 Baker Street	533
Mirival Phase II	11 DU SFR	2850 Mesa Verde Drive East	104
1585 MacArthur Boulevard	100,000 SF industrial	1585 MacArthur Boulevard	496
Symphony Apartments	393 DU apartments and 4,104 SF retail	585-595 Anton Boulevard	2,770
Orange County Museum of Art	66,750 SF art museum	3333 Avenue of the Arts	3,754
Avenue of the Arts Hotel	150 room hotel	3350 Avenue of the Arts	1,254
Costa Mesa Motor Inn	224 DU apartments	2277 Harbor Boulevard	1,490
City of Santa Ana			
Shea Homes	42 DU SFR	2001 W. MacArthur Boulevard	396
Shell Service Station Retail Building	1,600 SF gas station/convenience store	3820 S. Fairview St	1,152
Christ Our Savior Church	Demolition of 7,190 SF existing church and construction of 46,307 SF church/community center/office	2000 W. Alton Avenue	272
Legacy Sunflower Apartments	226 DU apartments	651 W. Sunflower Avenue	1,229
Metro Town Square Expansion	6,000 SF retail/restaurant	3719 S. Plaza Drive	606
Legado at the MET	278 DU apartments	200 E. First American Way	2,015
City of Fountain Valley			
Fountain Valley Crossings	Rezoning into a mixed-use activity center to allow uses including Automotive parts sales, warehousing, office, industrial park, electronics superstore, shopping center, and residential.	Bound by Ellis Avenue to the south, Talbert Avenue to the north, Ward Street to the west, and the Santa Ana River Trail to the east	7,890
Welbrook Assisted Living Facility	assisted living, 110,000 SF/162 bed	11360 Warner Avenue	421
Total	Not applicable	Not applicable	24,694

DU: dwelling unit; SFR: single family residential; SF: square feet
Source: LLG 2020

Near Term (2021) Plus Project Conditions

All 18 study area intersections would operate at acceptable LOS in near-term (2019) plus project conditions; that is, project traffic impacts in that scenario would be less than significant. ICU and LOS for each intersection in the AM and PM peak hours are listed below in Table 24. This is the same finding reached by the IS/MND for the Approved Project.

TABLE 24
YEAR 2021 PEAK HOUR INTERSECTION OPERATION

Intersection	Peak Hour	2021 Without Project Conditions		2021 Plus Project Conditions		Significant Impact	
		ICU	LOS	ICU	LOS	Increase	Yes/No
Harbor Boulevard at MacArthur Boulevard	AM PM	0.796 0.870	C D	0.810 0.879	D D	0.014 0.009	No No
Harbor Boulevard at Scenic Avenue/Lake Center Drive	AM PM	0.579 0.732	A C	0.592 0744	A C	0.013 0.012	No No
Harbor Avenue at Sunflower Avenue	AM PM	0.629 0.845	B D	0.646 0.863	B D	0.017 0.018	No No
Harbor Avenue at South Coast Drive	AM PM	0.564 0.719	A C	0.589 0.735	A C	0.025 0.016	No No
Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM PM	0.279 0.575	A A	0.298 0.625	A B	0.019 0.050	No No
Harbor Avenue at I-405 NB Ramps	AM PM	0.531 0.657	A B	0.570 0.676	A D	0.039 0.019	No No
Harbor Avenue at I-405 SB Ramps	AM PM	0.462 0.611	A B	0.487 0.626	A B	0.025 0.015	No No
Harbor Avenue at Gisler Avenue	AM PM	0.638 0.808	B D	0.645 0.823	B D	0.007 0.015	No No
Harbor Avenue at Baker Street	AM PM	0.545 0.633	A B	0561 0.648	A B	0.016 0.015	No No
Susan Street at Sunflower Avenue	AM PM	0.509 0.808	A D	0.542 0.830	A D	0.033 0.022	No No
Susan Street at South Coast Drive	AM PM	0.331 0.530	A A	0.349 0.564	A A	0.018 0.034	No No
Fairview Road at MacArthur Boulevard	AM PM	0.713 0.875	C D	0.722 0.883	C D	0.009 0.008	No No
Fairview Road at Sunflower Avenue	AM PM	0.687 0.715	B C	0.705 0.728	C C	0.018 0.013	No No
Fairview Road at South Coast Drive	AM PM	0.704 0.728	C C	0.729 0.738	C C	0.025 0.010	No No
Fairview Road at I-405 NB Ramps	AM PM	0.689 0.712	B C	0.691 0.715	B C	0.002 0.003	No No
Fairview Road at I-405 SB Ramps	AM PM	0.633 0.606	B B	0.639 0.609	B B	0.006 0.003	No No
Fairview Road at Paularino Avenue	AM PM	0.640 0.512	B A	0.648 0.517	B A	0.008 0.005	No No
Fairview Road at Baker Street	AM PM	0.668 0.653	B B	0.677 0.658	B B	0.009 0.005	No No

ICU: intersection capacity utilization; LOS: level of service

Source: Linscott, Law, & Greenspan 2020

Buildout (Year 2035) Without Project Conditions

Long-term (2035) without-project traffic forecasts were based on Year 2035 volumes from the *Tribune Property Traffic Analysis* prepared by Stantec in 2016.

Improvements to two Study Area intersections are identified in the City of Costa Mesa General Plan, independent of the Modified Project; implementation of these two improvements is assumed in the analysis of 2035 without-project traffic conditions.

- Harbor Boulevard at Sunflower Avenue: Construct an exclusive eastbound and westbound right-turn lane. Modify the existing traffic signal as necessary.
- Harbor Boulevard at Gisler Avenue: Construct an exclusive southbound right-turn lane. Modify the existing traffic signal as necessary.

Two intersections would operate at unacceptable LOS E in Project Buildout (2035) without-project conditions: Harbor Boulevard at MacArthur Boulevard, and Fairview Road at MacArthur Boulevard. The remaining 16 intersections would operate at acceptable LOS, as shown below in Table 25.

TABLE 25
YEAR 2035 PEAK HOUR INTERSECTION OPERATION

Intersection	Peak Hour	2035 Without Project Conditions		2035 Plus Project Conditions		Significant Impact	
		ICU	LOS	ICU	LOS	Increase	Yes/No
Harbor Boulevard at MacArthur Boulevard	AM	0.865	D	0.881	D	0.016	No
	PM	**0.949**	**E**	**0.958**	**E**	0.009	No
Harbor Boulevard at Scenic Avenue/Lake Center Drive	AM	0.609	B	0.624	B	0.015	No
	PM	0.777	C	0.791	C	0.014	No
Harbor Avenue at Sunflower Avenue	AM	0.648	B	0.662	B	0.014	No
	PM	0.842	D	0.864	D	0.022	No
Harbor Avenue at South Coast Drive	AM	0.580	A	0.606	B	0.026	No
	PM	0.850	D	0.869	C	0.019	No
Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM	0.314	A	0.333	A	0.019	No
	PM	0.798	C	0.854	C	0.056	No
Harbor Avenue at I-405 NB Ramps	AM	0.616	B	0.662	B	0.046	No
	PM	0.733	C	0.751	D	0.018	No
Harbor Avenue at I-405 SB Ramps	AM	0.613	B	0.657	B	0.044	No
	PM	0.742	C	0.759	C	0.017	No
Harbor Avenue at Gisler Avenue	AM	0.686	B	0.693	B	0.007	No
	PM	0.808	D	0.892	D	0.016	No
Harbor Avenue at Baker Street	AM	0.542	A	0.559	A	0.017	No
	PM	0.775	C	0.792	C	0.017	No
Susan Street at Sunflower Avenue	AM	0.479	A	0.513	A	0.034	No
	PM	0.775	C	0.800	C	0.025	No
Susan Street at South Coast Drive	AM	0.477	A	0.492	A	0.015	No
	PM	0.628	B	0.684	B	0.056	No
Fairview Road at MacArthur Boulevard	AM	0.796	C	0.800	C	0.004	No
	PM	**0.915**	**E**	**0.924**	**E**	0.009	No
Fairview Road at Sunflower Avenue	AM	0.725	C	0.744	C	0.019	No
	PM	0.761	C	0.776	C	0.015	No

TABLE 25
YEAR 2035 PEAK HOUR INTERSECTION OPERATION

Intersection	Peak Hour	2035 Without Project Conditions		2035 Plus Project Conditions		Significant Impact	
		ICU	LOS	ICU	LOS	Increase	Yes/No
Fairview Road at South Coast Drive	AM	0.762	C	0.788	C	0.026	No
	PM	0.792	C	0.822	D	0.030	No
Fairview Road at I-405 NB Ramps	AM	0.767	C	0.769	C	0.002	No
	PM	0.801	D	0.805	D	0.004	No
Fairview Road at I-405 SB Ramps	AM	0.637	B	0.644	B	0.007	No
	PM	0.709	C	0.712	C	0.003	No
Fairview Road at Paularino Avenue	AM	0.641	B	0.649	B	0.008	No
	PM	0.605	B	0.612	B	0.007	No
Fairview Road at Baker Street	AM	0.744	C	0.745	C	0.001	No
	PM	0.816	D	0.821	D	0.005	No

ICU: intersection capacity utilization; LOS: level of service
Source: Linscott, Law, & Greenspan 2020

Buildout (Year 2035) With-Project Conditions

Buildout (Year 2035) with-project conditions were analyzed by adding Modified Project traffic generation to 2035 without-project conditions and are shown above in Table 25. Two intersections are forecast to operate at unacceptable LOS E in 2035 with-project conditions: Harbor Boulevard at MacArthur Boulevard, and Fairview Road at MacArthur Boulevard. However, the Modified Project would not cause significant impacts at either intersection, as shown above; therefore, a new impact would not occur. The remaining 16 intersections would operate at acceptable LOS.

Caltrans Intersections

Five of the Study Area intersections are under the jurisdiction of Caltrans and the City of Costa Mesa:

1. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp (Costa Mesa/Caltrans)
2. Harbor Avenue at I-405 NB Ramps (Costa Mesa/Caltrans)
3. Harbor Avenue at I-405 SB Ramps (Costa Mesa/Caltrans)
4. Fairview Road at I-405 NB Ramps (Costa Mesa/Caltrans)
5. Fairview Road at I-405 SB Ramps (Costa Mesa/Caltrans)

Caltrans intersections are analyzed using the Highway Capacity Manual (HCM) method defined in terms of delay per vehicle caused by the traffic control (traffic signals for these five intersections); LOS are defined in terms of control delay per vehicle below in Table 26, Levels of Service for Signalized Intersections (HCM).

TABLE 26
LEVELS OF SERVICE FOR SIGNALIZED INTERSECTIONS (HCM)

LOS	Control Delay per Vehicle, seconds
A	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	≥ 80.0
Source: LLG 2020	

Year 2021 With Project Traffic Conditions

All five Caltrans intersections are forecast to operate at acceptable LOS in Year 2021 With Project traffic conditions, as shown below in Table 27, Levels of Service for Caltrans in Intersections, Year 2021 Conditions.

TABLE 27
LEVELS OF SERVICE FOR CALTRANS INTERSECTIONS,
YEAR 2021 CONDITIONS

Intersection	Peak Hour	Year 2021 Without Project Conditions		Year 2021 With Project Conditions		Significant Impact
		HCM	LOS	HCM	LOS	
Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM PM	32.9 21.6	C C	31.1 20.9	C C	No No
Harbor Avenue at I-405 NB Ramps	AM PM	17.4 21.6	B C	17.6 21.9	B C	No No
Harbor Avenue at I-405 SB Ramps	AM PM	13.3 16.1	B B	13.9 15.4	B B	No No
Fairview Road at I-405 NB Ramps	AM PM	26.4 28.8	C C	26.4 28.9	C C	No No
Fairview Road at I-405 SB Ramps	AM PM	24.0 22.4	C C	24.0 22.4	C C	No No
Highway Capacity Manual: HCM; LOS: level of service Source: Linscott, Law, & Greenspan 2020						

Year 2021 With Project Traffic Conditions

All five Caltrans intersections are forecast to operate at acceptable LOS in Year 2035 With Project traffic conditions, as shown below in Table 28, Levels of Service for Caltrans Intersections, Year 2035 Conditions.

TABLE 28
LEVELS OF SERVICE FOR CALTRANS INTERSECTIONS, YEAR 2035 CONDITIONS

Intersection	Peak Hour	Year 2035 Without Project Conditions		Year 2035 With Project Conditions		Significant Impact
		HCM	LOS	HCM	LOS	
Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM PM	27.2 21.7	C C	26.0 23.9	C C	No No
Harbor Avenue at I-405 NB Ramps	AM PM	17.5 24.6	B C	18.3 25.5	B C	No No
Harbor Avenue at I-405 SB Ramps	AM PM	18.9 19.7	B B	19.8 20.2	B C	No No
Fairview Road at I-405 NB Ramps	AM PM	37.3 41.1	D D	38.9 41.0	D D	No No
Fairview Road at I-405 SB Ramps	AM PM	29.9 25.2	C C	29.8 25.4	C C	No No

Highway Capacity Manual: HCM; LOS: level of service
Source: Linscott, Law, & Greenspan 2020

Site Access Evaluation

Operation of intersections of proposed Modified Project driveways with roadways was analyzed using the ICU method for signalized intersections (two proposed driveway intersections) and the HCM method for unsignalized intersections for the remaining three driveways. All the driveway intersections would operate at acceptable LOS, as shown below in Table 29.

Impacts to Bicycle and Pedestrian Facilities

The project applicant is required to construct a bike trail over the railroad easement on the project site connecting South Coast Drive and Sunflower Avenue. Project development would not block sidewalks or bicycle facilities on or near the project site, and no significant impact would occur.

TABLE 29
LEVELS OF SERVICE FOR PROPOSED MODIFIED PROJECT DRIVEWAYS

Intersection (Traffic Control)	Peak Hour	Year 2021 With Project Conditions		Year 2035 With Project Conditions	
		ICU/Delay[1]	LOS	ICU/Delay[1]	LOS
Project Driveway 1 at Sunflower Avenue (CSS)	AM PM	11.3 13.1	B B	11.5 13.4	C C
Project Driveway 2 at Sunflower Avenue (CSS)	AM PM	10.0 10.3	A B	10.2 10.5	B B
Project Driveway 3 at Harbor Boulevard/Law Court (TS)	AM PM	0.502 0.485	A A	0.481 0.538	A A
Project Driveway 4 at South Coast Drive (TS)	AM PM	0.325 0.702	A C	0.334 0.846	A D
Project Driveway 5 at South Coast Drive (CSS)	AM PM	9.9 16.9	C C	9.9 22.4	C C

CSS: cross-street stop; TS: traffic signal; ICU: intersection capacity utilization; LOS: level of service
[1] ICU is in units of seconds per vehicle (of control delay); delay is in units of seconds
Source: Linscott, Law, & Greenspan 2020

Impacts Summary

Modified Project traffic impacts in 2021 with-project conditions and 2035 with-project conditions, including to intersections under Caltrans jurisdiction, would be less than significant. Modified Project traffic impacts at intersections of Project driveways with roadways would be less than significant. No new significant impact would occur and no subsequent CEQA analysis is required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No substantial change from previous analysis. CEQA Guidelines Section 15064.3(b) pertains to the use of Vehicle Miles Traveled (VMT) as a method of determining the significance of transportation impacts. Based on direction from the City of Costa Mesa, VMT was not analyzed in the TIA for the 2017 IS/MND and is not analyzed in the TIA for the Modified Project. Implementation of Section 15064.3 will be mandatory statewide effective July 1, 2020. The IS/MND was circulated for public review in 2017 and is thus not subject to Section 15064.3, part of the CEQA Guidelines Update effective December 28, 2018. No additional CEQA analysis is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Substantial Change from Previous Analysis. The Modified Project does not propose changes to surrounding roadways. The Modified Project proposes site access via five driveways: two from Sunflower Avenue, two from South Coast Drive, and one from Harbor Boulevard. The Modified Project proposes one additional driveway compared to the Approved Project, which proposed one driveway from Sunflower Avenue rather than two. All proposed intersections of driveways with roadways would be perpendicular; the designs of the intersections would not create hazards. Modified Project development would not add incompatible uses to area roadways. No impacts respecting design features or incompatible uses were identified in the IS/MND. No new impact would occur, and no subsequent CEQA analysis is required.

d) Result in inadequate emergency access?

No Substantial Change from Previous Analysis. Modified Project development would not cause inadequate emergency access. Modified Project construction would not block public roadways and thus would not block emergency access to surrounding travel lanes. The Modified Project site plan would provide emergency access to all reused and proposed new buildings conforming with *California Fire Code* Section 503. No new impact would occur.

<u>Conclusion</u>

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the transportation and traffic resources analysis provided in the IS/MND are required.

Mitigation Program

The IS/MND did not set forth mitigation measures for transportation impacts.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Tribal cultural resources (TCRs) are defined by Public Resources Code (PRC) Section 21074, as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe in California that is on the contact list maintained by the Native American Heritage Commission. As part of the IS/MND prepared for the Approved Project, the City notified 14 tribes of the Approved Project and received one response. The Gabrielino Band of Mission Indians – Kizh Nation requested that a Certified Native American Monitor be present during any and all ground disturbance in an effort to protect any cultural resources that may be affected. The IS/MND concluded that grading and excavation activities could disturb archaeological resources that may be buried in site soils. Impacts to TCRs were determined to be less than significant after implementation of Mitigation Measure CULT-1.

4.18.2 PROJECT ENVIRONMENTAL REVIEW

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As discussed previously, no historic resources on or next to the Modified Project site were identified in the City of Costa Mesa General Plan and General Plan FEIR. The project site is shown as farmland in historical aerial photographs dated 1953 and 1963 (NETR.com 2019). The original LA Times building opened in 1968 and was expanded in 1980 and 1989. The IS/MND identified the nearest resources eligible for listing on the National Register of Historic Places (NRHP) and/or the City's Local Register of Historic Places as the Segerstrom House and Segerstrom Barn, both about 0.5 mile southeast of the project site and which are both eligible for listing on the NRHP; Modified Project development would not diminish the historical significance of those resources. Therefore, Modified Project development would not degrade the significance of a historical resource, and no new significant impact would occur.

The Modified Project site is located within an urbanized area, is fully developed with a variety of structures, and has historically been subject to high degree of disturbance associated with development of the Los Angeles Times industrial building. According to Section 21074 of the Public Resources Code, tribal cultural resources include (1) sites, features, places, cultural

landscapes, sacred places, and objects with cultural value to a tribe that are listed or determined to be eligible for listing, in the national or state register of historical resources, or listed in a local register of historic resources; or (2) a resource that the lead agency determines, in its discretion, is a tribal cultural resource. Because the Project would involve redevelopment of the previously fully developed site, the Project would not represent the loss of tribal cultural resources that were not already impacted through the previous construction and development activities. As noted above, no archaeological resources, including tribal cultural resources, have been identified on the Project Site. Additionally, no cemeteries or identified human remains are known to be located on the Modified Project site. However, the Modified Project would comply with Section 7050.5 of the *California Health and Safety Code* and Section 5097.98 of the *California Public Resources Code*, which require the County Coroner to be notified immediately if any human remains are encountered. Consistent with the analysis provided in the IS/MND, adherence to Mitigation Measure CULT-1 would ensure that any potential impacts related to archaeological resources, including tribal cultural resources, would be less than significant. As a result, the Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related to tribal cultural resources.

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) Initial Study/Mitigated

Water

The IS/MND for the Approved Project included a Water Supply Assessment (WSA) as an appendix, and the WSA was summarized in the IS/MND text. MWD was identified as the water supplier for the project. Project buildout water demand was estimated at about 126 acre-feet per year (afy); existing water use onsite was approximately 15 afy; and the net increase in water demand by project buildout would be about 111 afy or 99,090 gallons per day (gpd). The IS/MND concluded that MWD would have sufficient water supplies to meet project water demands over the 2020-2040 period in a normal, single-dry year, and multiple-dry year conditions. Impacts were identified as less than significant.

Wastewater

The IS/MND identified the Costa Mesa Sanitary District (CMSD) as providing sewer service for the project site; and that existing sewers serving the site have sufficient capacity for project-generated wastewater. Impacts were determined to be less than significant.

Storm Drainage

The IS/MND concluded that existing storm drainage facilities serving the site would accommodate site runoff in post-project conditions, and no new or expanded drainage facilities were required. Impacts were determined to be less than significant.

Solid Waste

The IS/MND determined that the Frank Bowerman Landfill has sufficient capacity for project-generated solid waste and that the project would comply with regulations governing solid waste disposal. Impacts were identified as less than significant.

4.19.2 PROJECT ENVIRONMENTAL REVIEW

Would the Project:

a) **Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

No Substantial Change from Previous Analysis.

Water

The Modified Project would consist of 504,877 SF of reuse and new construction, 60,282 SF less than the 565,159 SF for the Approved Project (see Table 2 of Section 3.4) or a reduction of about 11 percent. The Water Supply Assessment (WSA) for the Approved Project estimated water demand for the entire Approved Project (all three phases) as about 112,750 gallons per day (gpd). The Modified Project differs from the Approved Project as analyzed in the WSA somewhat regarding proposed land uses; for instance, the WSA accounts for a 400-room hotel in the Approved Project, which is excluded from the Modified Project. Nearly half of the water demand estimated for the Approved Project by the WSA would be for the hotel.[8] Thus, the WSA is conservative regarding the Modified Project in terms of water demand factors by various land use types. Considering the slight reduction in square footage for the Modified Project compared to the Approved Project, water demand by the Modified Project is expected to be lower than that for the Approved Project. The WSA determined that MWD has sufficient forecasted water supplies for the Approved Project. The WSA finding is expected to apply to the Modified Project as well; therefore, Modified Project development would not cause any new adverse impact on water supplies. No new impact would occur.

Wastewater

Wastewater generation for the Approved Project and the Modified Project is estimated as 100 percent of indoor water demands. The WSA for the Approved Project estimated that nearly 97 percent of Approved Project water demand would be indoors. The Modified Project proposes landscaping on about the same proportion of the project site as the Approved Project did. Thus, indoor water use as a proportion of total water use for the Modified Project is expected to be approximately the same as for the Approved Project. Modified Project water demand would be lower than that of the Approved Project, as explained in the water analysis above. Thus, wastewater generation by the Modified Project would also be lower than that for the Approved Project. The Orange County Sanitation District (OCSD) would provide wastewater treatment for the Modified Project. The OCSD operates two wastewater treatment plants: Plant No. 1 in the City of Fountain Valley, and Plant No. 2 in the City of Huntington Beach. Plant No. 1 has secondary treatment capacity of 182 million gallons per day (mgd) and had average daily flows in 2017–18 of 120 mgd; Plant No. 2 has secondary treatment capacity of 150 mgd and had average daily flows in 2017-18 of 65 mgd (OCSD 2018). Wastewater treatment capacity in the region is sufficient for project-generated wastewater, and no new impact would occur.

[8] Water demand by the hotel would be 50,000 gpd, or about 44 percent of the 112,750 gpd for the entire Approved Project (Psomas 2017).

Storm Water Drainage

Modified Project development would not add impervious surfaces to the project site compared to Approved Project development. Thus, Modified Project development would not increase the rate or volume of runoff. Like the Approved Project, the Modified Project would limit discharges of runoff off site to no more than the existing runoff rate, pursuant to OC Public Works requirements. The Modified Project would include bioretention planters in several parts of the project site, as the Approved Project did. Modified Project development would not require construction of additional or expanded storm water drainage facilities compared to those planned for the Approved Project, and no new impact would occur.

Electricity

The Modified Project comprises slightly less building area than the Approved Project. Although electricity demand was not quantified in the IS/MND prepared for the Approved Project, the Modified Project is expected to generate slightly reduced electricity demands when compared to the Approved Project, and electricity would be provided pursuant to Public Utilities Commission regulations and requirements. Therefore, no impacts are anticipated and no new impacts would occur.

Natural Gas

The Modified Project comprises slightly less building area than the Approved Project. Although natural gas demand was not quantified in the IS/MND prepared for the Approved Project, the Modified Project is expected to generate slightly reduced natural gas demands when compared to the Approved Project, and natural gas would be provided pursuant to Public Utilities Commission regulations and requirements. Therefore, no new impacts would occur.

Telecommunications

Modified Project development is expected to generate slightly reduced telecommunications demands for the same reason as the reductions for other utilities. Although telecommunications was not expressly evaluated in the IS/MND prepared for the Approved Project, telecommunications service would be provided pursuant to Public Utilities Commission regulations and requirements. Therefore, no new impacts would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Substantial Change from Previous Analysis. The WSA for the Approved Project assessed Approved Project water demands compared to MWD water supplies in normal, single-dry, and multiple-dry years. The conclusion of the WSA regarding adequacy of MWD water supplies for the Approved Project applies to the Modified Project as well (refer to Section 4.19.2.a, above). No new impact would occur.

c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

No Substantial Change from Previous Analysis. No new impact to wastewater treatment capacity would occur, as explained above in Section 4.19.2.a.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Substantial Change from Previous Analysis. The Modified Project involves slightly less building area than the Approved Project and therefore is expected to generate slightly less solid waste than the Approved Project. The Modified Project involves 113,355 SF less of construction and 60,312 SF less of demolition than the Approved Project would have. Thus, Modified Project construction would generate less construction and demolition debris than Approved Project construction would have. No new impact to solid waste disposal capacity or solid waste reduction goals would occur.

e) Comply with federal, State, and local statutes and regulations related to solid waste?

No Substantial Change from Previous Analysis. Consistent with the finding of the IS/MND for the Approved Project, the Modified Project would comply with policies governing solid waste disposal and diversion, including the California Integrated Waste Management Act of 1989 (AB 939) and Section 5.408 of the CALGreen Code (*California Code of Regulations* Title 24 Part 11). No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the utilities and services systems analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for utilities and service systems impacts.

4.20 WILDFIRE

4.20.1 SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

Wildfire impacts of the Approved Project were analyzed in the Hazards and Hazardous Materials section of the IS/MND. The IS/MND concluded that the project site was not in or near a Fire Hazard Severity Zone, that no wildland vegetation is near the project site, and that Approved Project development would have no impact regarding wildfire risks.

4.20.2 PROJECT ENVIRONMENTAL REVIEW

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) **Substantially impair an adopted emergency response plan or emergency evacuation plan?**

No Substantial Change from Previous Analysis. Consistent with the finding in the IS/MND for the Approved Project, the Modified Project would not block roadways providing access to surrounding properties and would not impede emergency access to the project site. No new impact would occur.

b) **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

No Substantial Change from Previous Analysis. Modified Project development would not add slopes or wildland vegetation to the site and would not change prevailing winds on site. Thus, Modified Project development would not expose project occupants to pollution concentrations from a wildfire or uncontrolled spread of wildfire, and no impact would occur.

c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

No Substantial Change from Previous Analysis. Modified Project development does not involve installation or maintenance of infrastructure in areas where wildfire risk would be exacerbated, and no new impact would occur.

d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

No Substantial Change from Previous Analysis. Modified Project development would not exacerbate wildfire risks; and, thus, would not expose people or structures to secondary hazards arising from wildfire, such as flooding or landslides. No new impact would occur.

Conclusion

The impacts of the Modified Project would be consistent with the impacts identified for the previously approved projects analyzed in the IS/MND. The Modified Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In

regard to Section 15162 of the State CEQA Guidelines, the Modified Project (1) would not propose substantial changes; (2) would not have circumstantial changes when the project is undertaken; (3) would bring about no new information of substantial importance that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the previous documents. For these reasons, no major revisions to the utilities and services systems analysis provided in the IS/MND are required.

Mitigation Program

The 2017 IS/MND did not require mitigation for wildfire impacts.

SECTION 5.0 CONCLUSIONS

Based on the analysis provided in this Addendum, the record demonstrates sufficient evidence to determine that (1) the Modified Project does not represent a substantial change from the previously approved project evaluated in *Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) IS/MND*; (2) no substantial changes have occurred with respect to the circumstances under which the project is undertaken; and (3) the modifications to the Modified Project have not introduced new information of substantial importance which was not known and could not have been known at the time the project was certified as complete. The Modified Project would not have any new or substantially more severe impacts than what was evaluated in *Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) IS/MND*. No new Mitigation Measures are recommended in addition to those adopted at the time the project was approved that would further reduce project impacts. *Preliminary Master Plan for Former LA Times Site (Planning Application-17-30) IS/MND*, when considered in conjunction with this Addendum, provides adequate documentation pursuant to the CEQA for the Preliminary Master Plan for the Former LA Times project.

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SECTION 6.0
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APPENDIX A

AIR QUALITY AND GREENHOUSE GAS CALCULATIONS

LA Times Construction for Phases 1 and 2

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	71.42	1000sqft	1.64	71,419.00	0
Parking Lot	470.00	1000sqft	10.79	470,000.00	0
High Turnover (Sit Down Restaurant)	6.35	1000sqft	0.15	6,354.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - ..

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Construction only

Area Coating - Construction only

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.5690	35.6884	25.2562	0.0579	3.2622	1.4042	4.5328	0.6804	1.2933	1.8507	0.0000	5,894.9423	5,894.9423	1.2970	0.0000	5,925.4261
2020	24.1194	62.6017	46.9867	0.1105	4.5458	2.4473	6.9931	0.8419	2.2538	3.0956	0.0000	11,066.2156	11,066.2156	2.5924	0.0000	11,131.0253
2021	20.5009	12.0827	11.1223	0.0234	0.4408	0.4987	0.9395	0.1188	0.4589	0.5777	0.0000	2,312.8226	2,312.8226	0.5703	0.0000	2,327.0796
Maximum	**24.1194**	**62.6017**	**46.9867**	**0.1105**	**4.5458**	**2.4473**	**6.9931**	**0.8419**	**2.2538**	**3.0956**	**0.0000**	**11,066.2156**	**11,066.2156**	**2.5924**	**0.0000**	**11,131.0253**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.5690	35.6884	25.2562	0.0579	2.2583	1.4042	3.5289	0.5284	1.2933	1.6987	0.0000	5,894.9423	5,894.9423	1.2970	0.0000	5,925.4261

2020	24.1194	62.6017	46.9867	0.1105	2.9205	2.4473	5.3678	0.6379	2.2538	2.8917	0.0000	11,066.2156	11,066.2156	2.5924	0.0000	11,131.0253
2021	20.5009	12.0827	11.1223	0.0234	0.4408	0.4987	0.9395	0.1188	0.4589	0.5777	0.0000	2,312.8226	2,312.8226	0.5703	0.0000	2,327.0796
Maximum	**24.1194**	**62.6017**	**46.9867**	**0.1105**	**2.9205**	**2.4473**	**5.3678**	**0.6379**	**2.2538**	**2.8917**	**0.0000**	**11,066.2156**	**11,066.2156**	**2.5924**	**0.0000**	**11,131.0253**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.87**	**0.00**	**21.09**	**21.69**	**0.00**	**6.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Energy	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0129**	**0.6184**	**0.5752**	**3.7100e-003**	**0.0000**	**0.0472**	**0.0472**	**0.0000**	**0.0472**	**0.0472**		**741.6151**	**741.6151**	**0.0145**	**0.0136**	**746.0294**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278

Energy	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0129**	**0.6184**	**0.5752**	**3.7100e-003**	**0.0000**	**0.0472**	**0.0472**	**0.0000**	**0.0472**	**0.0472**		**741.6151**	**741.6151**	**0.0145**	**0.0136**	**746.0294**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	P1a Demolition	Demolition	6/1/2019	8/1/2019	5	44	
2	Site Preparation	Site Preparation	6/1/2019	8/30/2019	5	65	
3	P1a Renovation	Building Construction	6/1/2019	4/30/2020	5	239	
4	P1a Grading	Grading	10/1/2019	10/30/2019	5	22	
5	P1b Building Construction	Building Construction	10/1/2019	7/30/2020	5	218	
6	P1a Paving	Paving	11/1/2019	11/29/2019	5	21	
7	P1b Demolition	Demolition	12/1/2019	2/27/2020	5	64	
8	P1b Renovation	Building Construction	12/1/2019	2/26/2021	5	325	
9	P1 Architectural Coating	Architectural Coating	2/1/2020	2/28/2020	5	20	
10	P2 Demolition	Demolition	3/1/2020	4/30/2020	5	44	
11	P1b Grading	Grading	3/1/2020	4/30/2020	5	44	
12	P2 Renovation	Building Construction	3/1/2020	4/30/2021	5	305	
13	P1b Paving	Paving	4/1/2020	5/29/2020	5	43	
14	P2 Grading	Grading	6/1/2020	6/30/2020	5	22	
15	P2 Paving	Paving	7/1/2020	7/30/2020	5	22	
16	P2 Architectural Coating	Architectural Coating	5/1/2021	5/31/2021	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 10.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 58,330; Non-Residential Outdoor: 19,444; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1a Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
P1a Demolition	Excavators	2	8.00	158	0.38
P1a Demolition	Rubber Tired Dozers	0	8.00	247	0.40
P1a Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1a Renovation	Aerial Lifts	2	8.00	63	0.31
P1a Renovation	Air Compressors	0	6.00	78	0.48
P1a Renovation	Cranes	1	4.00	231	0.29
P1a Renovation	Forklifts	2	6.00	89	0.20
P1a Renovation	Generator Sets	0	8.00	84	0.74
P1a Renovation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1a Renovation	Welders	0	8.00	46	0.45
P1a Grading	Concrete/Industrial Saws	0	8.00	81	0.73
P1a Grading	Cranes	0	4.00	231	0.29
P1a Grading	Excavators	0	8.00	158	0.38
P1a Grading	Forklifts	0	6.00	89	0.20
P1a Grading	Graders	1	8.00	187	0.41
P1a Grading	Plate Compactors	1	8.00	8	0.43
P1a Grading	Rubber Tired Dozers	0	8.00	247	0.40
P1a Grading	Scrapers	1	8.00	367	0.48
P1a Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37

P1b Building Construction	Aerial Lifts	2	8.00	63	0.31
P1b Building Construction	Cranes	1	4.00	231	0.29
P1b Building Construction	Forklifts	2	6.00	89	0.20
P1b Building Construction	Generator Sets	0	8.00	84	0.74
P1b Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1b Building Construction	Welders	0	8.00	46	0.45
P1a Paving	Cement and Mortar Mixers	0	6.00	9	0.56
P1a Paving	Pavers	0	8.00	130	0.42
P1a Paving	Paving Equipment	1	8.00	132	0.36
P1a Paving	Rollers	2	8.00	80	0.38
P1a Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1b Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
P1b Demolition	Excavators	1	8.00	158	0.38
P1b Demolition	Rubber Tired Dozers	0	8.00	247	0.40
P1b Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
P1b Renovation	Aerial Lifts	2	8.00	63	0.31
P1b Renovation	Cranes	1	4.00	231	0.29
P1b Renovation	Forklifts	2	6.00	89	0.20
P1b Renovation	Generator Sets	0	8.00	84	0.74
P1b Renovation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1b Renovation	Welders	0	8.00	46	0.45
P1 Architectural Coating	Air Compressors	1	6.00	78	0.48
P2 Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Demolition	Excavators	1	8.00	158	0.38
P2 Demolition	Rubber Tired Dozers	0	1.00	247	0.40
P2 Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
P1b Grading	Cement and Mortar Mixers	0	6.00	9	0.56
P1b Grading	Concrete/Industrial Saws	0	8.00	81	0.73
P1b Grading	Excavators	0	8.00	158	0.38
P1b Grading	Graders	1	8.00	187	0.41

P1b Grading	Pavers	0	7.00	130	0.42
P1b Grading	Plate Compactors	1	8.00	8	0.43
P1b Grading	Rollers	0	7.00	80	0.38
P1b Grading	Rubber Tired Dozers	0	1.00	247	0.40
P1b Grading	Scrapers	1	8.00	367	0.48
P1b Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Renovation	Aerial Lifts	2	8.00	63	0.31
P2 Renovation	Cranes	1	4.00	231	0.29
P2 Renovation	Forklifts	2	6.00	89	0.20
P2 Renovation	Generator Sets	0	8.00	84	0.74
P2 Renovation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Renovation	Welders	0	8.00	46	0.45
P1b Paving	Cement and Mortar Mixers	0	6.00	9	0.56
P1b Paving	Pavers	0	7.00	130	0.42
P1b Paving	Paving Equipment	1	8.00	132	0.36
P1b Paving	Rollers	2	8.00	80	0.38
P1b Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Grading	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Grading	Excavators	0	8.00	158	0.38
P2 Grading	Graders	1	8.00	187	0.41
P2 Grading	Plate Compactors	1	8.00	8	0.43
P2 Grading	Rubber Tired Dozers	0	1.00	247	0.40
P2 Grading	Scrapers	1	8.00	367	0.48
P2 Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Paving	Cement and Mortar Mixers	0	6.00	9	0.56
P2 Paving	Pavers	0	8.00	130	0.42
P2 Paving	Paving Equipment	1	8.00	132	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P2 Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
P1a Demolition	3	8.00	0.00	243.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	130.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1a Renovation	5	30.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1a Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Building Construction	5	30.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1a Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Demolition	2	5.00	0.00	487.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Renovation	5	30.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Demolition	2	5.00	0.00	215.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Grading	3	8.00	0.00	750.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Renovation	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 P1a Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.1969	0.0000	1.1969	0.1812	0.0000	0.1812			0.0000			0.0000
Off-Road	0.6961	7.1168	8.2534	0.0127		0.3757	0.3757		0.3456	0.3456		1,252.9076	1,252.9076	0.3964		1,262.8177
Total	**0.6961**	**7.1168**	**8.2534**	**0.0127**	**1.1969**	**0.3757**	**1.5726**	**0.1812**	**0.3456**	**0.5269**		**1,252.9076**	**1,252.9076**	**0.3964**		**1,262.8177**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0471	1.6585	0.4155	4.2200e-003	0.0962	6.4300e-003	0.1026	0.0263	6.1500e-003	0.0325		469.3161	469.3161	0.0510		470.5913
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144
Total	**0.0843**	**1.6823**	**0.6797**	**5.0800e-003**	**0.1856**	**7.0300e-003**	**0.1926**	**0.0500**	**6.7000e-003**	**0.0567**		**554.5780**	**554.5780**	**0.0531**		**555.9058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4668	0.0000	0.4668	0.0707	0.0000	0.0707			0.0000			0.0000
Off-Road	0.6961	7.1168	8.2534	0.0127		0.3757	0.3757		0.3456	0.3456	0.0000	1,252.9076	1,252.9076	0.3964		1,262.8177
Total	**0.6961**	**7.1168**	**8.2534**	**0.0127**	**0.4668**	**0.3757**	**0.8425**	**0.0707**	**0.3456**	**0.4163**	**0.0000**	**1,252.9076**	**1,252.9076**	**0.3964**		**1,262.8177**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0471	1.6585	0.4155	4.2200e-003	0.0962	6.4300e-003	0.1026	0.0263	6.1500e-003	0.0325		469.3161	469.3161	0.0510		470.5913
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144
Total	**0.0843**	**1.6823**	**0.6797**	**5.0800e-003**	**0.1856**	**7.0300e-003**	**0.1926**	**0.0500**	**6.7000e-003**	**0.0567**		**554.5780**	**554.5780**	**0.0531**		**555.9058**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004			0.0000			0.0000
Off-Road	0.7543	7.7011	8.8291	0.0134		0.4147	0.4147		0.3815	0.3815		1,329.7930	1,329.7930	0.4207		1,340.3113
Total	**0.7543**	**7.7011**	**8.8291**	**0.0134**	**1.8100e-003**	**0.4147**	**0.4165**	**2.7000e-004**	**0.3815**	**0.3818**		**1,329.7930**	**1,329.7930**	**0.4207**		**1,340.3113**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0171	0.6006	0.1505	1.5300e-003	0.0348	2.3300e-003	0.0372	9.5300e-003	2.2300e-003	0.0118		169.9581	169.9581	0.0185		170.4199
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144
Total	**0.0543**	**0.6244**	**0.4147**	**2.3900e-003**	**0.1243**	**2.9300e-003**	**0.1272**	**0.0332**	**2.7800e-003**	**0.0360**		**255.2200**	**255.2200**	**0.0206**		**255.7343**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1000e-004	0.0000	7.1000e-004	1.1000e-004	0.0000	1.1000e-004			0.0000			0.0000
Off-Road	0.7543	7.7011	8.8291	0.0134		0.4147	0.4147		0.3815	0.3815	0.0000	1,329.7930	1,329.7930	0.4207		1,340.3113
Total	**0.7543**	**7.7011**	**8.8291**	**0.0134**	**7.1000e-004**	**0.4147**	**0.4154**	**1.1000e-004**	**0.3815**	**0.3816**	**0.0000**	**1,329.7930**	**1,329.7930**	**0.4207**		**1,340.3113**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0171	0.6006	0.1505	1.5300e-003	0.0348	2.3300e-003	0.0372	9.5300e-003	2.2300e-003	0.0118		169.9581	169.9581	0.0185		170.4199
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144

Total	**0.0543**	**0.6244**	**0.4147**	**2.3900e-003**	**0.1243**	**2.9300e-003**	**0.1272**	**0.0332**	**2.7800e-003**	**0.0360**		**255.2200**	**255.2200**	**0.0206**		**255.7343**

3.4 P1a Renovation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006		845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**		**845.0531**	**845.0531**	**0.2674**		**851.7373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0469	1.3632	0.3952	2.9400e-003	0.0767	9.3700e-003	0.0861	0.0221	8.9600e-003	0.0310		319.6262	319.6262	0.0291		320.3539
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1864**	**1.4523**	**1.3861**	**6.1500e-003**	**0.4120**	**0.0116**	**0.4236**	**0.1110**	**0.0110**	**0.1220**		**639.3583**	**639.3583**	**0.0370**		**640.2830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006	0.0000	845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**	**0.0000**	**845.0531**	**845.0531**	**0.2674**		**851.7373**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0469	1.3632	0.3952	2.9400e-003	0.0767	9.3700e-003	0.0861	0.0221	8.9600e-003	0.0310		319.6262	319.6262	0.0291		320.3539
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1864**	**1.4523**	**1.3861**	**6.1500e-003**	**0.4120**	**0.0116**	**0.4236**	**0.1110**	**0.0110**	**0.1220**		**639.3583**	**639.3583**	**0.0370**		**640.2830**

3.4 P1a Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0400	1.2497	0.3617	2.9200e-003	0.0767	6.6300e-003	0.0833	0.0221	6.3500e-003	0.0284		317.3593	317.3593	0.0276		318.0503
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1703**	**1.3295**	**1.2693**	**6.0200e-003**	**0.4120**	**8.8500e-003**	**0.4209**	**0.1110**	**8.3900e-003**	**0.1194**		**626.8456**	**626.8456**	**0.0347**		**627.7132**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0400	1.2497	0.3617	2.9200e-003	0.0767	6.6300e-003	0.0833	0.0221	6.3500e-003	0.0284		317.3593	317.3593	0.0276		318.0503
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1703**	**1.3295**	**1.2693**	**6.0200e-003**	**0.4120**	**8.8500e-003**	**0.4209**	**0.1110**	**8.3900e-003**	**0.1194**		**626.8456**	**626.8456**	**0.0347**		**627.7132**

3.5 P1a Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5921	19.7447	10.1099	0.0223		0.7269	0.7269		0.6696	0.6696		2,191.9210	2,191.9210	0.6862		2,209.0753
Total	**1.5921**	**19.7447**	**10.1099**	**0.0223**	**1.5908**	**0.7269**	**2.3177**	**0.1718**	**0.6696**	**0.8413**		**2,191.9210**	**2,191.9210**	**0.6862**		**2,209.0753**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144
Total	**0.0372**	**0.0238**	**0.2642**	**8.6000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**85.2619**	**85.2619**	**2.1000e-003**		**85.3144**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5921	19.7447	10.1099	0.0223		0.7269	0.7269		0.6696	0.6696	0.0000	2,191.9210	2,191.9210	0.6862		2,209.0753
Total	**1.5921**	**19.7447**	**10.1099**	**0.0223**	**0.6204**	**0.7269**	**1.3473**	**0.0670**	**0.6696**	**0.7366**	**0.0000**	**2,191.9210**	**2,191.9210**	**0.6862**		**2,209.0753**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144

Total	**0.0372**	**0.0238**	**0.2642**	**8.6000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**85.2619**	**85.2619**	**2.1000e-003**		**85.3144**

3.6 P1b Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006		845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**		**845.0531**	**845.0531**	**0.2674**		**851.7373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0469	1.3632	0.3952	2.9400e-003	0.0767	9.3700e-003	0.0861	0.0221	8.9600e-003	0.0310		319.6262	319.6262	0.0291		320.3539
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1864**	**1.4523**	**1.3861**	**6.1500e-003**	**0.4120**	**0.0116**	**0.4236**	**0.1110**	**0.0110**	**0.1220**		**639.3583**	**639.3583**	**0.0370**		**640.2830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006	0.0000	845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**	**0.0000**	**845.0531**	**845.0531**	**0.2674**		**851.7373**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0469	1.3632	0.3952	2.9400e-003	0.0767	9.3700e-003	0.0861	0.0221	8.9600e-003	0.0310		319.6262	319.6262	0.0291		320.3539
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1864**	**1.4523**	**1.3861**	**6.1500e-003**	**0.4120**	**0.0116**	**0.4236**	**0.1110**	**0.0110**	**0.1220**		**639.3583**	**639.3583**	**0.0370**		**640.2830**

3.6 P1b Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0400	1.2497	0.3617	2.9200e-003	0.0767	6.6300e-003	0.0833	0.0221	6.3500e-003	0.0284		317.3593	317.3593	0.0276		318.0503
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1703**	**1.3295**	**1.2693**	**6.0200e-003**	**0.4120**	**8.8500e-003**	**0.4209**	**0.1110**	**8.3900e-003**	**0.1194**		**626.8456**	**626.8456**	**0.0347**		**627.7132**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0400	1.2497	0.3617	2.9200e-003	0.0767	6.6300e-003	0.0833	0.0221	6.3500e-003	0.0284		317.3593	317.3593	0.0276		318.0503
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1703**	**1.3295**	**1.2693**	**6.0200e-003**	**0.4120**	**8.8500e-003**	**0.4209**	**0.1110**	**8.3900e-003**	**0.1194**		**626.8456**	**626.8456**	**0.0347**		**627.7132**

3.7 P1a Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6660	6.7383	6.3380	9.3200e-003		0.4066	0.4066		0.3741	0.3741		922.6868	922.6868	0.2919		929.9850
Paving	1.3462					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0122**	**6.7383**	**6.3380**	**9.3200e-003**		**0.4066**	**0.4066**		**0.3741**	**0.3741**		**922.6868**	**922.6868**	**0.2919**		**929.9850**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144
Total	**0.0372**	**0.0238**	**0.2642**	**8.6000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**85.2619**	**85.2619**	**2.1000e-003**		**85.3144**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6660	6.7383	6.3380	9.3200e-003		0.4066	0.4066		0.3741	0.3741	0.0000	922.6868	922.6868	0.2919		929.9850
Paving	1.3462					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0122**	**6.7383**	**6.3380**	**9.3200e-003**		**0.4066**	**0.4066**		**0.3741**	**0.3741**	**0.0000**	**922.6868**	**922.6868**	**0.2919**		**929.9850**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0238	0.2642	8.6000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		85.2619	85.2619	2.1000e-003		85.3144

Total	**0.0372**	**0.0238**	**0.2642**	**8.6000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**85.2619**	**85.2619**	**2.1000e-003**		**85.3144**

3.8 P1b Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6457	0.0000	1.6457	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	0.4353	4.4349	4.9902	7.4900e-003		0.2464	0.2464		0.2267	0.2267		741.7820	741.7820	0.2347		747.6493
Total	**0.4353**	**4.4349**	**4.9902**	**7.4900e-003**	**1.6457**	**0.2464**	**1.8921**	**0.2492**	**0.2267**	**0.4758**		**741.7820**	**741.7820**	**0.2347**		**747.6493**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0649	2.2852	0.5724	5.8200e-003	0.3246	8.8500e-003	0.3334	0.0834	8.4700e-003	0.0919		646.6374	646.6374	0.0703		648.3945
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0233	0.0149	0.1651	5.3000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		53.2887	53.2887	1.3100e-003		53.3215
Total	**0.0882**	**2.3000**	**0.7376**	**6.3500e-003**	**0.3805**	**9.2200e-003**	**0.3897**	**0.0982**	**8.8100e-003**	**0.1071**		**699.9261**	**699.9261**	**0.0716**		**701.7160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6418	0.0000	0.6418	0.0972	0.0000	0.0972			0.0000			0.0000
Off-Road	0.4353	4.4349	4.9902	7.4900e-003		0.2464	0.2464		0.2267	0.2267	0.0000	741.7820	741.7820	0.2347		747.6493
Total	**0.4353**	**4.4349**	**4.9902**	**7.4900e-003**	**0.6418**	**0.2464**	**0.8882**	**0.0972**	**0.2267**	**0.3238**	**0.0000**	**741.7820**	**741.7820**	**0.2347**		**747.6493**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0649	2.2852	0.5724	5.8200e-003	0.3246	8.8500e-003	0.3334	0.0834	8.4700e-003	0.0919		646.6374	646.6374	0.0703		648.3945
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0233	0.0149	0.1651	5.3000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		53.2887	53.2887	1.3100e-003		53.3215
Total	**0.0882**	**2.3000**	**0.7376**	**6.3500e-003**	**0.3805**	**9.2200e-003**	**0.3897**	**0.0982**	**8.8100e-003**	**0.1071**		**699.9261**	**699.9261**	**0.0716**		**701.7160**

3.8 P1b Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.6457	0.0000	1.6457	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994		725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**1.6457**	**0.2167**	**1.8624**	**0.2492**	**0.1994**	**0.4486**		**725.6948**	**725.6948**	**0.2347**		**731.5624**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0589	2.1187	0.5566	5.7400e-003	0.1852	6.9000e-003	0.1921	0.0492	6.6000e-003	0.0558		639.3244	639.3244	0.0689		641.0466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0133	0.1513	5.2000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		51.5811	51.5811	1.1800e-003		51.6105
Total	**0.0806**	**2.1320**	**0.7079**	**6.2600e-003**	**0.2411**	**7.2700e-003**	**0.2484**	**0.0640**	**6.9400e-003**	**0.0710**		**690.9055**	**690.9055**	**0.0701**		**692.6570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6418	0.0000	0.6418	0.0972	0.0000	0.0972			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994	0.0000	725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**0.6418**	**0.2167**	**0.8585**	**0.0972**	**0.1994**	**0.2966**	**0.0000**	**725.6948**	**725.6948**	**0.2347**		**731.5624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0589	2.1187	0.5566	5.7400e-003	0.1852	6.9000e-003	0.1921	0.0492	6.6000e-003	0.0558		639.3244	639.3244	0.0689		641.0466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0133	0.1513	5.2000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		51.5811	51.5811	1.1800e-003		51.6105
Total	**0.0806**	**2.1320**	**0.7079**	**6.2600e-003**	**0.2411**	**7.2700e-003**	**0.2484**	**0.0640**	**6.9400e-003**	**0.0710**		**690.9055**	**690.9055**	**0.0701**		**692.6570**

3.9 P1b Renovation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006		845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**		**845.0531**	**845.0531**	**0.2674**		**851.7373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0469	1.3632	0.3952	2.9400e-003	0.0767	9.3700e-003	0.0861	0.0221	8.9600e-003	0.0310		319.6262	319.6262	0.0291		320.3539
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290
Total	**0.1864**	**1.4523**	**1.3861**	**6.1500e-003**	**0.4120**	**0.0116**	**0.4236**	**0.1110**	**0.0110**	**0.1220**		**639.3583**	**639.3583**	**0.0370**		**640.2830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006	0.0000	845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**	**0.0000**	**845.0531**	**845.0531**	**0.2674**		**851.7373**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0469	1.3632	0.3952	2.9400e-003	0.0767	9.3700e-003	0.0861	0.0221	8.9600e-003	0.0310		319.6262	319.6262	0.0291		320.3539
Worker	0.1395	0.0891	0.9908	3.2100e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		319.7321	319.7321	7.8800e-003		319.9290

Total	**0.1864**	**1.4523**	**1.3861**	**6.1500e-003**	**0.4120**	**0.0116**	**0.4236**	**0.1110**	**0.0110**	**0.1220**		**639.3583**	**639.3583**	**0.0370**		**640.2830**

3.9 P1b Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0400	1.2497	0.3617	2.9200e-003	0.0767	6.6300e-003	0.0833	0.0221	6.3500e-003	0.0284		317.3593	317.3593	0.0276		318.0503
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1703**	**1.3295**	**1.2693**	**6.0200e-003**	**0.4120**	**8.8500e-003**	**0.4209**	**0.1110**	**8.3900e-003**	**0.1194**		**626.8456**	**626.8456**	**0.0347**		**627.7132**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0400	1.2497	0.3617	2.9200e-003	0.0767	6.6300e-003	0.0833	0.0221	6.3500e-003	0.0284		317.3593	317.3593	0.0276		318.0503
Worker	0.1303	0.0798	0.9076	3.1000e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		309.4863	309.4863	7.0600e-003		309.6629
Total	**0.1703**	**1.3295**	**1.2693**	**6.0200e-003**	**0.4120**	**8.8500e-003**	**0.4209**	**0.1110**	**8.3900e-003**	**0.1194**		**626.8456**	**626.8456**	**0.0347**		**627.7132**

3.9 P1b Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272		826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**		**826.6553**	**826.6553**	**0.2674**		**833.3393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0336	1.1231	0.3350	2.8900e-003	0.0767	2.4300e-003	0.0791	0.0221	2.3200e-003	0.0244		314.6268	314.6268	0.0265		315.2900
Worker	0.1226	0.0720	0.8408	3.0000e-003	0.3353	2.1700e-003	0.3375	0.0889	2.0000e-003	0.0909		298.7497	298.7497	6.4000e-003		298.9096
Total	**0.1562**	**1.1951**	**1.1758**	**5.8900e-003**	**0.4120**	**4.6000e-003**	**0.4166**	**0.1110**	**4.3200e-003**	**0.1153**		**613.3765**	**613.3765**	**0.0329**		**614.1996**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272	0.0000	826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**	**0.0000**	**826.6553**	**826.6553**	**0.2674**		**833.3393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0336	1.1231	0.3350	2.8900e-003	0.0767	2.4300e-003	0.0791	0.0221	2.3200e-003	0.0244		314.6268	314.6268	0.0265		315.2900
Worker	0.1226	0.0720	0.8408	3.0000e-003	0.3353	2.1700e-003	0.3375	0.0889	2.0000e-003	0.0909		298.7497	298.7497	6.4000e-003		298.9096
Total	**0.1562**	**1.1951**	**1.1758**	**5.8900e-003**	**0.4120**	**4.6000e-003**	**0.4166**	**0.1110**	**4.3200e-003**	**0.1153**		**613.3765**	**613.3765**	**0.0329**		**614.1996**

3.10 P1 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2918					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**21.5340**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0261	0.0160	0.1815	6.2000e-004	0.0671	4.4000e-004	0.0675	0.0178	4.1000e-004	0.0182		61.8973	61.8973	1.4100e-003		61.9326
Total	**0.0261**	**0.0160**	**0.1815**	**6.2000e-004**	**0.0671**	**4.4000e-004**	**0.0675**	**0.0178**	**4.1000e-004**	**0.0182**		**61.8973**	**61.8973**	**1.4100e-003**		**61.9326**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2918					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**21.5340**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0261	0.0160	0.1815	6.2000e-004	0.0671	4.4000e-004	0.0675	0.0178	4.1000e-004	0.0182		61.8973	61.8973	1.4100e-003		61.9326

Total	**0.0261**	**0.0160**	**0.1815**	**6.2000e-004**	**0.0671**	**4.4000e-004**	**0.0675**	**0.0178**	**4.1000e-004**	**0.0182**		**61.8973**	**61.8973**	**1.4100e-003**		**61.9326**

3.11 P2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0583	0.0000	1.0583	0.1602	0.0000	0.1602			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994		725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**1.0583**	**0.2167**	**1.2750**	**0.1602**	**0.1994**	**0.3596**		**725.6948**	**725.6948**	**0.2347**		**731.5624**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.3605	0.3574	3.6800e-003	0.0851	4.4300e-003	0.0895	0.0233	4.2400e-003	0.0275		410.5425	410.5425	0.0442		411.6483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0133	0.1513	5.2000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		51.5811	51.5811	1.1800e-003		51.6105
Total	**0.0595**	**1.3738**	**0.5087**	**4.2000e-003**	**0.1410**	**4.8000e-003**	**0.1458**	**0.0381**	**4.5800e-003**	**0.0427**		**462.1235**	**462.1235**	**0.0454**		**463.2588**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4127	0.0000	0.4127	0.0625	0.0000	0.0625			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994	0.0000	725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**0.4127**	**0.2167**	**0.6294**	**0.0625**	**0.1994**	**0.2619**	**0.0000**	**725.6948**	**725.6948**	**0.2347**		**731.5624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.3605	0.3574	3.6800e-003	0.0851	4.4300e-003	0.0895	0.0233	4.2400e-003	0.0275		410.5425	410.5425	0.0442		411.6483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0133	0.1513	5.2000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		51.5811	51.5811	1.1800e-003		51.6105
Total	**0.0595**	**1.3738**	**0.5087**	**4.2000e-003**	**0.1410**	**4.8000e-003**	**0.1458**	**0.0381**	**4.5800e-003**	**0.0427**		**462.1235**	**462.1235**	**0.0454**		**463.2588**

3.12 P1b Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.6062	0.0000	1.6062	0.1741	0.0000	0.1741			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175		2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**1.6062**	**0.6704**	**2.2765**	**0.1741**	**0.6175**	**0.7916**		**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1319	4.7460	1.2469	0.0129	0.2968	0.0155	0.3122	0.0813	0.0148	0.0960		1,432.1249	1,432.1249	0.1543		1,435.9826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.1667**	**4.7673**	**1.4889**	**0.0137**	**0.3862**	**0.0160**	**0.4023**	**0.1050**	**0.0153**	**0.1203**		**1,514.6546**	**1,514.6546**	**0.1562**		**1,518.5594**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6264	0.0000	0.6264	0.0679	0.0000	0.0679			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175	0.0000	2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**0.6264**	**0.6704**	**1.2968**	**0.0679**	**0.6175**	**0.6854**	**0.0000**	**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1319	4.7460	1.2469	0.0129	0.2968	0.0155	0.3122	0.0813	0.0148	0.0960		1,432.1249	1,432.1249	0.1543		1,435.9826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.1667**	**4.7673**	**1.4889**	**0.0137**	**0.3862**	**0.0160**	**0.4023**	**0.1050**	**0.0153**	**0.1203**		**1,514.6546**	**1,514.6546**	**0.1562**		**1,518.5594**

3.13 P2 Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.3400e-003	0.1041	0.0301	2.4000e-004	6.3900e-003	5.5000e-004	6.9400e-003	1.8400e-003	5.3000e-004	2.3700e-003		26.4466	26.4466	2.3000e-003		26.5042
Worker	8.6900e-003	5.3200e-003	0.0605	2.1000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		20.6324	20.6324	4.7000e-004		20.6442
Total	**0.0120**	**0.1095**	**0.0907**	**4.5000e-004**	**0.0288**	**7.0000e-004**	**0.0294**	**7.7700e-003**	**6.7000e-004**	**8.4300e-003**		**47.0790**	**47.0790**	**2.7700e-003**		**47.1484**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.3400e-003	0.1041	0.0301	2.4000e-004	6.3900e-003	5.5000e-004	6.9400e-003	1.8400e-003	5.3000e-004	2.3700e-003		26.4466	26.4466	2.3000e-003		26.5042
Worker	8.6900e-003	5.3200e-003	0.0605	2.1000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		20.6324	20.6324	4.7000e-004		20.6442

Total	**0.0120**	**0.1095**	**0.0907**	**4.5000e-004**	**0.0288**	**7.0000e-004**	**0.0294**	**7.7700e-003**	**6.7000e-004**	**8.4300e-003**		**47.0790**	**47.0790**	**2.7700e-003**		**47.1484**

3.13 P2 Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272		826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**		**826.6553**	**826.6553**	**0.2674**		**833.3393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8000e-003	0.0936	0.0279	2.4000e-004	6.3900e-003	2.0000e-004	6.5900e-003	1.8400e-003	1.9000e-004	2.0300e-003		26.2189	26.2189	2.2100e-003		26.2742
Worker	8.1700e-003	4.8000e-003	0.0561	2.0000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		19.9166	19.9166	4.3000e-004		19.9273
Total	**0.0110**	**0.0984**	**0.0840**	**4.4000e-004**	**0.0288**	**3.4000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0900e-003**		**46.1355**	**46.1355**	**2.6400e-003**		**46.2015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272	0.0000	826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**	**0.0000**	**826.6553**	**826.6553**	**0.2674**		**833.3393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8000e-003	0.0936	0.0279	2.4000e-004	6.3900e-003	2.0000e-004	6.5900e-003	1.8400e-003	1.9000e-004	2.0300e-003		26.2189	26.2189	2.2100e-003		26.2742
Worker	8.1700e-003	4.8000e-003	0.0561	2.0000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		19.9166	19.9166	4.3000e-004		19.9273
Total	**0.0110**	**0.0984**	**0.0840**	**4.4000e-004**	**0.0288**	**3.4000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0900e-003**		**46.1355**	**46.1355**	**2.6400e-003**		**46.2015**

3.14 P1b Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427		902.6611	902.6611	0.2919		909.9595
Paving	0.6574					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2812**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**		**902.6611**	**902.6611**	**0.2919**		**909.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427	0.0000	902.6611	902.6611	0.2919		909.9595
Paving	0.6574					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2812**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**	**0.0000**	**902.6611**	**902.6611**	**0.2919**		**909.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

3.15 P2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175		2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**1.5908**	**0.6704**	**2.2611**	**0.1718**	**0.6175**	**0.7893**		**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175	0.0000	2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**0.6204**	**0.6704**	**1.2908**	**0.0670**	**0.6175**	**0.6845**	**0.0000**	**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768

Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

3.16 P2 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427		902.6611	902.6611	0.2919		909.9595
Paving	1.2850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9087**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**		**902.6611**	**902.6611**	**0.2919**		**909.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427	0.0000	902.6611	902.6611	0.2919		909.9595
Paving	1.2850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9087**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**	**0.0000**	**902.6611**	**902.6611**	**0.2919**		**909.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

3.17 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	20.2779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**20.4968**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.0900e-003	2.4000e-003	0.0280	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		9.9583	9.9583	2.1000e-004		9.9637
Total	**4.0900e-003**	**2.4000e-003**	**0.0280**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**9.9583**	**9.9583**	**2.1000e-004**		**9.9637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.2779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**20.4968**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.0900e-003	2.4000e-003	0.0280	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		9.9583	9.9583	2.1000e-004		9.9637
Total	**4.0900e-003**	**2.4000e-003**	**0.0280**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**9.9583**	**9.9583**	**2.1000e-004**		**9.9637**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
High Turnover (Sit Down Restaurant)	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016

NaturalGas Unmitigated	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1788.41	0.0193	0.1753	0.1473	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.4012	210.4012	4.0300e-003	3.8600e-003	211.6515
High Turnover (Sit Down Restaurant)	4514.3	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0680**	**0.6179**	**0.5191**	**3.7100e-003**		**0.0470**	**0.0470**		**0.0470**	**0.0470**		**741.4952**	**741.4952**	**0.0142**	**0.0136**	**745.9016**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.78841	0.0193	0.1753	0.1473	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.4012	210.4012	4.0300e-003	3.8600e-003	211.6515
High Turnover (Sit Down Restaurant)	4.5143	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0680**	**0.6179**	**0.5191**	**3.7100e-003**		**0.0470**	**0.0470**		**0.0470**	**0.0470**		**741.4952**	**741.4952**	**0.0142**	**0.0136**	**745.9016**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Unmitigated	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2400e-003	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Total	**1.9450**	**5.2000e-004**	**0.0562**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**		**0.1199**	**0.1199**	**3.2000e-004**		**0.1278**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2400e-003	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Total	**1.9450**	**5.2000e-004**	**0.0562**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**		**0.1199**	**0.1199**	**3.2000e-004**		**0.1278**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction for Phases 1 and 2

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	71.42	1000sqft	1.64	71,419.00	0
Parking Lot	470.00	1000sqft	10.79	470,000.00	0
High Turnover (Sit Down Restaurant)	6.35	1000sqft	0.15	6,354.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - ..

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Construction only

Area Coating - Construction only

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	38,887.00	19,444.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	38,887.00	19,444.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	116,660.00	58,330.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	116,660.00	58,330.00
tblArchitecturalCoating	ConstArea_Parking	28,200.00	14,100.00
tblArchitecturalCoating	ConstArea_Parking	28,200.00	14,100.00
tblConstructionPhase	NumDays	20.00	44.00

tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	300.00	239.00
tblConstructionPhase	NumDays	30.00	22.00
tblConstructionPhase	NumDays	300.00	218.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	64.00
tblConstructionPhase	NumDays	300.00	325.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	300.00	305.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	30.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	21.00
tblGrading	MaterialExported	0.00	6,000.00
tblGrading	MaterialExported	0.00	1,040.00
tblLandUse	LandUseSquareFeet	71,420.00	71,419.00
tblLandUse	LandUseSquareFeet	6,350.00	6,354.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	VendorTripNumber	90.00	12.00
tblTripsAndVMT	VendorTripNumber	90.00	12.00
tblTripsAndVMT	VendorTripNumber	90.00	12.00
tblTripsAndVMT	VendorTripNumber	90.00	1.00
tblTripsAndVMT	WorkerTripNumber	223.00	30.00
tblTripsAndVMT	WorkerTripNumber	223.00	30.00
tblTripsAndVMT	WorkerTripNumber	223.00	30.00
tblTripsAndVMT	WorkerTripNumber	45.00	6.00
tblTripsAndVMT	WorkerTripNumber	223.00	2.00
tblTripsAndVMT	WorkerTripNumber	45.00	1.00

tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	127.15	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.5292	35.6673	25.3701	0.0588	3.2622	1.4039	4.5321	0.6804	1.2930	1.8500	0.0000	5,985.8265	5,985.8265	1.2950	0.0000	6,016.1907
2020	24.0624	62.4999	47.0885	0.1116	4.5458	2.4466	6.9924	0.8419	2.2531	3.0950	0.0000	11,185.1295	11,185.1295	2.5852	0.0000	11,249.7585
2021	20.5004	12.0786	11.1653	0.0237	0.4408	0.4986	0.9394	0.1188	0.4589	0.5776	0.0000	2,339.4430	2,339.4430	0.5693	0.0000	2,353.6761
Maximum	**24.0624**	**62.4999**	**47.0885**	**0.1116**	**4.5458**	**2.4466**	**6.9924**	**0.8419**	**2.2531**	**3.0950**	**0.0000**	**11,185.1295**	**11,185.1295**	**2.5852**	**0.0000**	**11,249.7585**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.5292	35.6673	25.3701	0.0588	2.2583	1.4039	3.5282	0.5284	1.2930	1.6980	0.0000	5,985.8265	5,985.8265	1.2950	0.0000	6,016.1907

2020	24.0624	62.4999	47.0885	0.1116	2.9205	2.4466	5.3671	0.6379	2.2531	2.8910	0.0000	11,185.1295	11,185.1295	2.5852	0.0000	11,249.7585
2021	20.5004	12.0786	11.1653	0.0237	0.4408	0.4986	0.9394	0.1188	0.4589	0.5776	0.0000	2,339.4430	2,339.4430	0.5693	0.0000	2,353.6761
Maximum	**24.0624**	**62.4999**	**47.0885**	**0.1116**	**2.9205**	**2.4466**	**5.3671**	**0.6379**	**2.2531**	**2.8910**	**0.0000**	**11,185.1295**	**11,185.1295**	**2.5852**	**0.0000**	**11,249.7585**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.87**	**0.00**	**21.09**	**21.69**	**0.00**	**6.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Energy	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0129**	**0.6184**	**0.5752**	**3.7100e-003**	**0.0000**	**0.0472**	**0.0472**	**0.0000**	**0.0472**	**0.0472**		**741.6151**	**741.6151**	**0.0145**	**0.0136**	**746.0294**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278

Energy	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0129**	**0.6184**	**0.5752**	**3.7100e-003**	**0.0000**	**0.0472**	**0.0472**	**0.0000**	**0.0472**	**0.0472**		**741.6151**	**741.6151**	**0.0145**	**0.0136**	**746.0294**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	P1a Demolition	Demolition	6/1/2019	8/1/2019	5	44	
2	Site Preparation	Site Preparation	6/1/2019	8/30/2019	5	65	
3	P1a Renovation	Building Construction	6/1/2019	4/30/2020	5	239	
4	P1a Grading	Grading	10/1/2019	10/30/2019	5	22	
5	P1b Building Construction	Building Construction	10/1/2019	7/30/2020	5	218	
6	P1a Paving	Paving	11/1/2019	11/29/2019	5	21	
7	P1b Demolition	Demolition	12/1/2019	2/27/2020	5	64	
8	P1b Renovation	Building Construction	12/1/2019	2/26/2021	5	325	
9	P1 Architectural Coating	Architectural Coating	2/1/2020	2/28/2020	5	20	
10	P2 Demolition	Demolition	3/1/2020	4/30/2020	5	44	
11	P1b Grading	Grading	3/1/2020	4/30/2020	5	44	
12	P2 Renovation	Building Construction	3/1/2020	4/30/2021	5	305	
13	P1b Paving	Paving	4/1/2020	5/29/2020	5	43	
14	P2 Grading	Grading	6/1/2020	6/30/2020	5	22	
15	P2 Paving	Paving	7/1/2020	7/30/2020	5	22	
16	P2 Architectural Coating	Architectural Coating	5/1/2021	5/31/2021	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 10.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 58,330; Non-Residential Outdoor: 19,444; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1a Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
P1a Demolition	Excavators	2	8.00	158	0.38
P1a Demolition	Rubber Tired Dozers	0	8.00	247	0.40
P1a Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1a Renovation	Aerial Lifts	2	8.00	63	0.31
P1a Renovation	Air Compressors	0	6.00	78	0.48
P1a Renovation	Cranes	1	4.00	231	0.29
P1a Renovation	Forklifts	2	6.00	89	0.20
P1a Renovation	Generator Sets	0	8.00	84	0.74
P1a Renovation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1a Renovation	Welders	0	8.00	46	0.45
P1a Grading	Concrete/Industrial Saws	0	8.00	81	0.73
P1a Grading	Cranes	0	4.00	231	0.29
P1a Grading	Excavators	0	8.00	158	0.38
P1a Grading	Forklifts	0	6.00	89	0.20
P1a Grading	Graders	1	8.00	187	0.41
P1a Grading	Plate Compactors	1	8.00	8	0.43
P1a Grading	Rubber Tired Dozers	0	8.00	247	0.40
P1a Grading	Scrapers	1	8.00	367	0.48
P1a Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37

P1b Building Construction	Aerial Lifts	2	8.00	63	0.31
P1b Building Construction	Cranes	1	4.00	231	0.29
P1b Building Construction	Forklifts	2	6.00	89	0.20
P1b Building Construction	Generator Sets	0	8.00	84	0.74
P1b Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1b Building Construction	Welders	0	8.00	46	0.45
P1a Paving	Cement and Mortar Mixers	0	6.00	9	0.56
P1a Paving	Pavers	0	8.00	130	0.42
P1a Paving	Paving Equipment	1	8.00	132	0.36
P1a Paving	Rollers	2	8.00	80	0.38
P1a Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1b Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
P1b Demolition	Excavators	1	8.00	158	0.38
P1b Demolition	Rubber Tired Dozers	0	8.00	247	0.40
P1b Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
P1b Renovation	Aerial Lifts	2	8.00	63	0.31
P1b Renovation	Cranes	1	4.00	231	0.29
P1b Renovation	Forklifts	2	6.00	89	0.20
P1b Renovation	Generator Sets	0	8.00	84	0.74
P1b Renovation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1b Renovation	Welders	0	8.00	46	0.45
P1 Architectural Coating	Air Compressors	1	6.00	78	0.48
P2 Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Demolition	Excavators	1	8.00	158	0.38
P2 Demolition	Rubber Tired Dozers	0	1.00	247	0.40
P2 Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
P1b Grading	Cement and Mortar Mixers	0	6.00	9	0.56
P1b Grading	Concrete/Industrial Saws	0	8.00	81	0.73
P1b Grading	Excavators	0	8.00	158	0.38
P1b Grading	Graders	1	8.00	187	0.41

P1b Grading	Pavers	0	7.00	130	0.42
P1b Grading	Plate Compactors	1	8.00	8	0.43
P1b Grading	Rollers	0	7.00	80	0.38
P1b Grading	Rubber Tired Dozers	0	1.00	247	0.40
P1b Grading	Scrapers	1	8.00	367	0.48
P1b Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Renovation	Aerial Lifts	2	8.00	63	0.31
P2 Renovation	Cranes	1	4.00	231	0.29
P2 Renovation	Forklifts	2	6.00	89	0.20
P2 Renovation	Generator Sets	0	8.00	84	0.74
P2 Renovation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Renovation	Welders	0	8.00	46	0.45
P1b Paving	Cement and Mortar Mixers	0	6.00	9	0.56
P1b Paving	Pavers	0	7.00	130	0.42
P1b Paving	Paving Equipment	1	8.00	132	0.36
P1b Paving	Rollers	2	8.00	80	0.38
P1b Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Grading	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Grading	Excavators	0	8.00	158	0.38
P2 Grading	Graders	1	8.00	187	0.41
P2 Grading	Plate Compactors	1	8.00	8	0.43
P2 Grading	Rubber Tired Dozers	0	1.00	247	0.40
P2 Grading	Scrapers	1	8.00	367	0.48
P2 Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Paving	Cement and Mortar Mixers	0	6.00	9	0.56
P2 Paving	Pavers	0	8.00	130	0.42
P2 Paving	Paving Equipment	1	8.00	132	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P2 Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
P1a Demolition	3	8.00	0.00	243.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	130.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1a Renovation	5	30.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1a Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Building Construction	5	30.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1a Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Demolition	2	5.00	0.00	487.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Renovation	5	30.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Demolition	2	5.00	0.00	215.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Grading	3	8.00	0.00	750.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Renovation	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1b Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 P1a Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.1969	0.0000	1.1969	0.1812	0.0000	0.1812			0.0000			0.0000
Off-Road	0.6961	7.1168	8.2534	0.0127		0.3757	0.3757		0.3456	0.3456		1,252.9076	1,252.9076	0.3964		1,262.8177
Total	**0.6961**	**7.1168**	**8.2534**	**0.0127**	**1.1969**	**0.3757**	**1.5726**	**0.1812**	**0.3456**	**0.5269**		**1,252.9076**	**1,252.9076**	**0.3964**		**1,262.8177**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0459	1.6370	0.3925	4.2900e-003	0.0962	6.2900e-003	0.1025	0.0263	6.0100e-003	0.0323		476.3753	476.3753	0.0497		477.6186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466
Total	**0.0789**	**1.6586**	**0.6778**	**5.1900e-003**	**0.1856**	**6.8900e-003**	**0.1925**	**0.0500**	**6.5600e-003**	**0.0566**		**566.4666**	**566.4666**	**0.0519**		**567.7652**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4668	0.0000	0.4668	0.0707	0.0000	0.0707			0.0000			0.0000
Off-Road	0.6961	7.1168	8.2534	0.0127		0.3757	0.3757		0.3456	0.3456	0.0000	1,252.9076	1,252.9076	0.3964		1,262.8177
Total	**0.6961**	**7.1168**	**8.2534**	**0.0127**	**0.4668**	**0.3757**	**0.8425**	**0.0707**	**0.3456**	**0.4163**	**0.0000**	**1,252.9076**	**1,252.9076**	**0.3964**		**1,262.8177**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0459	1.6370	0.3925	4.2900e-003	0.0962	6.2900e-003	0.1025	0.0263	6.0100e-003	0.0323		476.3753	476.3753	0.0497		477.6186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466
Total	**0.0789**	**1.6586**	**0.6778**	**5.1900e-003**	**0.1856**	**6.8900e-003**	**0.1925**	**0.0500**	**6.5600e-003**	**0.0566**		**566.4666**	**566.4666**	**0.0519**		**567.7652**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004			0.0000			0.0000
Off-Road	0.7543	7.7011	8.8291	0.0134		0.4147	0.4147		0.3815	0.3815		1,329.7930	1,329.7930	0.4207		1,340.3113
Total	**0.7543**	**7.7011**	**8.8291**	**0.0134**	**1.8100e-003**	**0.4147**	**0.4165**	**2.7000e-004**	**0.3815**	**0.3818**		**1,329.7930**	**1,329.7930**	**0.4207**		**1,340.3113**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0166	0.5928	0.1421	1.5500e-003	0.0348	2.2800e-003	0.0371	9.5300e-003	2.1800e-003	0.0117		172.5145	172.5145	0.0180		172.9648
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466
Total	**0.0496**	**0.6145**	**0.4275**	**2.4500e-003**	**0.1243**	**2.8800e-003**	**0.1271**	**0.0332**	**2.7300e-003**	**0.0360**		**262.6057**	**262.6057**	**0.0202**		**263.1114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1000e-004	0.0000	7.1000e-004	1.1000e-004	0.0000	1.1000e-004			0.0000			0.0000
Off-Road	0.7543	7.7011	8.8291	0.0134		0.4147	0.4147		0.3815	0.3815	0.0000	1,329.7930	1,329.7930	0.4207		1,340.3113
Total	**0.7543**	**7.7011**	**8.8291**	**0.0134**	**7.1000e-004**	**0.4147**	**0.4154**	**1.1000e-004**	**0.3815**	**0.3816**	**0.0000**	**1,329.7930**	**1,329.7930**	**0.4207**		**1,340.3113**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0166	0.5928	0.1421	1.5500e-003	0.0348	2.2800e-003	0.0371	9.5300e-003	2.1800e-003	0.0117		172.5145	172.5145	0.0180		172.9648
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466

Total	**0.0496**	**0.6145**	**0.4275**	**2.4500e-003**	**0.1243**	**2.8800e-003**	**0.1271**	**0.0332**	**2.7300e-003**	**0.0360**		**262.6057**	**262.6057**	**0.0202**		**263.1114**

3.4 P1a Renovation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006		845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**		**845.0531**	**845.0531**	**0.2674**		**851.7373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.3618	0.3600	3.0100e-003	0.0767	9.2000e-003	0.0859	0.0221	8.8000e-003	0.0309		327.5626	327.5626	0.0277		328.2540
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1686**	**1.4428**	**1.4302**	**6.4000e-003**	**0.4120**	**0.0114**	**0.4234**	**0.1110**	**0.0109**	**0.1219**		**665.4047**	**665.4047**	**0.0360**		**666.3037**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006	0.0000	845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**	**0.0000**	**845.0531**	**845.0531**	**0.2674**		**851.7373**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.3618	0.3600	3.0100e-003	0.0767	9.2000e-003	0.0859	0.0221	8.8000e-003	0.0309		327.5626	327.5626	0.0277		328.2540
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1686**	**1.4428**	**1.4302**	**6.4000e-003**	**0.4120**	**0.0114**	**0.4234**	**0.1110**	**0.0109**	**0.1219**		**665.4047**	**665.4047**	**0.0360**		**666.3037**

3.4 P1a Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.2501	0.3300	2.9900e-003	0.0767	6.5200e-003	0.0832	0.0221	6.2400e-003	0.0283		325.3547	325.3547	0.0263		326.0126
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1536**	**1.3228**	**1.3119**	**6.2700e-003**	**0.4120**	**8.7400e-003**	**0.4207**	**0.1110**	**8.2800e-003**	**0.1193**		**652.3678**	**652.3678**	**0.0338**		**653.2120**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.2501	0.3300	2.9900e-003	0.0767	6.5200e-003	0.0832	0.0221	6.2400e-003	0.0283		325.3547	325.3547	0.0263		326.0126
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1536**	**1.3228**	**1.3119**	**6.2700e-003**	**0.4120**	**8.7400e-003**	**0.4207**	**0.1110**	**8.2800e-003**	**0.1193**		**652.3678**	**652.3678**	**0.0338**		**653.2120**

3.5 P1a Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5921	19.7447	10.1099	0.0223		0.7269	0.7269		0.6696	0.6696		2,191.9210	2,191.9210	0.6862		2,209.0753
Total	**1.5921**	**19.7447**	**10.1099**	**0.0223**	**1.5908**	**0.7269**	**2.3177**	**0.1718**	**0.6696**	**0.8413**		**2,191.9210**	**2,191.9210**	**0.6862**		**2,209.0753**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466
Total	**0.0330**	**0.0216**	**0.2854**	**9.0000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**90.0912**	**90.0912**	**2.2100e-003**		**90.1466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5921	19.7447	10.1099	0.0223		0.7269	0.7269		0.6696	0.6696	0.0000	2,191.9210	2,191.9210	0.6862		2,209.0753
Total	**1.5921**	**19.7447**	**10.1099**	**0.0223**	**0.6204**	**0.7269**	**1.3473**	**0.0670**	**0.6696**	**0.7366**	**0.0000**	**2,191.9210**	**2,191.9210**	**0.6862**		**2,209.0753**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466

Total	**0.0330**	**0.0216**	**0.2854**	**9.0000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**90.0912**	**90.0912**	**2.2100e-003**		**90.1466**

3.6 P1b Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006		845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**		**845.0531**	**845.0531**	**0.2674**		**851.7373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.3618	0.3600	3.0100e-003	0.0767	9.2000e-003	0.0859	0.0221	8.8000e-003	0.0309		327.5626	327.5626	0.0277		328.2540
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1686**	**1.4428**	**1.4302**	**6.4000e-003**	**0.4120**	**0.0114**	**0.4234**	**0.1110**	**0.0109**	**0.1219**		**665.4047**	**665.4047**	**0.0360**		**666.3037**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006	0.0000	845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**	**0.0000**	**845.0531**	**845.0531**	**0.2674**		**851.7373**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.3618	0.3600	3.0100e-003	0.0767	9.2000e-003	0.0859	0.0221	8.8000e-003	0.0309		327.5626	327.5626	0.0277		328.2540
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1686**	**1.4428**	**1.4302**	**6.4000e-003**	**0.4120**	**0.0114**	**0.4234**	**0.1110**	**0.0109**	**0.1219**		**665.4047**	**665.4047**	**0.0360**		**666.3037**

3.6 P1b Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.2501	0.3300	2.9900e-003	0.0767	6.5200e-003	0.0832	0.0221	6.2400e-003	0.0283		325.3547	325.3547	0.0263		326.0126
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1536**	**1.3228**	**1.3119**	**6.2700e-003**	**0.4120**	**8.7400e-003**	**0.4207**	**0.1110**	**8.2800e-003**	**0.1193**		**652.3678**	**652.3678**	**0.0338**		**653.2120**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.2501	0.3300	2.9900e-003	0.0767	6.5200e-003	0.0832	0.0221	6.2400e-003	0.0283		325.3547	325.3547	0.0263		326.0126
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1536**	**1.3228**	**1.3119**	**6.2700e-003**	**0.4120**	**8.7400e-003**	**0.4207**	**0.1110**	**8.2800e-003**	**0.1193**		**652.3678**	**652.3678**	**0.0338**		**653.2120**

3.7 P1a Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6660	6.7383	6.3380	9.3200e-003		0.4066	0.4066		0.3741	0.3741		922.6868	922.6868	0.2919		929.9850
Paving	1.3462					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0122**	**6.7383**	**6.3380**	**9.3200e-003**		**0.4066**	**0.4066**		**0.3741**	**0.3741**		**922.6868**	**922.6868**	**0.2919**		**929.9850**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466
Total	**0.0330**	**0.0216**	**0.2854**	**9.0000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**90.0912**	**90.0912**	**2.2100e-003**		**90.1466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6660	6.7383	6.3380	9.3200e-003		0.4066	0.4066		0.3741	0.3741	0.0000	922.6868	922.6868	0.2919		929.9850
Paving	1.3462					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0122**	**6.7383**	**6.3380**	**9.3200e-003**		**0.4066**	**0.4066**		**0.3741**	**0.3741**	**0.0000**	**922.6868**	**922.6868**	**0.2919**		**929.9850**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0216	0.2854	9.0000e-004	0.0894	6.0000e-004	0.0900	0.0237	5.5000e-004	0.0243		90.0912	90.0912	2.2100e-003		90.1466

Total	**0.0330**	**0.0216**	**0.2854**	**9.0000e-004**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.5000e-004**	**0.0243**		**90.0912**	**90.0912**	**2.2100e-003**		**90.1466**

3.8 P1b Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6457	0.0000	1.6457	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	0.4353	4.4349	4.9902	7.4900e-003		0.2464	0.2464		0.2267	0.2267		741.7820	741.7820	0.2347		747.6493
Total	**0.4353**	**4.4349**	**4.9902**	**7.4900e-003**	**1.6457**	**0.2464**	**1.8921**	**0.2492**	**0.2267**	**0.4758**		**741.7820**	**741.7820**	**0.2347**		**747.6493**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0633	2.2555	0.5407	5.9000e-003	0.3246	8.6600e-003	0.3332	0.0834	8.2900e-003	0.0917		656.3639	656.3639	0.0685		658.0769
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0206	0.0135	0.1784	5.6000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		56.3070	56.3070	1.3800e-003		56.3416
Total	**0.0839**	**2.2691**	**0.7191**	**6.4600e-003**	**0.3805**	**9.0300e-003**	**0.3895**	**0.0982**	**8.6300e-003**	**0.1069**		**712.6709**	**712.6709**	**0.0699**		**714.4185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6418	0.0000	0.6418	0.0972	0.0000	0.0972			0.0000			0.0000
Off-Road	0.4353	4.4349	4.9902	7.4900e-003		0.2464	0.2464		0.2267	0.2267	0.0000	741.7820	741.7820	0.2347		747.6493
Total	**0.4353**	**4.4349**	**4.9902**	**7.4900e-003**	**0.6418**	**0.2464**	**0.8882**	**0.0972**	**0.2267**	**0.3238**	**0.0000**	**741.7820**	**741.7820**	**0.2347**		**747.6493**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0633	2.2555	0.5407	5.9000e-003	0.3246	8.6600e-003	0.3332	0.0834	8.2900e-003	0.0917		656.3639	656.3639	0.0685		658.0769
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0206	0.0135	0.1784	5.6000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		56.3070	56.3070	1.3800e-003		56.3416
Total	**0.0839**	**2.2691**	**0.7191**	**6.4600e-003**	**0.3805**	**9.0300e-003**	**0.3895**	**0.0982**	**8.6300e-003**	**0.1069**		**712.6709**	**712.6709**	**0.0699**		**714.4185**

3.8 P1b Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.6457	0.0000	1.6457	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994		725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**1.6457**	**0.2167**	**1.8624**	**0.2492**	**0.1994**	**0.4486**		**725.6948**	**725.6948**	**0.2347**		**731.5624**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0575	2.0923	0.5287	5.8200e-003	0.1852	6.7700e-003	0.1920	0.0492	6.4800e-003	0.0557		649.1237	649.1237	0.0673		650.8059
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0121	0.1637	5.5000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		54.5022	54.5022	1.2400e-003		54.5332
Total	**0.0767**	**2.1045**	**0.6923**	**6.3700e-003**	**0.2411**	**7.1400e-003**	**0.2482**	**0.0640**	**6.8200e-003**	**0.0709**		**703.6259**	**703.6259**	**0.0685**		**705.3391**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6418	0.0000	0.6418	0.0972	0.0000	0.0972			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994	0.0000	725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**0.6418**	**0.2167**	**0.8585**	**0.0972**	**0.1994**	**0.2966**	**0.0000**	**725.6948**	**725.6948**	**0.2347**		**731.5624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0575	2.0923	0.5287	5.8200e-003	0.1852	6.7700e-003	0.1920	0.0492	6.4800e-003	0.0557		649.1237	649.1237	0.0673		650.8059
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0121	0.1637	5.5000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		54.5022	54.5022	1.2400e-003		54.5332
Total	**0.0767**	**2.1045**	**0.6923**	**6.3700e-003**	**0.2411**	**7.1400e-003**	**0.2482**	**0.0640**	**6.8200e-003**	**0.0709**		**703.6259**	**703.6259**	**0.0685**		**705.3391**

3.9 P1b Renovation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006		845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**		**845.0531**	**845.0531**	**0.2674**		**851.7373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.3618	0.3600	3.0100e-003	0.0767	9.2000e-003	0.0859	0.0221	8.8000e-003	0.0309		327.5626	327.5626	0.0277		328.2540
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497
Total	**0.1686**	**1.4428**	**1.4302**	**6.4000e-003**	**0.4120**	**0.0114**	**0.4234**	**0.1110**	**0.0109**	**0.1219**		**665.4047**	**665.4047**	**0.0360**		**666.3037**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5734	6.5076	5.1234	8.5400e-003		0.3267	0.3267		0.3006	0.3006	0.0000	845.0531	845.0531	0.2674		851.7373
Total	**0.5734**	**6.5076**	**5.1234**	**8.5400e-003**		**0.3267**	**0.3267**		**0.3006**	**0.3006**	**0.0000**	**845.0531**	**845.0531**	**0.2674**		**851.7373**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.3618	0.3600	3.0100e-003	0.0767	9.2000e-003	0.0859	0.0221	8.8000e-003	0.0309		327.5626	327.5626	0.0277		328.2540
Worker	0.1236	0.0811	1.0702	3.3900e-003	0.3353	2.2400e-003	0.3376	0.0889	2.0600e-003	0.0910		337.8421	337.8421	8.3100e-003		338.0497

Total	**0.1686**	**1.4428**	**1.4302**	**6.4000e-003**	**0.4120**	**0.0114**	**0.4234**	**0.1110**	**0.0109**	**0.1219**		**665.4047**	**665.4047**	**0.0360**		**666.3037**

3.9 P1b Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.2501	0.3300	2.9900e-003	0.0767	6.5200e-003	0.0832	0.0221	6.2400e-003	0.0283		325.3547	325.3547	0.0263		326.0126
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1536**	**1.3228**	**1.3119**	**6.2700e-003**	**0.4120**	**8.7400e-003**	**0.4207**	**0.1110**	**8.2800e-003**	**0.1193**		**652.3678**	**652.3678**	**0.0338**		**653.2120**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	1.2501	0.3300	2.9900e-003	0.0767	6.5200e-003	0.0832	0.0221	6.2400e-003	0.0283		325.3547	325.3547	0.0263		326.0126
Worker	0.1153	0.0726	0.9820	3.2800e-003	0.3353	2.2200e-003	0.3376	0.0889	2.0400e-003	0.0910		327.0131	327.0131	7.4500e-003		327.1995
Total	**0.1536**	**1.3228**	**1.3119**	**6.2700e-003**	**0.4120**	**8.7400e-003**	**0.4207**	**0.1110**	**8.2800e-003**	**0.1193**		**652.3678**	**652.3678**	**0.0338**		**653.2120**

3.9 P1b Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272		826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**		**826.6553**	**826.6553**	**0.2674**		**833.3393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0320	1.1258	0.3053	2.9600e-003	0.0767	2.3400e-003	0.0790	0.0221	2.2400e-003	0.0243		322.5510	322.5510	0.0253		323.1833
Worker	0.1083	0.0655	0.9112	3.1700e-003	0.3353	2.1700e-003	0.3375	0.0889	2.0000e-003	0.0909		315.6582	315.6582	6.7600e-003		315.8272
Total	**0.1403**	**1.1913**	**1.2165**	**6.1300e-003**	**0.4120**	**4.5100e-003**	**0.4165**	**0.1110**	**4.2400e-003**	**0.1152**		**638.2092**	**638.2092**	**0.0321**		**639.0106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272	0.0000	826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**	**0.0000**	**826.6553**	**826.6553**	**0.2674**		**833.3393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0320	1.1258	0.3053	2.9600e-003	0.0767	2.3400e-003	0.0790	0.0221	2.2400e-003	0.0243		322.5510	322.5510	0.0253		323.1833
Worker	0.1083	0.0655	0.9112	3.1700e-003	0.3353	2.1700e-003	0.3375	0.0889	2.0000e-003	0.0909		315.6582	315.6582	6.7600e-003		315.8272
Total	**0.1403**	**1.1913**	**1.2165**	**6.1300e-003**	**0.4120**	**4.5100e-003**	**0.4165**	**0.1110**	**4.2400e-003**	**0.1152**		**638.2092**	**638.2092**	**0.0321**		**639.0106**

3.10 P1 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2918					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**21.5340**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0145	0.1964	6.6000e-004	0.0671	4.4000e-004	0.0675	0.0178	4.1000e-004	0.0182		65.4026	65.4026	1.4900e-003		65.4399
Total	**0.0231**	**0.0145**	**0.1964**	**6.6000e-004**	**0.0671**	**4.4000e-004**	**0.0675**	**0.0178**	**4.1000e-004**	**0.0182**		**65.4026**	**65.4026**	**1.4900e-003**		**65.4399**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2918					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**21.5340**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0145	0.1964	6.6000e-004	0.0671	4.4000e-004	0.0675	0.0178	4.1000e-004	0.0182		65.4026	65.4026	1.4900e-003		65.4399

Total	**0.0231**	**0.0145**	**0.1964**	**6.6000e-004**	**0.0671**	**4.4000e-004**	**0.0675**	**0.0178**	**4.1000e-004**	**0.0182**		**65.4026**	**65.4026**	**1.4900e-003**		**65.4399**

3.11 P2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0583	0.0000	1.0583	0.1602	0.0000	0.1602			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994		725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**1.0583**	**0.2167**	**1.2750**	**0.1602**	**0.1994**	**0.3596**		**725.6948**	**725.6948**	**0.2347**		**731.5624**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0369	1.3436	0.3395	3.7400e-003	0.0851	4.3500e-003	0.0894	0.0233	4.1600e-003	0.0275		416.8351	416.8351	0.0432		417.9153
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0121	0.1637	5.5000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		54.5022	54.5022	1.2400e-003		54.5332
Total	**0.0561**	**1.3557**	**0.5032**	**4.2900e-003**	**0.1410**	**4.7200e-003**	**0.1457**	**0.0381**	**4.5000e-003**	**0.0426**		**471.3373**	**471.3373**	**0.0445**		**472.4486**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4127	0.0000	0.4127	0.0625	0.0000	0.0625			0.0000			0.0000
Off-Road	0.4021	3.9915	4.9776	7.4900e-003		0.2167	0.2167		0.1994	0.1994	0.0000	725.6948	725.6948	0.2347		731.5624
Total	**0.4021**	**3.9915**	**4.9776**	**7.4900e-003**	**0.4127**	**0.2167**	**0.6294**	**0.0625**	**0.1994**	**0.2619**	**0.0000**	**725.6948**	**725.6948**	**0.2347**		**731.5624**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0369	1.3436	0.3395	3.7400e-003	0.0851	4.3500e-003	0.0894	0.0233	4.1600e-003	0.0275		416.8351	416.8351	0.0432		417.9153
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0121	0.1637	5.5000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		54.5022	54.5022	1.2400e-003		54.5332
Total	**0.0561**	**1.3557**	**0.5032**	**4.2900e-003**	**0.1410**	**4.7200e-003**	**0.1457**	**0.0381**	**4.5000e-003**	**0.0426**		**471.3373**	**471.3373**	**0.0445**		**472.4486**

3.12 P1b Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					1.6062	0.0000	1.6062	0.1741	0.0000	0.1741			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175		2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**1.6062**	**0.6704**	**2.2765**	**0.1741**	**0.6175**	**0.7916**		**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1287	4.6870	1.1843	0.0131	0.2968	0.0152	0.3120	0.0813	0.0145	0.0958		1,454.0760	1,454.0760	0.1507		1,457.8441
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.1595**	**4.7063**	**1.4461**	**0.0139**	**0.3862**	**0.0158**	**0.4020**	**0.1050**	**0.0151**	**0.1200**		**1,541.2794**	**1,541.2794**	**0.1527**		**1,545.0973**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6264	0.0000	0.6264	0.0679	0.0000	0.0679			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175	0.0000	2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**0.6264**	**0.6704**	**1.2968**	**0.0679**	**0.6175**	**0.6854**	**0.0000**	**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1287	4.6870	1.1843	0.0131	0.2968	0.0152	0.3120	0.0813	0.0145	0.0958		1,454.0760	1,454.0760	0.1507		1,457.8441
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.1595**	**4.7063**	**1.4461**	**0.0139**	**0.3862**	**0.0158**	**0.4020**	**0.1050**	**0.0151**	**0.1200**		**1,541.2794**	**1,541.2794**	**0.1527**		**1,545.0973**

3.13 P2 Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620		826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**		**826.6808**	**826.6808**	**0.2674**		**833.3649**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1900e-003	0.1042	0.0275	2.5000e-004	6.3900e-003	5.4000e-004	6.9300e-003	1.8400e-003	5.2000e-004	2.3600e-003		27.1129	27.1129	2.1900e-003		27.1677
Worker	7.6900e-003	4.8400e-003	0.0655	2.2000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		21.8009	21.8009	5.0000e-004		21.8133
Total	**0.0109**	**0.1090**	**0.0930**	**4.7000e-004**	**0.0288**	**6.9000e-004**	**0.0294**	**7.7700e-003**	**6.6000e-004**	**8.4200e-003**		**48.9138**	**48.9138**	**2.6900e-003**		**48.9810**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5219	5.9293	5.0166	8.5400e-003		0.2848	0.2848		0.2620	0.2620	0.0000	826.6808	826.6808	0.2674		833.3649
Total	**0.5219**	**5.9293**	**5.0166**	**8.5400e-003**		**0.2848**	**0.2848**		**0.2620**	**0.2620**	**0.0000**	**826.6808**	**826.6808**	**0.2674**		**833.3649**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1900e-003	0.1042	0.0275	2.5000e-004	6.3900e-003	5.4000e-004	6.9300e-003	1.8400e-003	5.2000e-004	2.3600e-003		27.1129	27.1129	2.1900e-003		27.1677
Worker	7.6900e-003	4.8400e-003	0.0655	2.2000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		21.8009	21.8009	5.0000e-004		21.8133

Total	**0.0109**	**0.1090**	**0.0930**	**4.7000e-004**	**0.0288**	**6.9000e-004**	**0.0294**	**7.7700e-003**	**6.6000e-004**	**8.4200e-003**		**48.9138**	**48.9138**	**2.6900e-003**		**48.9810**

3.13 P2 Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272		826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**		**826.6553**	**826.6553**	**0.2674**		**833.3393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6700e-003	0.0938	0.0254	2.5000e-004	6.3900e-003	1.9000e-004	6.5800e-003	1.8400e-003	1.9000e-004	2.0200e-003		26.8793	26.8793	2.1100e-003		26.9319
Worker	7.2200e-003	4.3700e-003	0.0608	2.1000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		21.0439	21.0439	4.5000e-004		21.0552
Total	**9.8900e-003**	**0.0982**	**0.0862**	**4.6000e-004**	**0.0288**	**3.3000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0800e-003**		**47.9231**	**47.9231**	**2.5600e-003**		**47.9871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4754	5.3946	4.9313	8.5400e-003		0.2469	0.2469		0.2272	0.2272	0.0000	826.6553	826.6553	0.2674		833.3393
Total	**0.4754**	**5.3946**	**4.9313**	**8.5400e-003**		**0.2469**	**0.2469**		**0.2272**	**0.2272**	**0.0000**	**826.6553**	**826.6553**	**0.2674**		**833.3393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6700e-003	0.0938	0.0254	2.5000e-004	6.3900e-003	1.9000e-004	6.5800e-003	1.8400e-003	1.9000e-004	2.0200e-003		26.8793	26.8793	2.1100e-003		26.9319
Worker	7.2200e-003	4.3700e-003	0.0608	2.1000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		21.0439	21.0439	4.5000e-004		21.0552
Total	**9.8900e-003**	**0.0982**	**0.0862**	**4.6000e-004**	**0.0288**	**3.3000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0800e-003**		**47.9231**	**47.9231**	**2.5600e-003**		**47.9871**

3.14 P1b Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427		902.6611	902.6611	0.2919		909.9595
Paving	0.6574					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2812**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**		**902.6611**	**902.6611**	**0.2919**		**909.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427	0.0000	902.6611	902.6611	0.2919		909.9595
Paving	0.6574					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2812**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**	**0.0000**	**902.6611**	**902.6611**	**0.2919**		**909.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

3.15 P2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175		2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**1.5908**	**0.6704**	**2.2611**	**0.1718**	**0.6175**	**0.7893**		**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5088	18.3289	9.4835	0.0223		0.6704	0.6704		0.6175	0.6175	0.0000	2,144.2132	2,144.2132	0.6859		2,161.3609
Total	**1.5088**	**18.3289**	**9.4835**	**0.0223**	**0.6204**	**0.6704**	**1.2908**	**0.0670**	**0.6175**	**0.6845**	**0.0000**	**2,144.2132**	**2,144.2132**	**0.6859**		**2,161.3609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532

Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

3.16 P2 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427		902.6611	902.6611	0.2919		909.9595
Paving	1.2850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9087**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**		**902.6611**	**902.6611**	**0.2919**		**909.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427	0.0000	902.6611	902.6611	0.2919		909.9595
Paving	1.2850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9087**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**	**0.0000**	**902.6611**	**902.6611**	**0.2919**		**909.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

3.17 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	20.2779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**20.4968**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.6100e-003	2.1800e-003	0.0304	1.1000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		10.5219	10.5219	2.3000e-004		10.5276
Total	**3.6100e-003**	**2.1800e-003**	**0.0304**	**1.1000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**10.5219**	**10.5219**	**2.3000e-004**		**10.5276**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.2779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**20.4968**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.6100e-003	2.1800e-003	0.0304	1.1000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		10.5219	10.5219	2.3000e-004		10.5276
Total	**3.6100e-003**	**2.1800e-003**	**0.0304**	**1.1000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**10.5219**	**10.5219**	**2.3000e-004**		**10.5276**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
High Turnover (Sit Down Restaurant)	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016

NaturalGas Unmitigated	0.0680	0.6179	0.5191	3.7100e-003		0.0470	0.0470		0.0470	0.0470		741.4952	741.4952	0.0142	0.0136	745.9016

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1788.41	0.0193	0.1753	0.1473	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.4012	210.4012	4.0300e-003	3.8600e-003	211.6515
High Turnover (Sit Down Restaurant)	4514.3	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0680**	**0.6179**	**0.5191**	**3.7100e-003**		**0.0470**	**0.0470**		**0.0470**	**0.0470**		**741.4952**	**741.4952**	**0.0142**	**0.0136**	**745.9016**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.78841	0.0193	0.1753	0.1473	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.4012	210.4012	4.0300e-003	3.8600e-003	211.6515
High Turnover (Sit Down Restaurant)	4.5143	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0680**	**0.6179**	**0.5191**	**3.7100e-003**		**0.0470**	**0.0470**		**0.0470**	**0.0470**		**741.4952**	**741.4952**	**0.0142**	**0.0136**	**745.9016**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Unmitigated	1.9450	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2400e-003	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Total	**1.9450**	**5.2000e-004**	**0.0562**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**		**0.1199**	**0.1199**	**3.2000e-004**		**0.1278**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2400e-003	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1199	0.1199	3.2000e-004		0.1278
Total	**1.9450**	**5.2000e-004**	**0.0562**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**		**0.1199**	**0.1199**	**3.2000e-004**		**0.1278**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction for Phase 2

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	117.50	1000sqft	2.70	117,500.00	0
High Turnover (Sit Down Restaurant)	6.35	1000sqft	0.15	6,354.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Construction only.

Area Coating - Construction only

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Off-road Equipment - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	305.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblLandUse	LandUseSquareFeet	6,350.00	6,354.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	VendorTripNumber	20.00	1.00
tblTripsAndVMT	WorkerTripNumber	52.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1013	1.0987	0.9034	1.6700e-003	0.0489	0.0510	0.0999	7.5900e-003	0.0470	0.0545	0.0000	147.8508	147.8508	0.0439	0.0000	148.9473
2021	0.0704	0.2647	0.2471	4.3000e-004	1.3300e-003	0.0125	0.0138	3.6000e-004	0.0116	0.0120	0.0000	38.2206	38.2206	0.0112	0.0000	38.4996
Maximum	**0.1013**	**1.0987**	**0.9034**	**1.6700e-003**	**0.0489**	**0.0510**	**0.0999**	**7.5900e-003**	**0.0470**	**0.0545**	**0.0000**	**147.8508**	**147.8508**	**0.0439**	**0.0000**	**148.9473**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1013	1.0987	0.9034	1.6700e-003	0.0240	0.0510	0.0750	4.2900e-003	0.0470	0.0512	0.0000	147.8506	147.8506	0.0439	0.0000	148.9471
2021	0.0704	0.2647	0.2471	4.3000e-004	1.3300e-003	0.0125	0.0138	3.6000e-004	0.0116	0.0120	0.0000	38.2206	38.2206	0.0112	0.0000	38.4996
Maximum	**0.1013**	**1.0987**	**0.9034**	**1.6700e-003**	**0.0240**	**0.0510**	**0.0750**	**4.2900e-003**	**0.0470**	**0.0512**	**0.0000**	**147.8506**	**147.8506**	**0.0439**	**0.0000**	**148.9471**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.57**	**0.00**	**21.88**	**41.51**	**0.00**	**4.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**3-1-2020**	**5-31-2020**	0.3671	0.3671
2	**6-1-2020**	**8-31-2020**	0.5195	0.5195
3	**9-1-2020**	**11-30-2020**	0.2250	0.2250
4	**12-1-2020**	**2-28-2021**	0.2094	0.2094
5	**3-1-2021**	**5-31-2021**	0.2049	0.2049
		Highest	0.5195	0.5195

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Energy	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	174.8864	174.8864	5.2800e-003	2.3500e-003	175.7200

Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	15.3380	0.0000	15.3380	0.9065	0.0000	37.9992
Water						0.0000	0.0000		0.0000	0.0000	0.6115	8.4320	9.0435	0.0632	1.5600e-003	11.0857
Total	**0.0442**	**0.0808**	**0.0694**	**4.8000e-004**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**15.9495**	**183.3215**	**199.2710**	**0.9749**	**3.9100e-003**	**224.8083**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Energy	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	174.8864	174.8864	5.2800e-003	2.3500e-003	175.7200
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	15.3380	0.0000	15.3380	0.9065	0.0000	37.9992
Water						0.0000	0.0000		0.0000	0.0000	0.6115	8.4320	9.0435	0.0632	1.5600e-003	11.0857
Total	**0.0442**	**0.0808**	**0.0694**	**4.8000e-004**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**15.9495**	**183.3215**	**199.2710**	**0.9749**	**3.9100e-003**	**224.8083**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2020	4/30/2020	5	44	

2	P2 Renovation	Building Construction	3/1/2020	4/30/2021	5	305	
3	P2 Grading	Grading	6/1/2020	6/30/2020	5	22	
4	P2 Paving	Paving	7/1/2020	7/30/2020	5	22	
5	P2 Architectural Coating	Architectural Coating	5/1/2021	5/31/2021	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,531; Non-Residential Outdoor: 3,177; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	8.00	158	0.38
P2 Renovation	Aerial Lifts	2	8.00	63	0.31
P2 Grading	Scrapers	1	8.00	367	0.48
P2 Grading	Plate Compactors	1	8.00	8	0.43
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Renovation	Cranes	1	4.00	231	0.29
P2 Renovation	Forklifts	2	7.00	89	0.20
P2 Renovation	Generator Sets	0	8.00	84	0.74
P2 Renovation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Renovation	Welders	0	8.00	46	0.45
P2 Grading	Graders	1	8.00	187	0.41
P2 Grading	Rubber Tired Dozers	0	8.00	247	0.40
P2 Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Paving	Cement and Mortar Mixers	0	8.00	9	0.56
P2 Paving	Pavers	0	8.00	130	0.42
P2 Paving	Paving Equipment	1	8.00	132	0.36

P2 Paving	Rollers	2	8.00	80	0.38
P2 Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	5.00	0.00	215.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Renovation	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0233	0.0000	0.0233	3.5300e-003	0.0000	3.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0997	0.1224	1.8000e-004		5.5100e-003	5.5100e-003		5.0700e-003	5.0700e-003	0.0000	16.0341	16.0341	5.1900e-003	0.0000	16.1637
Total	**0.0100**	**0.0997**	**0.1224**	**1.8000e-004**	**0.0233**	**5.5100e-003**	**0.0288**	**3.5300e-003**	**5.0700e-003**	**8.6000e-003**	**0.0000**	**16.0341**	**16.0341**	**5.1900e-003**	**0.0000**	**16.1637**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.2000e-004	0.0305	7.6400e-003	8.0000e-005	1.8400e-003	1.0000e-004	1.9400e-003	5.1000e-004	9.0000e-005	6.0000e-004	0.0000	8.2665	8.2665	8.7000e-004	0.0000	8.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.4100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0452	1.0452	2.0000e-005	0.0000	1.0458
Total	**1.2500e-003**	**0.0308**	**0.0111**	**9.0000e-005**	**3.0500e-003**	**1.1000e-004**	**3.1600e-003**	**8.3000e-004**	**1.0000e-004**	**9.3000e-004**	**0.0000**	**9.3117**	**9.3117**	**8.9000e-004**	**0.0000**	**9.3340**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.0800e-003	0.0000	9.0800e-003	1.3700e-003	0.0000	1.3700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0997	0.1224	1.8000e-004		5.5100e-003	5.5100e-003		5.0700e-003	5.0700e-003	0.0000	16.0340	16.0340	5.1900e-003	0.0000	16.1637
Total	**0.0100**	**0.0997**	**0.1224**	**1.8000e-004**	**9.0800e-003**	**5.5100e-003**	**0.0146**	**1.3700e-003**	**5.0700e-003**	**6.4400e-003**	**0.0000**	**16.0340**	**16.0340**	**5.1900e-003**	**0.0000**	**16.1637**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	8.2000e-004	0.0305	7.6400e-003	8.0000e-005	1.8400e-003	1.0000e-004	1.9400e-003	5.1000e-004	9.0000e-005	6.0000e-004	0.0000	8.2665	8.2665	8.7000e-004	0.0000	8.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.4100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0452	1.0452	2.0000e-005	0.0000	1.0458
Total	**1.2500e-003**	**0.0308**	**0.0111**	**9.0000e-005**	**3.0500e-003**	**1.1000e-004**	**3.1600e-003**	**8.3000e-004**	**1.0000e-004**	**9.3000e-004**	**0.0000**	**9.3117**	**9.3117**	**8.9000e-004**	**0.0000**	**9.3340**

3.3 P2 Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0610	0.6840	0.5802	9.7000e-004		0.0338	0.0338		0.0311	0.0311	0.0000	85.6084	85.6084	0.0277	0.0000	86.3006
Total	**0.0610**	**0.6840**	**0.5802**	**9.7000e-004**		**0.0338**	**0.0338**		**0.0311**	**0.0311**	**0.0000**	**85.6084**	**85.6084**	**0.0277**	**0.0000**	**86.3006**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0116	3.1600e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	2.0000e-004	6.0000e-005	2.6000e-004	0.0000	2.6655	2.6655	2.2000e-004	0.0000	2.6711
Worker	8.5000e-004	6.0000e-004	6.7900e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.0809	2.0809	5.0000e-005	0.0000	2.0820
Total	**1.2100e-003**	**0.0122**	**9.9500e-003**	**5.0000e-005**	**3.0900e-003**	**8.0000e-005**	**3.1700e-003**	**8.4000e-004**	**7.0000e-005**	**9.1000e-004**	**0.0000**	**4.7464**	**4.7464**	**2.7000e-004**	**0.0000**	**4.7531**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0610	0.6840	0.5802	9.7000e-004		0.0338	0.0338		0.0311	0.0311	0.0000	85.6083	85.6083	0.0277	0.0000	86.3005
Total	**0.0610**	**0.6840**	**0.5802**	**9.7000e-004**		**0.0338**	**0.0338**		**0.0311**	**0.0311**	**0.0000**	**85.6083**	**85.6083**	**0.0277**	**0.0000**	**86.3005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0116	3.1600e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	2.0000e-004	6.0000e-005	2.6000e-004	0.0000	2.6655	2.6655	2.2000e-004	0.0000	2.6711
Worker	8.5000e-004	6.0000e-004	6.7900e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.0809	2.0809	5.0000e-005	0.0000	2.0820
Total	**1.2100e-003**	**0.0122**	**9.9500e-003**	**5.0000e-005**	**3.0900e-003**	**8.0000e-005**	**3.1700e-003**	**8.4000e-004**	**7.0000e-005**	**9.1000e-004**	**0.0000**	**4.7464**	**4.7464**	**2.7000e-004**	**0.0000**	**4.7531**

3.3 P2 Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0218	0.2443	0.2241	3.8000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	33.6169	33.6169	0.0109	0.0000	33.8887
Total	**0.0218**	**0.2443**	**0.2241**	**3.8000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**	**0.0000**	**33.6169**	**33.6169**	**0.0109**	**0.0000**	**33.8887**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-004	4.1000e-003	1.1500e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0377	1.0377	8.0000e-005	0.0000	1.0398
Worker	3.2000e-004	2.1000e-004	2.4700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7888	0.7888	2.0000e-005	0.0000	0.7892
Total	**4.4000e-004**	**4.3100e-003**	**3.6200e-003**	**2.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**2.0000e-005**	**3.5000e-004**	**0.0000**	**1.8265**	**1.8265**	**1.0000e-004**	**0.0000**	**1.8290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0218	0.2443	0.2241	3.8000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	33.6169	33.6169	0.0109	0.0000	33.8887

Total	**0.0218**	**0.2443**	**0.2241**	**3.8000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**	**0.0000**	**33.6169**	**33.6169**	**0.0109**	**0.0000**	**33.8887**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-004	4.1000e-003	1.1500e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0377	1.0377	8.0000e-005	0.0000	1.0398
Worker	3.2000e-004	2.1000e-004	2.4700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7888	0.7888	2.0000e-005	0.0000	0.7892
Total	**4.4000e-004**	**4.3100e-003**	**3.6200e-003**	**2.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**2.0000e-005**	**3.5000e-004**	**0.0000**	**1.8265**	**1.8265**	**1.0000e-004**	**0.0000**	**1.8290**

3.4 P2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0175	0.0000	0.0175	1.8900e-003	0.0000	1.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.2023	0.1047	2.5000e-004		7.4000e-003	7.4000e-003		6.8200e-003	6.8200e-003	0.0000	21.4704	21.4704	6.8700e-003	0.0000	21.6421
Total	**0.0167**	**0.2023**	**0.1047**	**2.5000e-004**	**0.0175**	**7.4000e-003**	**0.0249**	**1.8900e-003**	**6.8200e-003**	**8.7100e-003**	**0.0000**	**21.4704**	**21.4704**	**6.8700e-003**	**0.0000**	**21.6421**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8200e-003	0.0000	6.8200e-003	7.4000e-004	0.0000	7.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.2023	0.1047	2.5000e-004		7.4000e-003	7.4000e-003		6.8200e-003	6.8200e-003	0.0000	21.4703	21.4703	6.8700e-003	0.0000	21.6421
Total	**0.0167**	**0.2023**	**0.1047**	**2.5000e-004**	**6.8200e-003**	**7.4000e-003**	**0.0142**	**7.4000e-004**	**6.8200e-003**	**7.5600e-003**	**0.0000**	**21.4703**	**21.4703**	**6.8700e-003**	**0.0000**	**21.6421**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

3.5 P2 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8600e-003	0.0693	0.0695	1.0000e-004		4.1000e-003	4.1000e-003		3.7700e-003	3.7700e-003	0.0000	9.0077	9.0077	2.9100e-003	0.0000	9.0805
Paving	3.5400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0693**	**0.0695**	**1.0000e-004**		**4.1000e-003**	**4.1000e-003**		**3.7700e-003**	**3.7700e-003**	**0.0000**	**9.0077**	**9.0077**	**2.9100e-003**	**0.0000**	**9.0805**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8600e-003	0.0693	0.0695	1.0000e-004		4.1000e-003	4.1000e-003		3.7700e-003	3.7700e-003	0.0000	9.0077	9.0077	2.9100e-003	0.0000	9.0805
Paving	3.5400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0693**	**0.0695**	**1.0000e-004**		**4.1000e-003**	**4.1000e-003**		**3.7700e-003**	**3.7700e-003**	**0.0000**	**9.0077**	**9.0077**	**2.9100e-003**	**0.0000**	**9.0805**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

3.6 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3000e-003	0.0160	0.0191	3.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	2.6809	2.6809	1.8000e-004	0.0000	2.6855
Total	**0.0481**	**0.0160**	**0.0191**	**3.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.8000e-004**	**0.0000**	**2.6855**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0963	0.0963	0.0000	0.0000	0.0964
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0963**	**0.0963**	**0.0000**	**0.0000**	**0.0964**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.3000e-003	0.0160	0.0191	3.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	2.6809	2.6809	1.8000e-004	0.0000	2.6855
Total	**0.0481**	**0.0160**	**0.0191**	**3.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.8000e-004**	**0.0000**	**2.6855**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0963	0.0963	0.0000	0.0000	0.0964
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0963**	**0.0963**	**0.0000**	**0.0000**	**0.0964**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
High Turnover (Sit Down Restaurant)	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	86.9578	86.9578	3.5900e-003	7.4000e-004	87.2689
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	86.9578	86.9578	3.5900e-003	7.4000e-004	87.2689
NaturalGas Mitigated	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511
NaturalGas Unmitigated	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	1.64772e+006	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**8.8800e-003**	**0.0808**	**0.0679**	**4.8000e-004**		**6.1400e-003**	**6.1400e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**87.9286**	**87.9286**	**1.6900e-003**	**1.6100e-003**	**88.4511**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	1.64772e+006	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**8.8800e-003**	**0.0808**	**0.0679**	**4.8000e-004**		**6.1400e-003**	**6.1400e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**87.9286**	**87.9286**	**1.6900e-003**	**1.6100e-003**	**88.4511**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	231794	73.8545	3.0500e-003	6.3000e-004	74.1187
Parking Lot	41125	13.1033	5.4000e-004	1.1000e-004	13.1502
Total		**86.9578**	**3.5900e-003**	**7.4000e-004**	**87.2689**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	231794	73.8545	3.0500e-003	6.3000e-004	74.1187
Parking Lot	41125	13.1033	5.4000e-004	1.1000e-004	13.1502
Total		**86.9578**	**3.5900e-003**	**7.4000e-004**	**87.2689**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Unmitigated	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.5800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Total	**0.0353**	**1.0000e-005**	**1.5900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0700e-003**	**3.0700e-003**	**1.0000e-005**	**0.0000**	**3.2800e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.5800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	1.5000e-004	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Total	**0.0353**	**1.0000e-005**	**1.5900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0700e-003**	**3.0700e-003**	**1.0000e-005**	**0.0000**	**3.2800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.0435	0.0632	1.5600e-003	11.0857
Unmitigated	9.0435	0.0632	1.5600e-003	11.0857

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.92744 / 0.123028	9.0435	0.0632	1.5600e-003	11.0857
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0435**	**0.0632**	**1.5600e-003**	**11.0857**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.92744 / 0.123028	9.0435	0.0632	1.5600e-003	11.0857
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0435**	**0.0632**	**1.5600e-003**	**11.0857**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.3380	0.9065	0.0000	37.9992
Unmitigated	15.3380	0.9065	0.0000	37.9992

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	75.56	15.3380	0.9065	0.0000	37.9992
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.3380**	**0.9065**	**0.0000**	**37.9992**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	75.56	15.3380	0.9065	0.0000	37.9992
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.3380**	**0.9065**	**0.0000**	**37.9992**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction for Phase 2

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	117.50	1000sqft	2.70	117,500.00	0
High Turnover (Sit Down Restaurant)	6.35	1000sqft	0.15	6,354.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Construction only.

Area Coating - Construction only

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Off-road Equipment - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	305.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblLandUse	LandUseSquareFeet	6,350.00	6,354.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	VendorTripNumber	20.00	1.00
tblTripsAndVMT	WorkerTripNumber	52.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1180	24.7646	15.1524	0.0325	1.7089	0.9827	2.6916	0.2061	0.9049	1.1081	0.0000	3,142.9569	3,142.9569	0.9717	0.0000	3,167.2485
2021	4.5839	5.7808	5.2945	9.3400e-003	0.0288	0.2680	0.2968	7.7700e-003	0.2466	0.2544	0.0000	907.9101	907.9101	0.2814	0.0000	914.9439
Maximum	**4.5839**	**24.7646**	**15.1524**	**0.0325**	**1.7089**	**0.9827**	**2.6916**	**0.2061**	**0.9049**	**1.1081**	**0.0000**	**3,142.9569**	**3,142.9569**	**0.9717**	**0.0000**	**3,167.2485**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1180	24.7646	15.1524	0.0325	0.7386	0.9827	1.7213	0.1084	0.9049	1.0034	0.0000	3,142.9569	3,142.9569	0.9717	0.0000	3,167.2485
2021	4.5839	5.7808	5.2945	9.3400e-003	0.0288	0.2680	0.2968	7.7700e-003	0.2466	0.2544	0.0000	907.9101	907.9101	0.2814	0.0000	914.9439
Maximum	**4.5839**	**24.7646**	**15.1524**	**0.0325**	**0.7386**	**0.9827**	**1.7213**	**0.1084**	**0.9049**	**1.0034**	**0.0000**	**3,142.9569**	**3,142.9569**	**0.9717**	**0.0000**	**3,167.2485**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.84**	**0.00**	**32.47**	**45.70**	**0.00**	**7.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Energy	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.2424**	**0.4427**	**0.3845**	**2.6600e-003**	**0.0000**	**0.0337**	**0.0337**	**0.0000**	**0.0337**	**0.0337**		**531.1212**	**531.1212**	**0.0103**	**9.7400e-003**	**534.2790**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Energy	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.2424**	**0.4427**	**0.3845**	**2.6600e-003**	**0.0000**	**0.0337**	**0.0337**	**0.0000**	**0.0337**	**0.0337**		**531.1212**	**531.1212**	**0.0103**	**9.7400e-003**	**534.2790**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2020	4/30/2020	5	44	
2	P2 Renovation	Building Construction	3/1/2020	4/30/2021	5	305	
3	P2 Grading	Grading	6/1/2020	6/30/2020	5	22	
4	P2 Paving	Paving	7/1/2020	7/30/2020	5	22	
5	P2 Architectural Coating	Architectural Coating	5/1/2021	5/31/2021	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,531; Non-Residential Outdoor: 3,177; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	8.00	158	0.38
P2 Renovation	Aerial Lifts	2	8.00	63	0.31
P2 Grading	Scrapers	1	8.00	367	0.48
P2 Grading	Plate Compactors	1	8.00	8	0.43
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Renovation	Cranes	1	4.00	231	0.29
P2 Renovation	Forklifts	2	7.00	89	0.20
P2 Renovation	Generator Sets	0	8.00	84	0.74
P2 Renovation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Renovation	Welders	0	8.00	46	0.45
P2 Grading	Graders	1	8.00	187	0.41
P2 Grading	Rubber Tired Dozers	0	8.00	247	0.40
P2 Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Paving	Cement and Mortar Mixers	0	8.00	9	0.56
P2 Paving	Pavers	0	8.00	130	0.42
P2 Paving	Paving Equipment	1	8.00	132	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P2 Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	5.00	0.00	215.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Renovation	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0583	0.0000	1.0583	0.1602	0.0000	0.1602			0.0000			0.0000
Off-Road	0.4557	4.5298	5.5638	8.3000e-003		0.2506	0.2506		0.2305	0.2305		803.3875	803.3875	0.2598		809.8833
Total	**0.4557**	**4.5298**	**5.5638**	**8.3000e-003**	**1.0583**	**0.2506**	**1.3089**	**0.1602**	**0.2305**	**0.3908**		**803.3875**	**803.3875**	**0.2598**		**809.8833**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.3605	0.3574	3.6800e-003	0.0851	4.4300e-003	0.0895	0.0233	4.2400e-003	0.0275		410.5425	410.5425	0.0442		411.6483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0133	0.1513	5.2000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		51.5811	51.5811	1.1800e-003		51.6105
Total	**0.0595**	**1.3738**	**0.5087**	**4.2000e-003**	**0.1410**	**4.8000e-003**	**0.1458**	**0.0381**	**4.5800e-003**	**0.0427**		**462.1235**	**462.1235**	**0.0454**		**463.2588**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4127	0.0000	0.4127	0.0625	0.0000	0.0625			0.0000			0.0000
Off-Road	0.4557	4.5298	5.5638	8.3000e-003		0.2506	0.2506		0.2305	0.2305	0.0000	803.3875	803.3875	0.2598		809.8833
Total	**0.4557**	**4.5298**	**5.5638**	**8.3000e-003**	**0.4127**	**0.2506**	**0.6633**	**0.0625**	**0.2305**	**0.2930**	**0.0000**	**803.3875**	**803.3875**	**0.2598**		**809.8833**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	1.3605	0.3574	3.6800e-003	0.0851	4.4300e-003	0.0895	0.0233	4.2400e-003	0.0275		410.5425	410.5425	0.0442		411.6483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0133	0.1513	5.2000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		51.5811	51.5811	1.1800e-003		51.6105
Total	**0.0595**	**1.3738**	**0.5087**	**4.2000e-003**	**0.1410**	**4.8000e-003**	**0.1458**	**0.0381**	**4.5800e-003**	**0.0427**		**462.1235**	**462.1235**	**0.0454**		**463.2588**

3.3 P2 Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5574	6.2462	5.2989	8.9000e-003		0.3088	0.3088		0.2841	0.2841		861.8000	861.8000	0.2787		868.7681
Total	**0.5574**	**6.2462**	**5.2989**	**8.9000e-003**		**0.3088**	**0.3088**		**0.2841**	**0.2841**		**861.8000**	**861.8000**	**0.2787**		**868.7681**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.3400e-003	0.1041	0.0301	2.4000e-004	6.3900e-003	5.5000e-004	6.9400e-003	1.8400e-003	5.3000e-004	2.3700e-003		26.4466	26.4466	2.3000e-003		26.5042
Worker	8.6900e-003	5.3200e-003	0.0605	2.1000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		20.6324	20.6324	4.7000e-004		20.6442
Total	**0.0120**	**0.1095**	**0.0907**	**4.5000e-004**	**0.0288**	**7.0000e-004**	**0.0294**	**7.7700e-003**	**6.7000e-004**	**8.4300e-003**		**47.0790**	**47.0790**	**2.7700e-003**		**47.1484**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5574	6.2462	5.2989	8.9000e-003		0.3088	0.3088		0.2841	0.2841	0.0000	861.8000	861.8000	0.2787		868.7681

Total	**0.5574**	**6.2462**	**5.2989**	**8.9000e-003**		**0.3088**	**0.3088**		**0.2841**	**0.2841**	**0.0000**	**861.8000**	**861.8000**	**0.2787**		**868.7681**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.3400e-003	0.1041	0.0301	2.4000e-004	6.3900e-003	5.5000e-004	6.9400e-003	1.8400e-003	5.3000e-004	2.3700e-003		26.4466	26.4466	2.3000e-003		26.5042
Worker	8.6900e-003	5.3200e-003	0.0605	2.1000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		20.6324	20.6324	4.7000e-004		20.6442
Total	**0.0120**	**0.1095**	**0.0907**	**4.5000e-004**	**0.0288**	**7.0000e-004**	**0.0294**	**7.7700e-003**	**6.7000e-004**	**8.4300e-003**		**47.0790**	**47.0790**	**2.7700e-003**		**47.1484**

3.3 P2 Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5073	5.6824	5.2106	8.9000e-003		0.2677	0.2677		0.2463	0.2463		861.7745	861.7745	0.2787		868.7424
Total	**0.5073**	**5.6824**	**5.2106**	**8.9000e-003**		**0.2677**	**0.2677**		**0.2463**	**0.2463**		**861.7745**	**861.7745**	**0.2787**		**868.7424**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8000e-003	0.0936	0.0279	2.4000e-004	6.3900e-003	2.0000e-004	6.5900e-003	1.8400e-003	1.9000e-004	2.0300e-003		26.2189	26.2189	2.2100e-003		26.2742
Worker	8.1700e-003	4.8000e-003	0.0561	2.0000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		19.9166	19.9166	4.3000e-004		19.9273
Total	**0.0110**	**0.0984**	**0.0840**	**4.4000e-004**	**0.0288**	**3.4000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0900e-003**		**46.1355**	**46.1355**	**2.6400e-003**		**46.2015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5073	5.6824	5.2106	8.9000e-003		0.2677	0.2677		0.2463	0.2463	0.0000	861.7745	861.7745	0.2787		868.7424
Total	**0.5073**	**5.6824**	**5.2106**	**8.9000e-003**		**0.2677**	**0.2677**		**0.2463**	**0.2463**	**0.0000**	**861.7745**	**861.7745**	**0.2787**		**868.7424**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8000e-003	0.0936	0.0279	2.4000e-004	6.3900e-003	2.0000e-004	6.5900e-003	1.8400e-003	1.9000e-004	2.0300e-003		26.2189	26.2189	2.2100e-003		26.2742
Worker	8.1700e-003	4.8000e-003	0.0561	2.0000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		19.9166	19.9166	4.3000e-004		19.9273
Total	**0.0110**	**0.0984**	**0.0840**	**4.4000e-004**	**0.0288**	**3.4000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0900e-003**		**46.1355**	**46.1355**	**2.6400e-003**		**46.2015**

3.4 P2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5138	18.3877	9.5208	0.0223		0.6727	0.6727		0.6196	0.6196		2,151.5483	2,151.5483	0.6883		2,168.7553
Total	**1.5138**	**18.3877**	**9.5208**	**0.0223**	**1.5908**	**0.6727**	**2.2634**	**0.1718**	**0.6196**	**0.7914**		**2,151.5483**	**2,151.5483**	**0.6883**		**2,168.7553**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5138	18.3877	9.5208	0.0223		0.6727	0.6727		0.6196	0.6196	0.0000	2,151.5483	2,151.5483	0.6883		2,168.7553
Total	**1.5138**	**18.3877**	**9.5208**	**0.0223**	**0.6204**	**0.6727**	**1.2930**	**0.0670**	**0.6196**	**0.6866**	**0.0000**	**2,151.5483**	**2,151.5483**	**0.6883**		**2,168.7553**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

3.5 P2 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427		902.6611	902.6611	0.2919		909.9595
Paving	0.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9453**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**		**902.6611**	**902.6611**	**0.2919**		**909.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427	0.0000	902.6611	902.6611	0.2919		909.9595

Paving	0.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9453**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**	**0.0000**	**902.6611**	**902.6611**	**0.2919**		**909.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0213	0.2420	8.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		82.5297	82.5297	1.8800e-003		82.5768
Total	**0.0347**	**0.0213**	**0.2420**	**8.3000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**82.5297**	**82.5297**	**1.8800e-003**		**82.5768**

3.6 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.3609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**4.5798**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.0900e-003	2.4000e-003	0.0280	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		9.9583	9.9583	2.1000e-004		9.9637
Total	**4.0900e-003**	**2.4000e-003**	**0.0280**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**9.9583**	**9.9583**	**2.1000e-004**		**9.9637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.3609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**4.5798**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.0900e-003	2.4000e-003	0.0280	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		9.9583	9.9583	2.1000e-004		9.9637
Total	**4.0900e-003**	**2.4000e-003**	**0.0280**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**9.9583**	**9.9583**	**2.1000e-004**		**9.9637**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
High Turnover (Sit Down Restaurant)	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
NaturalGas Unmitigated	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	4514.3	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0487**	**0.4426**	**0.3718**	**2.6600e-003**		**0.0336**	**0.0336**		**0.0336**	**0.0336**		**531.0941**	**531.0941**	**0.0102**	**9.7400e-003**	**534.2501**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	4.5143	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0487**	**0.4426**	**0.3718**	**2.6600e-003**		**0.0336**	**0.0336**		**0.0336**	**0.0336**		**531.0941**	**531.0941**	**0.0102**	**9.7400e-003**	**534.2501**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289

Unmitigated	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1674					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1900e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Total	**0.1937**	**1.2000e-004**	**0.0127**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0271**	**0.0271**	**7.0000e-005**		**0.0289**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1674					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1900e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Total	**0.1937**	**1.2000e-004**	**0.0127**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0271**	**0.0271**	**7.0000e-005**		**0.0289**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction for Phase 2

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	117.50	1000sqft	2.70	117,500.00	0
High Turnover (Sit Down Restaurant)	6.35	1000sqft	0.15	6,354.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Construction only.

Area Coating - Construction only

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Off-road Equipment - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	305.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblLandUse	LandUseSquareFeet	6,350.00	6,354.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	VendorTripNumber	20.00	1.00
tblTripsAndVMT	WorkerTripNumber	52.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1129	24.7623	15.1746	0.0326	1.7089	0.9827	2.6916	0.2061	0.9049	1.1081	0.0000	3,149.4655	3,149.4655	0.9717	0.0000	3,173.7576
2021	4.5834	5.7806	5.2968	9.3600e-003	0.0288	0.2680	0.2968	7.7700e-003	0.2466	0.2544	0.0000	909.6977	909.6977	0.2813	0.0000	916.7295
Maximum	**4.5834**	**24.7623**	**15.1746**	**0.0326**	**1.7089**	**0.9827**	**2.6916**	**0.2061**	**0.9049**	**1.1081**	**0.0000**	**3,149.4655**	**3,149.4655**	**0.9717**	**0.0000**	**3,173.7576**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1129	24.7623	15.1746	0.0326	0.7386	0.9827	1.7213	0.1084	0.9049	1.0034	0.0000	3,149.4655	3,149.4655	0.9717	0.0000	3,173.7576
2021	4.5834	5.7806	5.2968	9.3600e-003	0.0288	0.2680	0.2968	7.7700e-003	0.2466	0.2544	0.0000	909.6977	909.6977	0.2813	0.0000	916.7295
Maximum	**4.5834**	**24.7623**	**15.1746**	**0.0326**	**0.7386**	**0.9827**	**1.7213**	**0.1084**	**0.9049**	**1.0034**	**0.0000**	**3,149.4655**	**3,149.4655**	**0.9717**	**0.0000**	**3,173.7576**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**55.84**	**0.00**	**32.47**	**45.70**	**0.00**	**7.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Energy	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.2424**	**0.4427**	**0.3845**	**2.6600e-003**	**0.0000**	**0.0337**	**0.0337**	**0.0000**	**0.0337**	**0.0337**		**531.1212**	**531.1212**	**0.0103**	**9.7400e-003**	**534.2790**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Energy	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.2424**	**0.4427**	**0.3845**	**2.6600e-003**	**0.0000**	**0.0337**	**0.0337**	**0.0000**	**0.0337**	**0.0337**		**531.1212**	**531.1212**	**0.0103**	**9.7400e-003**	**534.2790**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2020	4/30/2020	5	44	
2	P2 Renovation	Building Construction	3/1/2020	4/30/2021	5	305	
3	P2 Grading	Grading	6/1/2020	6/30/2020	5	22	
4	P2 Paving	Paving	7/1/2020	7/30/2020	5	22	
5	P2 Architectural Coating	Architectural Coating	5/1/2021	5/31/2021	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,531; Non-Residential Outdoor: 3,177; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	8.00	158	0.38
P2 Renovation	Aerial Lifts	2	8.00	63	0.31
P2 Grading	Scrapers	1	8.00	367	0.48
P2 Grading	Plate Compactors	1	8.00	8	0.43
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Renovation	Cranes	1	4.00	231	0.29
P2 Renovation	Forklifts	2	7.00	89	0.20
P2 Renovation	Generator Sets	0	8.00	84	0.74
P2 Renovation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Renovation	Welders	0	8.00	46	0.45
P2 Grading	Graders	1	8.00	187	0.41
P2 Grading	Rubber Tired Dozers	0	8.00	247	0.40
P2 Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Paving	Cement and Mortar Mixers	0	8.00	9	0.56
P2 Paving	Pavers	0	8.00	130	0.42
P2 Paving	Paving Equipment	1	8.00	132	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P2 Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	5.00	0.00	215.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Renovation	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0583	0.0000	1.0583	0.1602	0.0000	0.1602			0.0000			0.0000
Off-Road	0.4557	4.5298	5.5638	8.3000e-003		0.2506	0.2506		0.2305	0.2305		803.3875	803.3875	0.2598		809.8833
Total	**0.4557**	**4.5298**	**5.5638**	**8.3000e-003**	**1.0583**	**0.2506**	**1.3089**	**0.1602**	**0.2305**	**0.3908**		**803.3875**	**803.3875**	**0.2598**		**809.8833**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0369	1.3436	0.3395	3.7400e-003	0.0851	4.3500e-003	0.0894	0.0233	4.1600e-003	0.0275		416.8351	416.8351	0.0432		417.9153
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0121	0.1637	5.5000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		54.5022	54.5022	1.2400e-003		54.5332
Total	**0.0561**	**1.3557**	**0.5032**	**4.2900e-003**	**0.1410**	**4.7200e-003**	**0.1457**	**0.0381**	**4.5000e-003**	**0.0426**		**471.3373**	**471.3373**	**0.0445**		**472.4486**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4127	0.0000	0.4127	0.0625	0.0000	0.0625			0.0000			0.0000
Off-Road	0.4557	4.5298	5.5638	8.3000e-003		0.2506	0.2506		0.2305	0.2305	0.0000	803.3875	803.3875	0.2598		809.8833
Total	**0.4557**	**4.5298**	**5.5638**	**8.3000e-003**	**0.4127**	**0.2506**	**0.6633**	**0.0625**	**0.2305**	**0.2930**	**0.0000**	**803.3875**	**803.3875**	**0.2598**		**809.8833**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0369	1.3436	0.3395	3.7400e-003	0.0851	4.3500e-003	0.0894	0.0233	4.1600e-003	0.0275		416.8351	416.8351	0.0432		417.9153
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0121	0.1637	5.5000e-004	0.0559	3.7000e-004	0.0563	0.0148	3.4000e-004	0.0152		54.5022	54.5022	1.2400e-003		54.5332
Total	**0.0561**	**1.3557**	**0.5032**	**4.2900e-003**	**0.1410**	**4.7200e-003**	**0.1457**	**0.0381**	**4.5000e-003**	**0.0426**		**471.3373**	**471.3373**	**0.0445**		**472.4486**

3.3 P2 Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5574	6.2462	5.2989	8.9000e-003		0.3088	0.3088		0.2841	0.2841		861.8000	861.8000	0.2787		868.7681
Total	**0.5574**	**6.2462**	**5.2989**	**8.9000e-003**		**0.3088**	**0.3088**		**0.2841**	**0.2841**		**861.8000**	**861.8000**	**0.2787**		**868.7681**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1900e-003	0.1042	0.0275	2.5000e-004	6.3900e-003	5.4000e-004	6.9300e-003	1.8400e-003	5.2000e-004	2.3600e-003		27.1129	27.1129	2.1900e-003		27.1677
Worker	7.6900e-003	4.8400e-003	0.0655	2.2000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		21.8009	21.8009	5.0000e-004		21.8133
Total	**0.0109**	**0.1090**	**0.0930**	**4.7000e-004**	**0.0288**	**6.9000e-004**	**0.0294**	**7.7700e-003**	**6.6000e-004**	**8.4200e-003**		**48.9138**	**48.9138**	**2.6900e-003**		**48.9810**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5574	6.2462	5.2989	8.9000e-003		0.3088	0.3088		0.2841	0.2841	0.0000	861.8000	861.8000	0.2787		868.7681

Total	**0.5574**	**6.2462**	**5.2989**	**8.9000e-003**		**0.3088**	**0.3088**		**0.2841**	**0.2841**	**0.0000**	**861.8000**	**861.8000**	**0.2787**		**868.7681**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1900e-003	0.1042	0.0275	2.5000e-004	6.3900e-003	5.4000e-004	6.9300e-003	1.8400e-003	5.2000e-004	2.3600e-003		27.1129	27.1129	2.1900e-003		27.1677
Worker	7.6900e-003	4.8400e-003	0.0655	2.2000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0600e-003		21.8009	21.8009	5.0000e-004		21.8133
Total	**0.0109**	**0.1090**	**0.0930**	**4.7000e-004**	**0.0288**	**6.9000e-004**	**0.0294**	**7.7700e-003**	**6.6000e-004**	**8.4200e-003**		**48.9138**	**48.9138**	**2.6900e-003**		**48.9810**

3.3 P2 Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5073	5.6824	5.2106	8.9000e-003		0.2677	0.2677		0.2463	0.2463		861.7745	861.7745	0.2787		868.7424
Total	**0.5073**	**5.6824**	**5.2106**	**8.9000e-003**		**0.2677**	**0.2677**		**0.2463**	**0.2463**		**861.7745**	**861.7745**	**0.2787**		**868.7424**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6700e-003	0.0938	0.0254	2.5000e-004	6.3900e-003	1.9000e-004	6.5800e-003	1.8400e-003	1.9000e-004	2.0200e-003		26.8793	26.8793	2.1100e-003		26.9319
Worker	7.2200e-003	4.3700e-003	0.0608	2.1000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		21.0439	21.0439	4.5000e-004		21.0552
Total	**9.8900e-003**	**0.0982**	**0.0862**	**4.6000e-004**	**0.0288**	**3.3000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0800e-003**		**47.9231**	**47.9231**	**2.5600e-003**		**47.9871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5073	5.6824	5.2106	8.9000e-003		0.2677	0.2677		0.2463	0.2463	0.0000	861.7745	861.7745	0.2787		868.7424
Total	**0.5073**	**5.6824**	**5.2106**	**8.9000e-003**		**0.2677**	**0.2677**		**0.2463**	**0.2463**	**0.0000**	**861.7745**	**861.7745**	**0.2787**		**868.7424**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.6700e-003	0.0938	0.0254	2.5000e-004	6.3900e-003	1.9000e-004	6.5800e-003	1.8400e-003	1.9000e-004	2.0200e-003		26.8793	26.8793	2.1100e-003		26.9319
Worker	7.2200e-003	4.3700e-003	0.0608	2.1000e-004	0.0224	1.4000e-004	0.0225	5.9300e-003	1.3000e-004	6.0600e-003		21.0439	21.0439	4.5000e-004		21.0552
Total	**9.8900e-003**	**0.0982**	**0.0862**	**4.6000e-004**	**0.0288**	**3.3000e-004**	**0.0291**	**7.7700e-003**	**3.2000e-004**	**8.0800e-003**		**47.9231**	**47.9231**	**2.5600e-003**		**47.9871**

3.4 P2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5138	18.3877	9.5208	0.0223		0.6727	0.6727		0.6196	0.6196		2,151.5483	2,151.5483	0.6883		2,168.7553
Total	**1.5138**	**18.3877**	**9.5208**	**0.0223**	**1.5908**	**0.6727**	**2.2634**	**0.1718**	**0.6196**	**0.7914**		**2,151.5483**	**2,151.5483**	**0.6883**		**2,168.7553**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.5138	18.3877	9.5208	0.0223		0.6727	0.6727		0.6196	0.6196	0.0000	2,151.5483	2,151.5483	0.6883		2,168.7553
Total	**1.5138**	**18.3877**	**9.5208**	**0.0223**	**0.6204**	**0.6727**	**1.2930**	**0.0670**	**0.6196**	**0.6866**	**0.0000**	**2,151.5483**	**2,151.5483**	**0.6883**		**2,168.7553**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

3.5 P2 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427		902.6611	902.6611	0.2919		909.9595
Paving	0.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9453**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**		**902.6611**	**902.6611**	**0.2919**		**909.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6238	6.3036	6.3212	9.3200e-003		0.3725	0.3725		0.3427	0.3427	0.0000	902.6611	902.6611	0.2919		909.9595

Paving	0.3216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9453**	**6.3036**	**6.3212**	**9.3200e-003**		**0.3725**	**0.3725**		**0.3427**	**0.3427**	**0.0000**	**902.6611**	**902.6611**	**0.2919**		**909.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0194	0.2619	8.7000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		87.2035	87.2035	1.9900e-003		87.2532
Total	**0.0307**	**0.0194**	**0.2619**	**8.7000e-004**	**0.0894**	**5.9000e-004**	**0.0900**	**0.0237**	**5.4000e-004**	**0.0243**		**87.2035**	**87.2035**	**1.9900e-003**		**87.2532**

3.6 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.3609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**4.5798**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.6100e-003	2.1800e-003	0.0304	1.1000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		10.5219	10.5219	2.3000e-004		10.5276
Total	**3.6100e-003**	**2.1800e-003**	**0.0304**	**1.1000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**10.5219**	**10.5219**	**2.3000e-004**		**10.5276**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.3609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**4.5798**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.6100e-003	2.1800e-003	0.0304	1.1000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		10.5219	10.5219	2.3000e-004		10.5276
Total	**3.6100e-003**	**2.1800e-003**	**0.0304**	**1.1000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**10.5219**	**10.5219**	**2.3000e-004**		**10.5276**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
High Turnover (Sit Down Restaurant)	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
NaturalGas Unmitigated	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	4514.3	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0487**	**0.4426**	**0.3718**	**2.6600e-003**		**0.0336**	**0.0336**		**0.0336**	**0.0336**		**531.0941**	**531.0941**	**0.0102**	**9.7400e-003**	**534.2501**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	4.5143	0.0487	0.4426	0.3718	2.6600e-003		0.0336	0.0336		0.0336	0.0336		531.0941	531.0941	0.0102	9.7400e-003	534.2501
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0487**	**0.4426**	**0.3718**	**2.6600e-003**		**0.0336**	**0.0336**		**0.0336**	**0.0336**		**531.0941**	**531.0941**	**0.0102**	**9.7400e-003**	**534.2501**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289

Unmitigated	0.1937	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1674					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1900e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Total	**0.1937**	**1.2000e-004**	**0.0127**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0271**	**0.0271**	**7.0000e-005**		**0.0289**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0251					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1674					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1900e-003	1.2000e-004	0.0127	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0271	0.0271	7.0000e-005		0.0289
Total	**0.1937**	**1.2000e-004**	**0.0127**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0271**	**0.0271**	**7.0000e-005**		**0.0289**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction for Phase 2

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	117.50	1000sqft	2.70	117,500.00	0
High Turnover (Sit Down Restaurant)	6.35	1000sqft	0.15	6,354.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Construction only.

Area Coating - Construction only

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Off-road Equipment - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	305.00
tblConstructionPhase	NumDays	6.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblLandUse	LandUseSquareFeet	6,350.00	6,354.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	VendorTripNumber	20.00	1.00
tblTripsAndVMT	WorkerTripNumber	52.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	1.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1013	1.0987	0.9034	1.6700e-003	0.0489	0.0510	0.0999	7.5900e-003	0.0470	0.0545	0.0000	147.8508	147.8508	0.0439	0.0000	148.9473
2021	0.0704	0.2647	0.2471	4.3000e-004	1.3300e-003	0.0125	0.0138	3.6000e-004	0.0116	0.0120	0.0000	38.2206	38.2206	0.0112	0.0000	38.4996
Maximum	**0.1013**	**1.0987**	**0.9034**	**1.6700e-003**	**0.0489**	**0.0510**	**0.0999**	**7.5900e-003**	**0.0470**	**0.0545**	**0.0000**	**147.8508**	**147.8508**	**0.0439**	**0.0000**	**148.9473**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1013	1.0987	0.9034	1.6700e-003	0.0240	0.0510	0.0750	4.2900e-003	0.0470	0.0512	0.0000	147.8506	147.8506	0.0439	0.0000	148.9471
2021	0.0704	0.2647	0.2471	4.3000e-004	1.3300e-003	0.0125	0.0138	3.6000e-004	0.0116	0.0120	0.0000	38.2206	38.2206	0.0112	0.0000	38.4996
Maximum	**0.1013**	**1.0987**	**0.9034**	**1.6700e-003**	**0.0240**	**0.0510**	**0.0750**	**4.2900e-003**	**0.0470**	**0.0512**	**0.0000**	**147.8506**	**147.8506**	**0.0439**	**0.0000**	**148.9471**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.57**	**0.00**	**21.88**	**41.51**	**0.00**	**4.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**3-1-2020**	**5-31-2020**	0.3671	0.3671
2	**6-1-2020**	**8-31-2020**	0.5195	0.5195
3	**9-1-2020**	**11-30-2020**	0.2250	0.2250
4	**12-1-2020**	**2-28-2021**	0.2094	0.2094
5	**3-1-2021**	**5-31-2021**	0.2049	0.2049
		Highest	0.5195	0.5195

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Energy	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	174.8864	174.8864	5.2800e-003	2.3500e-003	175.7200

Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	15.3380	0.0000	15.3380	0.9065	0.0000	37.9992
Water						0.0000	0.0000		0.0000	0.0000	0.6115	8.4320	9.0435	0.0632	1.5600e-003	11.0857
Total	**0.0442**	**0.0808**	**0.0694**	**4.8000e-004**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**15.9495**	**183.3215**	**199.2710**	**0.9749**	**3.9100e-003**	**224.8083**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Energy	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	174.8864	174.8864	5.2800e-003	2.3500e-003	175.7200
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	15.3380	0.0000	15.3380	0.9065	0.0000	37.9992
Water						0.0000	0.0000		0.0000	0.0000	0.6115	8.4320	9.0435	0.0632	1.5600e-003	11.0857
Total	**0.0442**	**0.0808**	**0.0694**	**4.8000e-004**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**15.9495**	**183.3215**	**199.2710**	**0.9749**	**3.9100e-003**	**224.8083**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2020	4/30/2020	5	44	

2	P2 Renovation	Building Construction	3/1/2020	4/30/2021	5	305	
3	P2 Grading	Grading	6/1/2020	6/30/2020	5	22	
4	P2 Paving	Paving	7/1/2020	7/30/2020	5	22	
5	P2 Architectural Coating	Architectural Coating	5/1/2021	5/31/2021	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,531; Non-Residential Outdoor: 3,177; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	8.00	158	0.38
P2 Renovation	Aerial Lifts	2	8.00	63	0.31
P2 Grading	Scrapers	1	8.00	367	0.48
P2 Grading	Plate Compactors	1	8.00	8	0.43
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Renovation	Cranes	1	4.00	231	0.29
P2 Renovation	Forklifts	2	7.00	89	0.20
P2 Renovation	Generator Sets	0	8.00	84	0.74
P2 Renovation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
P2 Renovation	Welders	0	8.00	46	0.45
P2 Grading	Graders	1	8.00	187	0.41
P2 Grading	Rubber Tired Dozers	0	8.00	247	0.40
P2 Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Paving	Cement and Mortar Mixers	0	8.00	9	0.56
P2 Paving	Pavers	0	8.00	130	0.42
P2 Paving	Paving Equipment	1	8.00	132	0.36

P2 Paving	Rollers	2	8.00	80	0.38
P2 Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	5.00	0.00	215.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Renovation	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0233	0.0000	0.0233	3.5300e-003	0.0000	3.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0997	0.1224	1.8000e-004		5.5100e-003	5.5100e-003		5.0700e-003	5.0700e-003	0.0000	16.0341	16.0341	5.1900e-003	0.0000	16.1637
Total	**0.0100**	**0.0997**	**0.1224**	**1.8000e-004**	**0.0233**	**5.5100e-003**	**0.0288**	**3.5300e-003**	**5.0700e-003**	**8.6000e-003**	**0.0000**	**16.0341**	**16.0341**	**5.1900e-003**	**0.0000**	**16.1637**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.2000e-004	0.0305	7.6400e-003	8.0000e-005	1.8400e-003	1.0000e-004	1.9400e-003	5.1000e-004	9.0000e-005	6.0000e-004	0.0000	8.2665	8.2665	8.7000e-004	0.0000	8.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.4100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0452	1.0452	2.0000e-005	0.0000	1.0458
Total	**1.2500e-003**	**0.0308**	**0.0111**	**9.0000e-005**	**3.0500e-003**	**1.1000e-004**	**3.1600e-003**	**8.3000e-004**	**1.0000e-004**	**9.3000e-004**	**0.0000**	**9.3117**	**9.3117**	**8.9000e-004**	**0.0000**	**9.3340**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.0800e-003	0.0000	9.0800e-003	1.3700e-003	0.0000	1.3700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0997	0.1224	1.8000e-004		5.5100e-003	5.5100e-003		5.0700e-003	5.0700e-003	0.0000	16.0340	16.0340	5.1900e-003	0.0000	16.1637
Total	**0.0100**	**0.0997**	**0.1224**	**1.8000e-004**	**9.0800e-003**	**5.5100e-003**	**0.0146**	**1.3700e-003**	**5.0700e-003**	**6.4400e-003**	**0.0000**	**16.0340**	**16.0340**	**5.1900e-003**	**0.0000**	**16.1637**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	8.2000e-004	0.0305	7.6400e-003	8.0000e-005	1.8400e-003	1.0000e-004	1.9400e-003	5.1000e-004	9.0000e-005	6.0000e-004	0.0000	8.2665	8.2665	8.7000e-004	0.0000	8.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.4100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0452	1.0452	2.0000e-005	0.0000	1.0458
Total	**1.2500e-003**	**0.0308**	**0.0111**	**9.0000e-005**	**3.0500e-003**	**1.1000e-004**	**3.1600e-003**	**8.3000e-004**	**1.0000e-004**	**9.3000e-004**	**0.0000**	**9.3117**	**9.3117**	**8.9000e-004**	**0.0000**	**9.3340**

3.3 P2 Renovation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0610	0.6840	0.5802	9.7000e-004		0.0338	0.0338		0.0311	0.0311	0.0000	85.6084	85.6084	0.0277	0.0000	86.3006
Total	**0.0610**	**0.6840**	**0.5802**	**9.7000e-004**		**0.0338**	**0.0338**		**0.0311**	**0.0311**	**0.0000**	**85.6084**	**85.6084**	**0.0277**	**0.0000**	**86.3006**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0116	3.1600e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	2.0000e-004	6.0000e-005	2.6000e-004	0.0000	2.6655	2.6655	2.2000e-004	0.0000	2.6711
Worker	8.5000e-004	6.0000e-004	6.7900e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.0809	2.0809	5.0000e-005	0.0000	2.0820
Total	**1.2100e-003**	**0.0122**	**9.9500e-003**	**5.0000e-005**	**3.0900e-003**	**8.0000e-005**	**3.1700e-003**	**8.4000e-004**	**7.0000e-005**	**9.1000e-004**	**0.0000**	**4.7464**	**4.7464**	**2.7000e-004**	**0.0000**	**4.7531**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0610	0.6840	0.5802	9.7000e-004		0.0338	0.0338		0.0311	0.0311	0.0000	85.6083	85.6083	0.0277	0.0000	86.3005
Total	**0.0610**	**0.6840**	**0.5802**	**9.7000e-004**		**0.0338**	**0.0338**		**0.0311**	**0.0311**	**0.0000**	**85.6083**	**85.6083**	**0.0277**	**0.0000**	**86.3005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0116	3.1600e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	2.0000e-004	6.0000e-005	2.6000e-004	0.0000	2.6655	2.6655	2.2000e-004	0.0000	2.6711
Worker	8.5000e-004	6.0000e-004	6.7900e-003	2.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	2.0809	2.0809	5.0000e-005	0.0000	2.0820
Total	**1.2100e-003**	**0.0122**	**9.9500e-003**	**5.0000e-005**	**3.0900e-003**	**8.0000e-005**	**3.1700e-003**	**8.4000e-004**	**7.0000e-005**	**9.1000e-004**	**0.0000**	**4.7464**	**4.7464**	**2.7000e-004**	**0.0000**	**4.7531**

3.3 P2 Renovation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0218	0.2443	0.2241	3.8000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	33.6169	33.6169	0.0109	0.0000	33.8887
Total	**0.0218**	**0.2443**	**0.2241**	**3.8000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**	**0.0000**	**33.6169**	**33.6169**	**0.0109**	**0.0000**	**33.8887**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-004	4.1000e-003	1.1500e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0377	1.0377	8.0000e-005	0.0000	1.0398
Worker	3.2000e-004	2.1000e-004	2.4700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7888	0.7888	2.0000e-005	0.0000	0.7892
Total	**4.4000e-004**	**4.3100e-003**	**3.6200e-003**	**2.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**2.0000e-005**	**3.5000e-004**	**0.0000**	**1.8265**	**1.8265**	**1.0000e-004**	**0.0000**	**1.8290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0218	0.2443	0.2241	3.8000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	33.6169	33.6169	0.0109	0.0000	33.8887

Total	**0.0218**	**0.2443**	**0.2241**	**3.8000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**	**0.0000**	**33.6169**	**33.6169**	**0.0109**	**0.0000**	**33.8887**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-004	4.1000e-003	1.1500e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0377	1.0377	8.0000e-005	0.0000	1.0398
Worker	3.2000e-004	2.1000e-004	2.4700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7888	0.7888	2.0000e-005	0.0000	0.7892
Total	**4.4000e-004**	**4.3100e-003**	**3.6200e-003**	**2.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**2.0000e-005**	**3.5000e-004**	**0.0000**	**1.8265**	**1.8265**	**1.0000e-004**	**0.0000**	**1.8290**

3.4 P2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0175	0.0000	0.0175	1.8900e-003	0.0000	1.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.2023	0.1047	2.5000e-004		7.4000e-003	7.4000e-003		6.8200e-003	6.8200e-003	0.0000	21.4704	21.4704	6.8700e-003	0.0000	21.6421
Total	**0.0167**	**0.2023**	**0.1047**	**2.5000e-004**	**0.0175**	**7.4000e-003**	**0.0249**	**1.8900e-003**	**6.8200e-003**	**8.7100e-003**	**0.0000**	**21.4704**	**21.4704**	**6.8700e-003**	**0.0000**	**21.6421**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8200e-003	0.0000	6.8200e-003	7.4000e-004	0.0000	7.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.2023	0.1047	2.5000e-004		7.4000e-003	7.4000e-003		6.8200e-003	6.8200e-003	0.0000	21.4703	21.4703	6.8700e-003	0.0000	21.6421
Total	**0.0167**	**0.2023**	**0.1047**	**2.5000e-004**	**6.8200e-003**	**7.4000e-003**	**0.0142**	**7.4000e-004**	**6.8200e-003**	**7.5600e-003**	**0.0000**	**21.4703**	**21.4703**	**6.8700e-003**	**0.0000**	**21.6421**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

3.5 P2 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8600e-003	0.0693	0.0695	1.0000e-004		4.1000e-003	4.1000e-003		3.7700e-003	3.7700e-003	0.0000	9.0077	9.0077	2.9100e-003	0.0000	9.0805
Paving	3.5400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0693**	**0.0695**	**1.0000e-004**		**4.1000e-003**	**4.1000e-003**		**3.7700e-003**	**3.7700e-003**	**0.0000**	**9.0077**	**9.0077**	**2.9100e-003**	**0.0000**	**9.0805**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8600e-003	0.0693	0.0695	1.0000e-004		4.1000e-003	4.1000e-003		3.7700e-003	3.7700e-003	0.0000	9.0077	9.0077	2.9100e-003	0.0000	9.0805
Paving	3.5400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0104**	**0.0693**	**0.0695**	**1.0000e-004**		**4.1000e-003**	**4.1000e-003**		**3.7700e-003**	**3.7700e-003**	**0.0000**	**9.0077**	**9.0077**	**2.9100e-003**	**0.0000**	**9.0805**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.4000e-004	2.7300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8361	0.8361	2.0000e-005	0.0000	0.8366
Total	**3.4000e-004**	**2.4000e-004**	**2.7300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8361**	**0.8361**	**2.0000e-005**	**0.0000**	**0.8366**

3.6 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3000e-003	0.0160	0.0191	3.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	2.6809	2.6809	1.8000e-004	0.0000	2.6855
Total	**0.0481**	**0.0160**	**0.0191**	**3.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.8000e-004**	**0.0000**	**2.6855**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0963	0.0963	0.0000	0.0000	0.0964
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0963**	**0.0963**	**0.0000**	**0.0000**	**0.0964**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.3000e-003	0.0160	0.0191	3.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	2.6809	2.6809	1.8000e-004	0.0000	2.6855
Total	**0.0481**	**0.0160**	**0.0191**	**3.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.8000e-004**	**0.0000**	**2.6855**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0963	0.0963	0.0000	0.0000	0.0964
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0963**	**0.0963**	**0.0000**	**0.0000**	**0.0964**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
High Turnover (Sit Down Restaurant)	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	86.9578	86.9578	3.5900e-003	7.4000e-004	87.2689
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	86.9578	86.9578	3.5900e-003	7.4000e-004	87.2689
NaturalGas Mitigated	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511
NaturalGas Unmitigated	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	1.64772e+006	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**8.8800e-003**	**0.0808**	**0.0679**	**4.8000e-004**		**6.1400e-003**	**6.1400e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**87.9286**	**87.9286**	**1.6900e-003**	**1.6100e-003**	**88.4511**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	1.64772e+006	8.8800e-003	0.0808	0.0679	4.8000e-004		6.1400e-003	6.1400e-003		6.1400e-003	6.1400e-003	0.0000	87.9286	87.9286	1.6900e-003	1.6100e-003	88.4511
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**8.8800e-003**	**0.0808**	**0.0679**	**4.8000e-004**		**6.1400e-003**	**6.1400e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**87.9286**	**87.9286**	**1.6900e-003**	**1.6100e-003**	**88.4511**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	231794	73.8545	3.0500e-003	6.3000e-004	74.1187
Parking Lot	41125	13.1033	5.4000e-004	1.1000e-004	13.1502
Total		**86.9578**	**3.5900e-003**	**7.4000e-004**	**87.2689**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	231794	73.8545	3.0500e-003	6.3000e-004	74.1187
Parking Lot	41125	13.1033	5.4000e-004	1.1000e-004	13.1502
Total		**86.9578**	**3.5900e-003**	**7.4000e-004**	**87.2689**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Unmitigated	0.0353	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.5800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Total	**0.0353**	**1.0000e-005**	**1.5900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0700e-003**	**3.0700e-003**	**1.0000e-005**	**0.0000**	**3.2800e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.5800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	1.5000e-004	1.0000e-005	1.5900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.0700e-003	3.0700e-003	1.0000e-005	0.0000	3.2800e-003
Total	**0.0353**	**1.0000e-005**	**1.5900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.0700e-003**	**3.0700e-003**	**1.0000e-005**	**0.0000**	**3.2800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.0435	0.0632	1.5600e-003	11.0857
Unmitigated	9.0435	0.0632	1.5600e-003	11.0857

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.92744 / 0.123028	9.0435	0.0632	1.5600e-003	11.0857
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0435**	**0.0632**	**1.5600e-003**	**11.0857**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.92744 / 0.123028	9.0435	0.0632	1.5600e-003	11.0857
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.0435**	**0.0632**	**1.5600e-003**	**11.0857**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.3380	0.9065	0.0000	37.9992
Unmitigated	15.3380	0.9065	0.0000	37.9992

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	75.56	15.3380	0.9065	0.0000	37.9992
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.3380**	**0.9065**	**0.0000**	**37.9992**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	75.56	15.3380	0.9065	0.0000	37.9992
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.3380**	**0.9065**	**0.0000**	**37.9992**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Full Buildout (Phase 1-3) Operational

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	454.23	1000sqft	10.43	454,230.00	0
General Office Building	1.81	1000sqft	0.04	1,808.00	0
Parking Lot	480.89	1000sqft	11.04	480,890.00	0
Fast Food Restaurant w/o Drive Thru	3.58	1000sqft	0.08	3,582.00	0
High Turnover (Sit Down Restaurant)	34.15	1000sqft	0.78	34,149.00	0
Quality Restaurant	7.18	1000sqft	0.16	7,182.00	0
Strip Mall	3.97	1000sqft	0.09	3,970.00	0
Enclosed Parking with Elevator	140.06	1000sqft	1.07	46,624.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - .

Area Coating -

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Waste Mitigation - Regulation

Fleet Mix - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	6/14/2019	6/3/2019
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.56
tblFleetMix	LDA	0.56	0.66

tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	1.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.21
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	6.1460e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	5.7910e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	0.00

tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	5.0140e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	4.8960e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	9.4400e-004
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	9.6600e-004
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.03
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	2.4390e-003

tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	1.7130e-003
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	6.8600e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	5.9000e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	0.00
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	2.5190e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	1.5530e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	0.00
tblLandUse	LandUseSquareFeet	1,810.00	1,808.00
tblLandUse	LandUseSquareFeet	140,060.00	46,624.00
tblLandUse	LandUseSquareFeet	3,580.00	3,582.00
tblLandUse	LandUseSquareFeet	34,150.00	34,149.00
tblLandUse	LandUseSquareFeet	7,180.00	7,182.00
tblLandUse	LotAcreage	3.22	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	ST_TR	696.00	227.04
tblVehicleTrips	ST_TR	2.46	2.19
tblVehicleTrips	ST_TR	158.37	113.18

tblVehicleTrips	ST_TR	94.36	107.79
tblVehicleTrips	ST_TR	42.04	37.79
tblVehicleTrips	SU_TR	500.00	163.10
tblVehicleTrips	SU_TR	1.05	0.94
tblVehicleTrips	SU_TR	131.84	94.22
tblVehicleTrips	SU_TR	72.16	82.43
tblVehicleTrips	SU_TR	20.43	18.36
tblVehicleTrips	WD_TR	716.00	233.56
tblVehicleTrips	WD_TR	11.03	9.84
tblVehicleTrips	WD_TR	127.15	90.87
tblVehicleTrips	WD_TR	89.95	102.76
tblVehicleTrips	WD_TR	44.32	39.84
tblWater	IndoorWaterUseRate	1,086,650.69	795,700.00
tblWater	IndoorWaterUseRate	81,053,698.43	795,700.00
tblWater	IndoorWaterUseRate	10,365,676.28	795,700.00
tblWater	IndoorWaterUseRate	2,179,372.06	795,700.00
tblWater	IndoorWaterUseRate	294,067.91	795,700.00
tblWater	OutdoorWaterUseRate	69,360.68	742,264.00
tblWater	OutdoorWaterUseRate	49,678,073.23	742,264.00
tblWater	OutdoorWaterUseRate	661,638.91	742,264.00
tblWater	OutdoorWaterUseRate	139,108.85	742,264.00
tblWater	OutdoorWaterUseRate	180,235.17	742,264.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626

Energy	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769
Mobile	11.2228	16.2057	125.3986	0.4168	47.6420	0.3468	47.9888	12.6911	0.3210	13.0121		41,921.2097	41,921.2097	1.6540		41,962.5608
Total	**23.2077**	**20.4568**	**129.0835**	**0.4423**	**47.6420**	**0.6702**	**48.3122**	**12.6911**	**0.6444**	**13.3355**		**47,021.5259**	**47,021.5259**	**1.7524**	**0.0935**	**47,093.2003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Energy	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769
Mobile	11.2228	16.2057	125.3986	0.4168	47.6420	0.3468	47.9888	12.6911	0.3210	13.0121		41,921.2097	41,921.2097	1.6540		41,962.5608
Total	**23.2077**	**20.4568**	**129.0835**	**0.4423**	**47.6420**	**0.6702**	**48.3122**	**12.6911**	**0.6444**	**13.3355**		**47,021.5259**	**47,021.5259**	**1.7524**	**0.0935**	**47,093.2003**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/3/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.2228	16.2057	125.3986	0.4168	47.6420	0.3468	47.9888	12.6911	0.3210	13.0121		41,921.2097	41,921.2097	1.6540		41,962.5608
Unmitigated	11.2228	16.2057	125.3986	0.4168	47.6420	0.3468	47.9888	12.6911	0.3210	13.0121		41,921.2097	41,921.2097	1.6540		41,962.5608

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant w/o Drive Thru	836.14	812.80	583.90	1,442,994	1,442,994
General Office Building	4,469.62	994.76	426.98	10,939,095	10,939,095
General Office Building	17.81	3.96	1.70	43,590	43,590
High Turnover (Sit Down Restaurant)	3,103.21	3,865.10	3217.61	4,399,755	4,399,755
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	737.82	773.93	591.85	1,028,037	1,028,037
Strip Mall	158.16	150.03	72.89	275,534	275,534

Total	9,322.77	6,600.59	4,894.93	18,129,005	18,129,005

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
High Turnover (Sit Down Restaurant)	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
Quality Restaurant	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Strip Mall	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Enclosed Parking with Elevator	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769
NaturalGas Unmitigated	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	2544.89	0.0274	0.2495	0.2096	1.5000e-003		0.0190	0.0190		0.0190	0.0190		299.3986	299.3986	5.7400e-003	5.4900e-003	301.1778
General Office Building	11374.4	0.1227	1.1151	0.9367	6.6900e-003		0.0848	0.0848		0.0848	0.0848		1,338.1667	1,338.1667	0.0257	0.0245	1,346.1188
General Office Building	45.2743	4.9000e-004	4.4400e-003	3.7300e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3264	5.3264	1.0000e-004	1.0000e-004	5.3580
High Turnover (Sit Down Restaurant)	24261.7	0.2617	2.3786	1.9980	0.0143		0.1808	0.1808		0.1808	0.1808		2,854.3171	2,854.3171	0.0547	0.0523	2,871.2788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	5102.57	0.0550	0.5003	0.4202	3.0000e-003		0.0380	0.0380		0.0380	0.0380		600.3018	600.3018	0.0115	0.0110	603.8691
Strip Mall	21.7534	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		2.5592	2.5592	5.0000e-005	5.0000e-005	2.5744
Total		**0.4675**	**4.2501**	**3.5701**	**0.0255**		**0.3230**	**0.3230**		**0.3230**	**0.3230**		**5,100.0698**	**5,100.0698**	**0.0978**	**0.0935**	**5,130.3769**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	2.54489	0.0274	0.2495	0.2096	1.5000e-003		0.0190	0.0190		0.0190	0.0190		299.3986	299.3986	5.7400e-003	5.4900e-003	301.1778
General Office Building	0.0452743	4.9000e-004	4.4400e-003	3.7300e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3264	5.3264	1.0000e-004	1.0000e-004	5.3580
General Office Building	11.3744	0.1227	1.1151	0.9367	6.6900e-003		0.0848	0.0848		0.0848	0.0848		1,338.1667	1,338.1667	0.0257	0.0245	1,346.1188
High Turnover (Sit Down Restaurant)	24.2617	0.2617	2.3786	1.9980	0.0143		0.1808	0.1808		0.1808	0.1808		2,854.3171	2,854.3171	0.0547	0.0523	2,871.2788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	5.10257	0.0550	0.5003	0.4202	3.0000e-003		0.0380	0.0380		0.0380	0.0380		600.3018	600.3018	0.0115	0.0110	603.8691
Strip Mall	0.0217534	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		2.5592	2.5592	5.0000e-005	5.0000e-005	2.5744
Total		**0.4675**	**4.2501**	**3.5701**	**0.0255**		**0.3230**	**0.3230**		**0.3230**	**0.3230**		**5,100.0698**	**5,100.0698**	**0.0978**	**0.0935**	**5,130.3769**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Unmitigated	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.1843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0107	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Total	**11.5175**	**1.0500e-003**	**0.1149**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2464**	**0.2464**	**6.5000e-004**		**0.2626**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.1843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0107	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Total	**11.5175**	**1.0500e-003**	**0.1149**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2464**	**0.2464**	**6.5000e-004**		**0.2626**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Full Buildout (Phase 1-3) Operational

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	454.23	1000sqft	10.43	454,230.00	0
General Office Building	1.81	1000sqft	0.04	1,808.00	0
Parking Lot	480.89	1000sqft	11.04	480,890.00	0
Fast Food Restaurant w/o Drive Thru	3.58	1000sqft	0.08	3,582.00	0
High Turnover (Sit Down Restaurant)	34.15	1000sqft	0.78	34,149.00	0
Quality Restaurant	7.18	1000sqft	0.16	7,182.00	0
Strip Mall	3.97	1000sqft	0.09	3,970.00	0
Enclosed Parking with Elevator	140.06	1000sqft	1.07	46,624.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - .

Area Coating -

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Waste Mitigation - Regulation

Fleet Mix - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	6/14/2019	6/3/2019
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.56
tblFleetMix	LDA	0.56	0.66

tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	1.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.21
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	6.1460e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	5.7910e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	0.00

tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	5.0140e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	4.8960e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	9.4400e-004
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	9.6600e-004
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.03
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	2.4390e-003

tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	1.7130e-003
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	6.8600e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	5.9000e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	0.00
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	2.5190e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	1.5530e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	0.00
tblLandUse	LandUseSquareFeet	1,810.00	1,808.00
tblLandUse	LandUseSquareFeet	140,060.00	46,624.00
tblLandUse	LandUseSquareFeet	3,580.00	3,582.00
tblLandUse	LandUseSquareFeet	34,150.00	34,149.00
tblLandUse	LandUseSquareFeet	7,180.00	7,182.00
tblLandUse	LotAcreage	3.22	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	ST_TR	696.00	227.04
tblVehicleTrips	ST_TR	2.46	2.19
tblVehicleTrips	ST_TR	158.37	113.18

tblVehicleTrips	ST_TR	94.36	107.79
tblVehicleTrips	ST_TR	42.04	37.79
tblVehicleTrips	SU_TR	500.00	163.10
tblVehicleTrips	SU_TR	1.05	0.94
tblVehicleTrips	SU_TR	131.84	94.22
tblVehicleTrips	SU_TR	72.16	82.43
tblVehicleTrips	SU_TR	20.43	18.36
tblVehicleTrips	WD_TR	716.00	233.56
tblVehicleTrips	WD_TR	11.03	9.84
tblVehicleTrips	WD_TR	127.15	90.87
tblVehicleTrips	WD_TR	89.95	102.76
tblVehicleTrips	WD_TR	44.32	39.84
tblWater	IndoorWaterUseRate	1,086,650.69	795,700.00
tblWater	IndoorWaterUseRate	81,053,698.43	795,700.00
tblWater	IndoorWaterUseRate	10,365,676.28	795,700.00
tblWater	IndoorWaterUseRate	2,179,372.06	795,700.00
tblWater	IndoorWaterUseRate	294,067.91	795,700.00
tblWater	OutdoorWaterUseRate	69,360.68	742,264.00
tblWater	OutdoorWaterUseRate	49,678,073.23	742,264.00
tblWater	OutdoorWaterUseRate	661,638.91	742,264.00
tblWater	OutdoorWaterUseRate	139,108.85	742,264.00
tblWater	OutdoorWaterUseRate	180,235.17	742,264.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626

Energy	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769
Mobile	11.4724	15.1806	130.4957	0.4383	47.6420	0.3467	47.9887	12.6911	0.3209	13.0120		44,063.0853	44,063.0853	1.6756		44,104.9740
Total	**23.4573**	**19.4317**	**134.1807**	**0.4638**	**47.6420**	**0.6701**	**48.3121**	**12.6911**	**0.6443**	**13.3355**		**49,163.4014**	**49,163.4014**	**1.7740**	**0.0935**	**49,235.6135**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Energy	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769
Mobile	11.4724	15.1806	130.4957	0.4383	47.6420	0.3467	47.9887	12.6911	0.3209	13.0120		44,063.0853	44,063.0853	1.6756		44,104.9740
Total	**23.4573**	**19.4317**	**134.1807**	**0.4638**	**47.6420**	**0.6701**	**48.3121**	**12.6911**	**0.6443**	**13.3355**		**49,163.4014**	**49,163.4014**	**1.7740**	**0.0935**	**49,235.6135**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/3/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.4724	15.1806	130.4957	0.4383	47.6420	0.3467	47.9887	12.6911	0.3209	13.0120		44,063.0853	44,063.0853	1.6756		44,104.9740
Unmitigated	11.4724	15.1806	130.4957	0.4383	47.6420	0.3467	47.9887	12.6911	0.3209	13.0120		44,063.0853	44,063.0853	1.6756		44,104.9740

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant w/o Drive Thru	836.14	812.80	583.90	1,442,994	1,442,994
General Office Building	4,469.62	994.76	426.98	10,939,095	10,939,095
General Office Building	17.81	3.96	1.70	43,590	43,590
High Turnover (Sit Down Restaurant)	3,103.21	3,865.10	3217.61	4,399,755	4,399,755
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	737.82	773.93	591.85	1,028,037	1,028,037
Strip Mall	158.16	150.03	72.89	275,534	275,534

Total	9,322.77	6,600.59	4,894.93	18,129,005	18,129,005

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
High Turnover (Sit Down Restaurant)	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
Quality Restaurant	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Strip Mall	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Enclosed Parking with Elevator	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769
NaturalGas Unmitigated	0.4675	4.2501	3.5701	0.0255		0.3230	0.3230		0.3230	0.3230		5,100.0698	5,100.0698	0.0978	0.0935	5,130.3769

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	2544.89	0.0274	0.2495	0.2096	1.5000e-003		0.0190	0.0190		0.0190	0.0190		299.3986	299.3986	5.7400e-003	5.4900e-003	301.1778
General Office Building	11374.4	0.1227	1.1151	0.9367	6.6900e-003		0.0848	0.0848		0.0848	0.0848		1,338.1667	1,338.1667	0.0257	0.0245	1,346.1188
General Office Building	45.2743	4.9000e-004	4.4400e-003	3.7300e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3264	5.3264	1.0000e-004	1.0000e-004	5.3580
High Turnover (Sit Down Restaurant)	24261.7	0.2617	2.3786	1.9980	0.0143		0.1808	0.1808		0.1808	0.1808		2,854.3171	2,854.3171	0.0547	0.0523	2,871.2788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	5102.57	0.0550	0.5003	0.4202	3.0000e-003		0.0380	0.0380		0.0380	0.0380		600.3018	600.3018	0.0115	0.0110	603.8691
Strip Mall	21.7534	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		2.5592	2.5592	5.0000e-005	5.0000e-005	2.5744
Total		**0.4675**	**4.2501**	**3.5701**	**0.0255**		**0.3230**	**0.3230**		**0.3230**	**0.3230**		**5,100.0698**	**5,100.0698**	**0.0978**	**0.0935**	**5,130.3769**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	2.54489	0.0274	0.2495	0.2096	1.5000e-003		0.0190	0.0190		0.0190	0.0190		299.3986	299.3986	5.7400e-003	5.4900e-003	301.1778
General Office Building	0.0452743	4.9000e-004	4.4400e-003	3.7300e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3264	5.3264	1.0000e-004	1.0000e-004	5.3580
General Office Building	11.3744	0.1227	1.1151	0.9367	6.6900e-003		0.0848	0.0848		0.0848	0.0848		1,338.1667	1,338.1667	0.0257	0.0245	1,346.1188
High Turnover (Sit Down Restaurant)	24.2617	0.2617	2.3786	1.9980	0.0143		0.1808	0.1808		0.1808	0.1808		2,854.3171	2,854.3171	0.0547	0.0523	2,871.2788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	5.10257	0.0550	0.5003	0.4202	3.0000e-003		0.0380	0.0380		0.0380	0.0380		600.3018	600.3018	0.0115	0.0110	603.8691
Strip Mall	0.0217534	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		2.5592	2.5592	5.0000e-005	5.0000e-005	2.5744
Total		**0.4675**	**4.2501**	**3.5701**	**0.0255**		**0.3230**	**0.3230**		**0.3230**	**0.3230**		**5,100.0698**	**5,100.0698**	**0.0978**	**0.0935**	**5,130.3769**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626

Unmitigated	11.5175	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.1843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0107	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Total	**11.5175**	**1.0500e-003**	**0.1149**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2464**	**0.2464**	**6.5000e-004**		**0.2626**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.1843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0107	1.0500e-003	0.1149	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2464	0.2464	6.5000e-004		0.2626
Total	**11.5175**	**1.0500e-003**	**0.1149**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2464**	**0.2464**	**6.5000e-004**		**0.2626**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Full Buildout (Phase 1-3) Operational

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	454.23	1000sqft	10.43	454,230.00	0
General Office Building	1.81	1000sqft	0.04	1,808.00	0
Parking Lot	480.89	1000sqft	11.04	480,890.00	0
Fast Food Restaurant w/o Drive Thru	3.58	1000sqft	0.08	3,582.00	0
High Turnover (Sit Down Restaurant)	34.15	1000sqft	0.78	34,149.00	0
Quality Restaurant	7.18	1000sqft	0.16	7,182.00	0
Strip Mall	3.97	1000sqft	0.09	3,970.00	0
Enclosed Parking with Elevator	140.06	1000sqft	1.07	46,624.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - .

Area Coating -

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Waste Mitigation - Regulation

Fleet Mix - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	6/14/2019	6/3/2019
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	1.0210e-003
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	0.56
tblFleetMix	LDA	0.56	0.66

tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	1.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.21
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	6.1460e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	5.7910e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	5.9200e-003
tblFleetMix	LHD2	5.7840e-003	0.00

tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	5.0140e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	4.8960e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	4.9320e-003
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	9.4400e-004
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	9.6600e-004
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	1.0630e-003
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.03
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	1.0210e-003
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	2.4390e-003

tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	1.7130e-003
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	1.6720e-003
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	6.8600e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	5.9000e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	5.9500e-004
tblFleetMix	SBUS	5.9800e-004	0.00
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	2.5190e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	1.5530e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	1.6680e-003
tblFleetMix	UBUS	1.5240e-003	0.00
tblLandUse	LandUseSquareFeet	1,810.00	1,808.00
tblLandUse	LandUseSquareFeet	140,060.00	46,624.00
tblLandUse	LandUseSquareFeet	3,580.00	3,582.00
tblLandUse	LandUseSquareFeet	34,150.00	34,149.00
tblLandUse	LandUseSquareFeet	7,180.00	7,182.00
tblLandUse	LotAcreage	3.22	1.07
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	ST_TR	696.00	227.04
tblVehicleTrips	ST_TR	2.46	2.19
tblVehicleTrips	ST_TR	158.37	113.18

tblVehicleTrips	ST_TR	94.36	107.79
tblVehicleTrips	ST_TR	42.04	37.79
tblVehicleTrips	SU_TR	500.00	163.10
tblVehicleTrips	SU_TR	1.05	0.94
tblVehicleTrips	SU_TR	131.84	94.22
tblVehicleTrips	SU_TR	72.16	82.43
tblVehicleTrips	SU_TR	20.43	18.36
tblVehicleTrips	WD_TR	716.00	233.56
tblVehicleTrips	WD_TR	11.03	9.84
tblVehicleTrips	WD_TR	127.15	90.87
tblVehicleTrips	WD_TR	89.95	102.76
tblVehicleTrips	WD_TR	44.32	39.84
tblWater	IndoorWaterUseRate	1,086,650.69	795,700.00
tblWater	IndoorWaterUseRate	81,053,698.43	795,700.00
tblWater	IndoorWaterUseRate	10,365,676.28	795,700.00
tblWater	IndoorWaterUseRate	2,179,372.06	795,700.00
tblWater	IndoorWaterUseRate	294,067.91	795,700.00
tblWater	OutdoorWaterUseRate	69,360.68	742,264.00
tblWater	OutdoorWaterUseRate	49,678,073.23	742,264.00
tblWater	OutdoorWaterUseRate	661,638.91	742,264.00
tblWater	OutdoorWaterUseRate	139,108.85	742,264.00
tblWater	OutdoorWaterUseRate	180,235.17	742,264.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Area	2.1013	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0298
Energy	0.0853	0.7756	0.6515	4.6500e-003		0.0590	0.0590		0.0590	0.0590	0.0000	3,554.3582	3,554.3582	0.1281	0.0386	3,569.0709
Mobile	1.6041	2.4188	18.6230	0.0616	6.8196	0.0506	6.8703	1.8192	0.0469	1.8661	0.0000	5,617.5613	5,617.5613	0.2192	0.0000	5,623.0407
Waste						0.0000	0.0000		0.0000	0.0000	179.1314	0.0000	179.1314	10.5864	0.0000	443.7905
Water						0.0000	0.0000		0.0000	0.0000	1.2622	29.6435	30.9057	0.1309	3.3100e-003	35.1650
Total	**3.7908**	**3.1946**	**19.2889**	**0.0662**	**6.8196**	**0.1096**	**6.9293**	**1.8192**	**0.1059**	**1.9251**	**180.3936**	**9,201.5909**	**9,381.9845**	**11.0645**	**0.0419**	**9,671.0969**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1013	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0298
Energy	0.0853	0.7756	0.6515	4.6500e-003		0.0590	0.0590		0.0590	0.0590	0.0000	3,554.3582	3,554.3582	0.1281	0.0386	3,569.0709
Mobile	1.6041	2.4188	18.6230	0.0616	6.8196	0.0506	6.8703	1.8192	0.0469	1.8661	0.0000	5,617.5613	5,617.5613	0.2192	0.0000	5,623.0407
Waste						0.0000	0.0000		0.0000	0.0000	89.5657	0.0000	89.5657	5.2932	0.0000	221.8952
Water						0.0000	0.0000		0.0000	0.0000	1.2622	29.6435	30.9057	0.1309	3.3100e-003	35.1650
Total	**3.7908**	**3.1946**	**19.2889**	**0.0662**	**6.8196**	**0.1096**	**6.9293**	**1.8192**	**0.1059**	**1.9251**	**90.8279**	**9,201.5909**	**9,292.4188**	**5.7714**	**0.0419**	**9,449.2016**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.65**	**0.00**	**0.95**	**47.84**	**0.00**	**2.29**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	6/3/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6041	2.4188	18.6230	0.0616	6.8196	0.0506	6.8703	1.8192	0.0469	1.8661	0.0000	5,617.5613	5,617.5613	0.2192	0.0000	5,623.0407
Unmitigated	1.6041	2.4188	18.6230	0.0616	6.8196	0.0506	6.8703	1.8192	0.0469	1.8661	0.0000	5,617.5613	5,617.5613	0.2192	0.0000	5,623.0407

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant w/o Drive Thru	836.14	812.80	583.90	1,442,994	1,442,994
General Office Building	4,469.62	994.76	426.98	10,939,095	10,939,095
General Office Building	17.81	3.96	1.70	43,590	43,590
High Turnover (Sit Down Restaurant)	3,103.21	3,865.10	3217.61	4,399,755	4,399,755
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	737.82	773.93	591.85	1,028,037	1,028,037
Strip Mall	158.16	150.03	72.89	275,534	275,534
Total	9,322.77	6,600.59	4,894.93	18,129,005	18,129,005

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant w/o Drive Thru	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
High Turnover (Sit Down Restaurant)	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966
Quality Restaurant	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Strip Mall	0.663771	0.045166	0.153178	0.102119	0.017874	0.005920	0.001021	0.001021	0.001672	0.001668	0.004932	0.000595	0.001063
Enclosed Parking with Elevator	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,709.9844	2,709.9844	0.1119	0.0232	2,719.6795
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,709.9844	2,709.9844	0.1119	0.0232	2,719.6795
NaturalGas Mitigated	0.0853	0.7756	0.6515	4.6500e-003		0.0590	0.0590		0.0590	0.0590	0.0000	844.3738	844.3738	0.0162	0.0155	849.3914
NaturalGas Unmitigated	0.0853	0.7756	0.6515	4.6500e-003		0.0590	0.0590		0.0590	0.0590	0.0000	844.3738	844.3738	0.0162	0.0155	849.3914

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	928884	5.0100e-003	0.0455	0.0383	2.7000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003	0.0000	49.5688	49.5688	9.5000e-004	9.1000e-004	49.8634
General Office Building	16525.1	9.0000e-005	8.1000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8818	0.8818	2.0000e-005	2.0000e-005	0.8871
General Office Building	4.15166e+006	0.0224	0.2035	0.1710	1.2200e-003		0.0155	0.0155		0.0155	0.0155	0.0000	221.5485	221.5485	4.2500e-003	4.0600e-003	222.8651
High Turnover (Sit Down Restaurant)	8.85552e+006	0.0478	0.4341	0.3646	2.6000e-003		0.0330	0.0330		0.0330	0.0330	0.0000	472.5642	472.5642	9.0600e-003	8.6600e-003	475.3724

Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.86244e+006	0.0100	0.0913	0.0767	5.5000e-004		6.9400e-003	6.9400e-003		6.9400e-003	6.9400e-003	0.0000	99.3867	99.3867	1.9000e-003	1.8200e-003	99.9773
Strip Mall	7940	4.0000e-005	3.9000e-004	3.3000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4237	0.4237	1.0000e-005	1.0000e-005	0.4262
Total		**0.0853**	**0.7756**	**0.6515**	**4.6400e-003**		**0.0590**	**0.0590**		**0.0590**	**0.0590**	**0.0000**	**844.3738**	**844.3738**	**0.0162**	**0.0155**	**849.3914**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	928884	5.0100e-003	0.0455	0.0383	2.7000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003	0.0000	49.5688	49.5688	9.5000e-004	9.1000e-004	49.8634
General Office Building	16525.1	9.0000e-005	8.1000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8818	0.8818	2.0000e-005	2.0000e-005	0.8871
General Office Building	4.15166e+006	0.0224	0.2035	0.1710	1.2200e-003		0.0155	0.0155		0.0155	0.0155	0.0000	221.5485	221.5485	4.2500e-003	4.0600e-003	222.8651
High Turnover (Sit Down Restaurant)	8.85552e+006	0.0478	0.4341	0.3646	2.6000e-003		0.0330	0.0330		0.0330	0.0330	0.0000	472.5642	472.5642	9.0600e-003	8.6600e-003	475.3724
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.86244e+006	0.0100	0.0913	0.0767	5.5000e-004		6.9400e-003	6.9400e-003		6.9400e-003	6.9400e-003	0.0000	99.3867	99.3867	1.9000e-003	1.8200e-003	99.9773
Strip Mall	7940	4.0000e-005	3.9000e-004	3.3000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4237	0.4237	1.0000e-005	1.0000e-005	0.4262
Total		**0.0853**	**0.7756**	**0.6515**	**4.6400e-003**		**0.0590**	**0.0590**		**0.0590**	**0.0590**	**0.0000**	**844.3738**	**844.3738**	**0.0162**	**0.0155**	**849.3914**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	273217	87.0527	3.5900e-003	7.4000e-004	87.3641
Fast Food Restaurant w/o Drive Thru	130671	41.6347	1.7200e-003	3.6000e-004	41.7836
General Office Building	25293.9	8.0592	3.3000e-004	7.0000e-005	8.0880
General Office Building	6.35468e+006	2,024.7365	0.0836	0.0173	2,031.9800
High Turnover (Sit Down Restaurant)	1.24576e+006	396.9244	0.0164	3.3900e-003	398.3444
Parking Lot	168312	53.6277	2.2100e-003	4.6000e-004	53.8195
Quality Restaurant	261999	83.4786	3.4500e-003	7.1000e-004	83.7773
Strip Mall	45416.8	14.4708	6.0000e-004	1.2000e-004	14.5225
Total		**2,709.9844**	**0.1119**	**0.0231**	**2,719.6795**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	273217	87.0527	3.5900e-003	7.4000e-004	87.3641
Fast Food Restaurant w/o Drive Thru	130671	41.6347	1.7200e-003	3.6000e-004	41.7836
General Office Building	25293.9	8.0592	3.3000e-004	7.0000e-005	8.0880
General Office Building	6.35468e+006	2,024.7365	0.0836	0.0173	2,031.9800
High Turnover (Sit Down Restaurant)	1.24576e+006	396.9244	0.0164	3.3900e-003	398.3444

Parking Lot	168312	53.6277	2.2100e-003	4.6000e-004	53.8195
Quality Restaurant	261999	83.4786	3.4500e-003	7.1000e-004	83.7773
Strip Mall	45416.8	14.4708	6.0000e-004	1.2000e-004	14.5225
Total		**2,709.9844**	**0.1119**	**0.0231**	**2,719.6795**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1013	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0298
Unmitigated	2.1013	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0298

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Consumer Products	1.8586					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3300e-003	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0298
Total	**2.1013**	**1.3000e-004**	**0.0144**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0279**	**0.0279**	**7.0000e-005**	**0.0000**	**0.0298**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8586					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3300e-003	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0298
Total	**2.1013**	**1.3000e-004**	**0.0144**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0279**	**0.0279**	**7.0000e-005**	**0.0000**	**0.0298**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.9057	0.1309	3.3100e-003	35.1650
Unmitigated	30.9057	0.1309	3.3100e-003	35.1650

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
General Office Building	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
High Turnover (Sit Down Restaurant)	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
Strip Mall	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
Total		**30.9057**	**0.1309**	**3.3000e-003**	**35.1650**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330

General Office Building	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
High Turnover (Sit Down Restaurant)	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
Strip Mall	0.7957 / 0.742264	6.1811	0.0262	6.6000e-004	7.0330
Total		**30.9057**	**0.1309**	**3.3000e-003**	**35.1650**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	89.5657	5.2932	0.0000	221.8952
Unmitigated	179.1314	10.5864	0.0000	443.7905

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	41.24	8.3714	0.4947	0.0000	20.7397
General Office Building	424.12	86.0925	5.0879	0.0000	213.2906
High Turnover (Sit Down Restaurant)	406.38	82.4915	4.8751	0.0000	204.3691
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	6.55	1.3296	0.0786	0.0000	3.2940
Strip Mall	4.17	0.8465	0.0500	0.0000	2.0971
Total		**179.1314**	**10.5864**	**0.0000**	**443.7905**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	20.62	4.1857	0.2474	0.0000	10.3698
General Office Building	212.06	43.0463	2.5440	0.0000	106.6453
High Turnover (Sit Down Restaurant)	203.19	41.2457	2.4376	0.0000	102.1846
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.275	0.6648	0.0393	0.0000	1.6470
Strip Mall	2.085	0.4232	0.0250	0.0000	1.0486

Total		**89.5657**	**5.2932**	**0.0000**	**221.8952**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Phase 1 Operational

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	346.58	1000sqft	7.96	346,576.00	0
Parking Lot	352.50	1000sqft	8.09	352,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - .

Area Coating -

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Waste Mitigation - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.7910e-003	6.1462e-003
tblFleetMix	MCY	4.8960e-003	5.0139e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	9.6600e-004	9.4361e-004
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7130e-003	2.4391e-003
tblFleetMix	SBUS	5.9000e-004	6.8552e-004
tblFleetMix	UBUS	1.5530e-003	2.5187e-003
tblLandUse	LandUseSquareFeet	346,580.00	346,576.00
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	WD_TR	11.03	9.74
tblWater	IndoorWaterUseRate	61,598,962.38	795,000.00
tblWater	OutdoorWaterUseRate	37,754,202.75	742,264.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	2.3917	0.0000	0.0000	2.2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.3917**	**0.0000**	**0.0000**	**2.2004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	2.3917	0.0000	0.0000	2.2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.3917**	**0.0000**	**0.0000**	**2.2004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Energy	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Mobile	4.8394	8.6793	64.0403	0.2131	22.8940	0.1670	23.0610	6.1005	0.1547	6.2552		21,432.4710	21,432.4710	0.9130		21,455.2962
Total	**12.8338**	**9.5308**	**64.8266**	**0.2182**	**22.8940**	**0.2319**	**23.1259**	**6.1005**	**0.2197**	**6.3202**		**22,453.6408**	**22,453.6408**	**0.9330**	**0.0187**	**22,482.5435**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Energy	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Mobile	4.8394	8.6793	64.0403	0.2131	22.8940	0.1670	23.0610	6.1005	0.1547	6.2552		21,432.4710	21,432.4710	0.9130		21,455.2962
Total	**12.8338**	**9.5308**	**64.8266**	**0.2182**	**22.8940**	**0.2319**	**23.1259**	**6.1005**	**0.2197**	**6.3202**		**22,453.6408**	**22,453.6408**	**0.9330**	**0.0187**	**22,482.5435**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	5/31/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8394	8.6793	64.0403	0.2131	22.8940	0.1670	23.0610	6.1005	0.1547	6.2552		21,432.4710	21,432.4710	0.9130		21,455.2962
Unmitigated	4.8394	8.6793	64.0403	0.2131	22.8940	0.1670	23.0610	6.1005	0.1547	6.2552		21,432.4710	21,432.4710	0.9130		21,455.2962

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

General Office Building	3,375.69	752.08	322.32	8,262,055	8,262,055
Parking Lot	0.00	0.00	0.00		
Total	3,375.69	752.08	322.32	8,262,055	8,262,055

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
NaturalGas Unmitigated	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8678.64	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0936**	**0.8509**	**0.7147**	**5.1100e-003**		**0.0647**	**0.0647**		**0.0647**	**0.0647**		**1,021.0168**	**1,021.0168**	**0.0196**	**0.0187**	**1,027.0842**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8.67864	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0936**	**0.8509**	**0.7147**	**5.1100e-003**		**0.0647**	**0.0647**		**0.0647**	**0.0647**		**1,021.0168**	**1,021.0168**	**0.0196**	**0.0187**	**1,027.0842**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Unmitigated	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9071					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.6900e-003	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Total	**7.9008**	**6.6000e-004**	**0.0717**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1530**	**0.1530**	**4.1000e-004**		**0.1632**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9071					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	6.6900e-003	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Total	**7.9008**	**6.6000e-004**	**0.0717**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1530**	**0.1530**	**4.1000e-004**		**0.1632**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Phase 1 Operational

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	346.58	1000sqft	7.96	346,576.00	0
Parking Lot	352.50	1000sqft	8.09	352,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - .

Area Coating -

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Waste Mitigation - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.7910e-003	6.1462e-003
tblFleetMix	MCY	4.8960e-003	5.0139e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	9.6600e-004	9.4361e-004
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7130e-003	2.4391e-003
tblFleetMix	SBUS	5.9000e-004	6.8552e-004
tblFleetMix	UBUS	1.5530e-003	2.5187e-003
tblLandUse	LandUseSquareFeet	346,580.00	346,576.00
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	WD_TR	11.03	9.74
tblWater	IndoorWaterUseRate	61,598,962.38	795,000.00
tblWater	OutdoorWaterUseRate	37,754,202.75	742,264.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	2.3917	0.0000	0.0000	2.2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.3917**	**0.0000**	**0.0000**	**2.2004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	2.3917	0.0000	0.0000	2.2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.3917**	**0.0000**	**0.0000**	**2.2004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Energy	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Mobile	4.9386	8.1008	67.4030	0.2242	22.8940	0.1670	23.0609	6.1005	0.1547	6.2552		22,545.0124	22,545.0124	0.9290		22,568.2364
Total	**12.9330**	**8.9523**	**68.1894**	**0.2294**	**22.8940**	**0.2319**	**23.1259**	**6.1005**	**0.2196**	**6.3201**		**23,566.1822**	**23,566.1822**	**0.9489**	**0.0187**	**23,595.4837**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Energy	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Mobile	4.9386	8.1008	67.4030	0.2242	22.8940	0.1670	23.0609	6.1005	0.1547	6.2552		22,545.0124	22,545.0124	0.9290		22,568.2364
Total	**12.9330**	**8.9523**	**68.1894**	**0.2294**	**22.8940**	**0.2319**	**23.1259**	**6.1005**	**0.2196**	**6.3201**		**23,566.1822**	**23,566.1822**	**0.9489**	**0.0187**	**23,595.4837**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	5/31/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.9386	8.1008	67.4030	0.2242	22.8940	0.1670	23.0609	6.1005	0.1547	6.2552		22,545.0124	22,545.0124	0.9290		22,568.2364
Unmitigated	4.9386	8.1008	67.4030	0.2242	22.8940	0.1670	23.0609	6.1005	0.1547	6.2552		22,545.0124	22,545.0124	0.9290		22,568.2364

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

General Office Building	3,375.69	752.08	322.32	8,262,055	8,262,055
Parking Lot	0.00	0.00	0.00		
Total	3,375.69	752.08	322.32	8,262,055	8,262,055

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
NaturalGas Unmitigated	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8678.64	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0936**	**0.8509**	**0.7147**	**5.1100e-003**		**0.0647**	**0.0647**		**0.0647**	**0.0647**		**1,021.0168**	**1,021.0168**	**0.0196**	**0.0187**	**1,027.0842**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	8.67864	0.0936	0.8509	0.7147	5.1100e-003		0.0647	0.0647		0.0647	0.0647		1,021.0168	1,021.0168	0.0196	0.0187	1,027.0842
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0936**	**0.8509**	**0.7147**	**5.1100e-003**		**0.0647**	**0.0647**		**0.0647**	**0.0647**		**1,021.0168**	**1,021.0168**	**0.0196**	**0.0187**	**1,027.0842**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Unmitigated	7.9008	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9071					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.6900e-003	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Total	**7.9008**	**6.6000e-004**	**0.0717**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1530**	**0.1530**	**4.1000e-004**		**0.1632**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9071					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	6.6900e-003	6.6000e-004	0.0717	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1530	0.1530	4.1000e-004		0.1632
Total	**7.9008**	**6.6000e-004**	**0.0717**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1530**	**0.1530**	**4.1000e-004**		**0.1632**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Phase 1 Operational

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	346.58	1000sqft	7.96	346,576.00	0
Parking Lot	352.50	1000sqft	8.09	352,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - .

Land Use - .

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - .

Area Coating -

Energy Use - .

Water And Wastewater - .

Solid Waste - .

Construction Off-road Equipment Mitigation -

Waste Mitigation - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.7910e-003	6.1462e-003
tblFleetMix	MCY	4.8960e-003	5.0139e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	9.6600e-004	9.4361e-004
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7130e-003	2.4391e-003
tblFleetMix	SBUS	5.9000e-004	6.8552e-004
tblFleetMix	UBUS	1.5530e-003	2.5187e-003
tblLandUse	LandUseSquareFeet	346,580.00	346,576.00
tblVehicleTrips	ST_TR	2.46	2.17
tblVehicleTrips	SU_TR	1.05	0.93
tblVehicleTrips	WD_TR	11.03	9.74
tblWater	IndoorWaterUseRate	61,598,962.38	795,000.00
tblWater	OutdoorWaterUseRate	37,754,202.75	742,264.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**

		Highest	

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4415	8.0000e-005	8.9600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Energy	0.0171	0.1553	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	1,753.2180	1,753.2180	0.0686	0.0166	1,759.8899
Mobile	0.6492	1.2233	9.0014	0.0298	3.1096	0.0231	3.1326	0.8298	0.0214	0.8511	0.0000	2,722.9283	2,722.9283	0.1150	0.0000	2,725.8037
Waste						0.0000	0.0000		0.0000	0.0000	65.4281	0.0000	65.4281	3.8667	0.0000	162.0952
Water						0.0000	0.0000		0.0000	0.0000	0.2522	5.9258	6.1780	0.0262	6.6000e-004	7.0291
Total	**2.1078**	**1.3787**	**9.1408**	**0.0308**	**3.1096**	**0.0349**	**3.1444**	**0.8298**	**0.0332**	**0.8630**	**65.6803**	**4,482.0894**	**4,547.7697**	**4.0766**	**0.0173**	**4,654.8365**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4415	8.0000e-005	8.9600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Energy	0.0171	0.1553	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	1,753.2180	1,753.2180	0.0686	0.0166	1,759.8899
Mobile	0.6492	1.2233	9.0014	0.0298	3.1096	0.0231	3.1326	0.8298	0.0214	0.8511	0.0000	2,722.9283	2,722.9283	0.1150	0.0000	2,725.8037
Waste						0.0000	0.0000		0.0000	0.0000	32.7140	0.0000	32.7140	1.9333	0.0000	81.0476

Water						0.0000	0.0000		0.0000	0.0000	0.2522	5.9258	6.1780	0.0262	6.6000e-004	7.0291
Total	**2.1078**	**1.3787**	**9.1408**	**0.0308**	**3.1096**	**0.0349**	**3.1444**	**0.8298**	**0.0332**	**0.8630**	**32.9662**	**4,482.0894**	**4,515.0557**	**2.1432**	**0.0173**	**4,573.7889**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**49.81**	**0.00**	**0.72**	**47.43**	**0.00**	**1.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2019	5/31/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Mitigated	0.6492	1.2233	9.0014	0.0298	3.1096	0.0231	3.1326	0.8298	0.0214	0.8511	0.0000	2,722.9283	2,722.9283	0.1150	0.0000	2,725.8037
Unmitigated	0.6492	1.2233	9.0014	0.0298	3.1096	0.0231	3.1326	0.8298	0.0214	0.8511	0.0000	2,722.9283	2,722.9283	0.1150	0.0000	2,725.8037

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,375.69	752.08	322.32	8,262,055	8,262,055
Parking Lot	0.00	0.00	0.00		
Total	3,375.69	752.08	322.32	8,262,055	8,262,055

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
Parking Lot	0.558976	0.043534	0.209821	0.113949	0.016111	0.005791	0.025447	0.016654	0.001713	0.001553	0.004896	0.000590	0.000966

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,584.1772	1,584.1772	0.0654	0.0135	1,589.8446
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,584.1772	1,584.1772	0.0654	0.0135	1,589.8446
NaturalGas Mitigated	0.0171	0.1553	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	169.0408	169.0408	3.2400e-003	3.1000e-003	170.0453
NaturalGas Unmitigated	0.0171	0.1553	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	169.0408	169.0408	3.2400e-003	3.1000e-003	170.0453

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	3.1677e+006	0.0171	0.1553	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	169.0408	169.0408	3.2400e-003	3.1000e-003	170.0453
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0171**	**0.1553**	**0.1304**	**9.3000e-004**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**169.0408**	**169.0408**	**3.2400e-003**	**3.1000e-003**	**170.0453**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

General Office Building	3.1677e+006	0.0171	0.1553	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	169.0408	169.0408	3.2400e-003	3.1000e-003	170.0453
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0171**	**0.1553**	**0.1304**	**9.3000e-004**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**169.0408**	**169.0408**	**3.2400e-003**	**3.1000e-003**	**170.0453**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	4.8486e+006	1,544.8673	0.0638	0.0132	1,550.3941
Parking Lot	123375	39.3099	1.6200e-003	3.4000e-004	39.4506
Total		**1,584.1772**	**0.0654**	**0.0135**	**1,589.8446**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	4.8486e+006	1,544.8673	0.0638	0.0132	1,550.3941
Parking Lot	123375	39.3099	1.6200e-003	3.4000e-004	39.4506
Total		**1,584.1772**	**0.0654**	**0.0135**	**1,589.8446**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4415	8.0000e-005	8.9600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Unmitigated	1.4415	8.0000e-005	8.9600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1655					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.4000e-004	8.0000e-005	8.9600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Total	**1.4415**	**8.0000e-005**	**8.9600e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0174**	**0.0174**	**5.0000e-005**	**0.0000**	**0.0185**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1655					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.4000e-004	8.0000e-005	8.9600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Total	**1.4415**	**8.0000e-005**	**8.9600e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0174**	**0.0174**	**5.0000e-005**	**0.0000**	**0.0185**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.1780	0.0262	6.6000e-004	7.0291
Unmitigated	6.1780	0.0262	6.6000e-004	7.0291

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

General Office Building	0.795 / 0.742264	6.1780	0.0262	6.6000e-004	7.0291
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**6.1780**	**0.0262**	**6.6000e-004**	**7.0291**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.795 / 0.742264	6.1780	0.0262	6.6000e-004	7.0291
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**6.1780**	**0.0262**	**6.6000e-004**	**7.0291**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.7140	1.9333	0.0000	81.0476

Unmitigated	65.4281	3.8667	0.0000	162.0952

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	322.32	65.4281	3.8667	0.0000	162.0952
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**65.4281**	**3.8667**	**0.0000**	**162.0952**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	161.16	32.7140	1.9333	0.0000	81.0476
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**32.7140**	**1.9333**	**0.0000**	**81.0476**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction of Phase 3

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	107.65	1000sqft	2.47	107,650.00	0
Enclosed Parking with Elevator	140.06	1000sqft	1.07	46,624.00	0
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - Demo of asphalt for Phase 3

Grading - .

Architectural Coating -

Vehicle Trips - Construction Only Run

Consumer Products -

Area Coating -

Water And Wastewater - .

Construction Off-road Equipment Mitigation -

Fleet Mix - .

Landscape Equipment -

Project Characteristics -

Energy Use - .

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstructionPhase	NumDays	18.00	42.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	8.00	22.00
tblConstructionPhase	NumDays	18.00	22.00
tblConstructionPhase	NumDays	5.00	22.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.71	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	1.00

tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.7840e-003	0.00
tblFleetMix	LHD2	5.7840e-003	6.1460e-003
tblFleetMix	LHD2	5.7840e-003	0.00
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MCY	4.9410e-003	5.0140e-003
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MH	9.0400e-004	9.4400e-004
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	OBUS	1.7750e-003	2.4390e-003
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	SBUS	5.9800e-004	0.00

tblFleetMix	SBUS	5.9800e-004	6.8600e-004
tblFleetMix	SBUS	5.9800e-004	0.00
tblFleetMix	UBUS	1.5240e-003	0.00
tblFleetMix	UBUS	1.5240e-003	2.5190e-003
tblFleetMix	UBUS	1.5240e-003	0.00
tblLandUse	LandUseSquareFeet	140,060.00	46,624.00
tblLandUse	LotAcreage	3.22	1.07
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblWater	IndoorWaterUseRate	19,133,037.97	0.00
tblWater	OutdoorWaterUseRate	11,726,700.69	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.6918	17.9333	14.1406	0.0318	1.7361	0.7031	2.4391	0.2645	0.6476	0.8579	0.0000	3,071.9737	3,071.9737	0.9482	0.0000	3,095.6778
2023	24.7943	6.2751	6.9934	0.0193	0.8320	0.2636	1.0459	0.2245	0.2481	0.4214	0.0000	1,962.0496	1,962.0496	0.3024	0.0000	1,969.6101
Maximum	**24.7943**	**17.9333**	**14.1406**	**0.0318**	**1.7361**	**0.7031**	**2.4391**	**0.2645**	**0.6476**	**0.8579**	**0.0000**	**3,071.9737**	**3,071.9737**	**0.9482**	**0.0000**	**3,095.6778**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2022	1.6918	17.9333	14.1406	0.0318	0.8320	0.7031	1.4688	0.2245	0.6476	0.7531	0.0000	3,071.9737	3,071.9737	0.9482	0.0000	3,095.6778
2023	24.7943	6.2751	6.9934	0.0193	0.8320	0.2636	1.0459	0.2245	0.2481	0.4214	0.0000	1,962.0496	1,962.0496	0.3024	0.0000	1,969.6101
Maximum	**24.7943**	**17.9333**	**14.1406**	**0.0318**	**0.8320**	**0.7031**	**1.4688**	**0.2245**	**0.6476**	**0.7531**	**0.0000**	**3,071.9737**	**3,071.9737**	**0.9482**	**0.0000**	**3,095.6778**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**35.21**	**0.00**	**27.84**	**8.17**	**0.00**	**8.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Energy	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.4610**	**0.2645**	**0.2473**	**1.5900e-003**	**0.0000**	**0.0202**	**0.0202**	**0.0000**	**0.0202**	**0.0202**		**317.1924**	**317.1924**	**6.2200e-003**	**5.8100e-003**	**319.0805**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578

Energy	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.4610**	**0.2645**	**0.2473**	**1.5900e-003**	**0.0000**	**0.0202**	**0.0202**	**0.0000**	**0.0202**	**0.0202**		**317.1924**	**317.1924**	**6.2200e-003**	**5.8100e-003**	**319.0805**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2022	4/29/2022	5	21	
2	Site Preparation	Site Preparation	5/1/2022	5/31/2022	5	22	
3	Grading	Grading	5/1/2022	5/31/2022	5	22	
4	Building Construction	Building Construction	6/1/2022	5/30/2023	5	260	
5	Paving	Paving	6/1/2023	6/30/2023	5	22	
6	Architectural Coating	Architectural Coating	6/1/2023	7/28/2023	5	42	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 33

Acres of Paving: 1.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 161,475; Non-Residential Outdoor: 53,825; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Scrapers	1	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	0.00	135.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	4	59.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3879	0.0000	1.3879	0.2101	0.0000	0.2101			0.0000			0.0000
Off-Road	0.5284	4.8107	8.1887	0.0127		0.2394	0.2394		0.2203	0.2203		1,225.9598	1,225.9598	0.3965		1,235.8723
Total	**0.5284**	**4.8107**	**8.1887**	**0.0127**	**1.3879**	**0.2394**	**1.6273**	**0.2101**	**0.2203**	**0.4304**		**1,225.9598**	**1,225.9598**	**0.3965**		**1,235.8723**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0450	1.5180	0.4726	4.7000e-003	0.1119	4.5200e-003	0.1164	0.0306	4.3200e-003	0.0350		526.3968	526.3968	0.0566		527.8124
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0310	0.0174	0.2089	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		76.7183	76.7183	1.5500e-003		76.7570

Total	**0.0760**	**1.5353**	**0.6815**	**5.4700e-003**	**0.2013**	**5.0900e-003**	**0.2064**	**0.0544**	**4.8400e-003**	**0.0592**		**603.1151**	**603.1151**	**0.0582**		**604.5694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5413	0.0000	0.5413	0.0820	0.0000	0.0820			0.0000			0.0000
Off-Road	0.5284	4.8107	8.1887	0.0127		0.2394	0.2394		0.2203	0.2203	0.0000	1,225.9598	1,225.9598	0.3965		1,235.8723
Total	**0.5284**	**4.8107**	**8.1887**	**0.0127**	**0.5413**	**0.2394**	**0.7807**	**0.0820**	**0.2203**	**0.3022**	**0.0000**	**1,225.9598**	**1,225.9598**	**0.3965**		**1,235.8723**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0450	1.5180	0.4726	4.7000e-003	0.1119	4.5200e-003	0.1164	0.0306	4.3200e-003	0.0350		526.3968	526.3968	0.0566		527.8124
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0310	0.0174	0.2089	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		76.7183	76.7183	1.5500e-003		76.7570
Total	**0.0760**	**1.5353**	**0.6815**	**5.4700e-003**	**0.2013**	**5.0900e-003**	**0.2064**	**0.0544**	**4.8400e-003**	**0.0592**		**603.1151**	**603.1151**	**0.0582**		**604.5694**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3671	3.4526	5.4931	8.2800e-003		0.1760	0.1760		0.1620	0.1620		801.2542	801.2542	0.2591		807.7328
Total	**0.3671**	**3.4526**	**5.4931**	**8.2800e-003**	**0.0000**	**0.1760**	**0.1760**	**0.0000**	**0.1620**	**0.1620**		**801.2542**	**801.2542**	**0.2591**		**807.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0194	0.0109	0.1306	4.8000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152		47.9489	47.9489	9.7000e-004		47.9731
Total	**0.0194**	**0.0109**	**0.1306**	**4.8000e-004**	**0.0559**	**3.5000e-004**	**0.0562**	**0.0148**	**3.3000e-004**	**0.0152**		**47.9489**	**47.9489**	**9.7000e-004**		**47.9731**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3671	3.4526	5.4931	8.2800e-003		0.1760	0.1760		0.1620	0.1620	0.0000	801.2542	801.2542	0.2591		807.7328
Total	**0.3671**	**3.4526**	**5.4931**	**8.2800e-003**	**0.0000**	**0.1760**	**0.1760**	**0.0000**	**0.1620**	**0.1620**	**0.0000**	**801.2542**	**801.2542**	**0.2591**		**807.7328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0194	0.0109	0.1306	4.8000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152		47.9489	47.9489	9.7000e-004		47.9731
Total	**0.0194**	**0.0109**	**0.1306**	**4.8000e-004**	**0.0559**	**3.5000e-004**	**0.0562**	**0.0148**	**3.3000e-004**	**0.0152**		**47.9489**	**47.9489**	**9.7000e-004**		**47.9731**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.2743	14.4524	8.3080	0.0223		0.5261	0.5261		0.4848	0.4848		2,146.0522	2,146.0522	0.6865		2,163.2149
Total	**1.2743**	**14.4524**	**8.3080**	**0.0223**	**1.5908**	**0.5261**	**2.1169**	**0.1718**	**0.4848**	**0.6566**		**2,146.0522**	**2,146.0522**	**0.6865**		**2,163.2149**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0310	0.0174	0.2089	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		76.7183	76.7183	1.5500e-003		76.7570
Total	**0.0310**	**0.0174**	**0.2089**	**7.7000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.2000e-004**	**0.0242**		**76.7183**	**76.7183**	**1.5500e-003**		**76.7570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.2743	14.4524	8.3080	0.0223		0.5261	0.5261		0.4848	0.4848	0.0000	2,146.0522	2,146.0522	0.6865		2,163.2149
Total	**1.2743**	**14.4524**	**8.3080**	**0.0223**	**0.6204**	**0.5261**	**1.1465**	**0.0670**	**0.4848**	**0.5518**	**0.0000**	**2,146.0522**	**2,146.0522**	**0.6865**		**2,163.2149**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0310	0.0174	0.2089	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		76.7183	76.7183	1.5500e-003		76.7570
Total	**0.0310**	**0.0174**	**0.2089**	**7.7000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.2000e-004**	**0.0242**		**76.7183**	**76.7183**	**1.5500e-003**		**76.7570**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4498	4.7622	4.3476	7.6200e-003		0.2370	0.2370		0.2181	0.2181		738.0967	738.0967	0.2387		744.0646
Total	**0.4498**	**4.7622**	**4.3476**	**7.6200e-003**		**0.2370**	**0.2370**		**0.2181**	**0.2181**		**738.0967**	**738.0967**	**0.2387**		**744.0646**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0711	2.3891	0.7267	6.4200e-003	0.1725	4.7500e-003	0.1773	0.0496	4.5500e-003	0.0542		700.8911	700.8911	0.0577		702.3338
Worker	0.2285	0.1283	1.5410	5.6700e-003	0.6595	4.1900e-003	0.6637	0.1749	3.8500e-003	0.1788		565.7975	565.7975	0.0114		566.0829

Total	**0.2996**	**2.5174**	**2.2676**	**0.0121**	**0.8320**	**8.9400e-003**	**0.8409**	**0.2245**	**8.4000e-003**	**0.2329**		**1,266.6886**	**1,266.6886**	**0.0691**		**1,268.4168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4498	4.7622	4.3476	7.6200e-003		0.2370	0.2370		0.2181	0.2181	0.0000	738.0967	738.0967	0.2387		744.0646
Total	**0.4498**	**4.7622**	**4.3476**	**7.6200e-003**		**0.2370**	**0.2370**		**0.2181**	**0.2181**	**0.0000**	**738.0967**	**738.0967**	**0.2387**		**744.0646**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0711	2.3891	0.7267	6.4200e-003	0.1725	4.7500e-003	0.1773	0.0496	4.5500e-003	0.0542		700.8911	700.8911	0.0577		702.3338
Worker	0.2285	0.1283	1.5410	5.6700e-003	0.6595	4.1900e-003	0.6637	0.1749	3.8500e-003	0.1788		565.7975	565.7975	0.0114		566.0829
Total	**0.2996**	**2.5174**	**2.2676**	**0.0121**	**0.8320**	**8.9400e-003**	**0.8409**	**0.2245**	**8.4000e-003**	**0.2329**		**1,266.6886**	**1,266.6886**	**0.0691**		**1,268.4168**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4154	4.3604	4.2988	7.6200e-003		0.2075	0.2075		0.1909	0.1909		738.0911	738.0911	0.2387		744.0590
Total	**0.4154**	**4.3604**	**4.2988**	**7.6200e-003**		**0.2075**	**0.2075**		**0.1909**	**0.1909**		**738.0911**	**738.0911**	**0.2387**		**744.0590**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0542	1.7983	0.6677	6.2200e-003	0.1725	2.3100e-003	0.1748	0.0496	2.2100e-003	0.0519		679.8850	679.8850	0.0534		681.2190
Worker	0.2170	0.1164	1.4348	5.4500e-003	0.6595	4.1100e-003	0.6636	0.1749	3.7900e-003	0.1787		544.0734	544.0734	0.0104		544.3321
Total	**0.2711**	**1.9147**	**2.1026**	**0.0117**	**0.8320**	**6.4200e-003**	**0.8384**	**0.2245**	**6.0000e-003**	**0.2305**		**1,223.9584**	**1,223.9584**	**0.0637**		**1,225.5511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.4154	4.3604	4.2988	7.6200e-003		0.2075	0.2075		0.1909	0.1909	0.0000	738.0911	738.0911	0.2387		744.0590
Total	**0.4154**	**4.3604**	**4.2988**	**7.6200e-003**		**0.2075**	**0.2075**		**0.1909**	**0.1909**	**0.0000**	**738.0911**	**738.0911**	**0.2387**		**744.0590**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0542	1.7983	0.6677	6.2200e-003	0.1725	2.3100e-003	0.1748	0.0496	2.2100e-003	0.0519		679.8850	679.8850	0.0534		681.2190
Worker	0.2170	0.1164	1.4348	5.4500e-003	0.6595	4.1100e-003	0.6636	0.1749	3.7900e-003	0.1787		544.0734	544.0734	0.0104		544.3321
Total	**0.2711**	**1.9147**	**2.1026**	**0.0117**	**0.8320**	**6.4200e-003**	**0.8384**	**0.2245**	**6.0000e-003**	**0.2305**		**1,223.9584**	**1,223.9584**	**0.0637**		**1,225.5511**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3586	3.6174	4.6959	6.9900e-003		0.1913	0.1913		0.1760	0.1760		677.0118	677.0118	0.2190		682.4858
Paving	0.0298					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3884**	**3.6174**	**4.6959**	**6.9900e-003**		**0.1913**	**0.1913**		**0.1760**	**0.1760**		**677.0118**	**677.0118**	**0.2190**		**682.4858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0158	0.1946	7.4000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		73.7727	73.7727	1.4000e-003		73.8077
Total	**0.0294**	**0.0158**	**0.1946**	**7.4000e-004**	**0.0894**	**5.6000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**73.7727**	**73.7727**	**1.4000e-003**		**73.8077**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3586	3.6174	4.6959	6.9900e-003		0.1913	0.1913		0.1760	0.1760	0.0000	677.0118	677.0118	0.2190		682.4858
Paving	0.0298					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3884**	**3.6174**	**4.6959**	**6.9900e-003**		**0.1913**	**0.1913**		**0.1760**	**0.1760**	**0.0000**	**677.0118**	**677.0118**	**0.2190**		**682.4858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0158	0.1946	7.4000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		73.7727	73.7727	1.4000e-003		73.8077
Total	**0.0294**	**0.0158**	**0.1946**	**7.4000e-004**	**0.0894**	**5.6000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**73.7727**	**73.7727**	**1.4000e-003**		**73.8077**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**24.3324**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0441	0.0237	0.2918	1.1100e-003	0.1341	8.4000e-004	0.1350	0.0356	7.7000e-004	0.0363		110.6590	110.6590	2.1000e-003		110.7116

Total	**0.0441**	**0.0237**	**0.2918**	**1.1100e-003**	**0.1341**	**8.4000e-004**	**0.1350**	**0.0356**	**7.7000e-004**	**0.0363**		**110.6590**	**110.6590**	**2.1000e-003**		**110.7116**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**24.3324**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0441	0.0237	0.2918	1.1100e-003	0.1341	8.4000e-004	0.1350	0.0356	7.7000e-004	0.0363		110.6590	110.6590	2.1000e-003		110.7116
Total	**0.0441**	**0.0237**	**0.2918**	**1.1100e-003**	**0.1341**	**8.4000e-004**	**0.1350**	**0.0356**	**7.7000e-004**	**0.0363**		**110.6590**	**110.6590**	**2.1000e-003**		**110.7116**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
Other Asphalt Surfaces	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
NaturalGas Unmitigated	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2695.67	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0291**	**0.2643**	**0.2220**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**317.1381**	**317.1381**	**6.0800e-003**	**5.8100e-003**	**319.0227**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.69567	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0291**	**0.2643**	**0.2220**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**317.1381**	**317.1381**	**6.0800e-003**	**5.8100e-003**	**319.0227**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Unmitigated	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3400e-003	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Total	**2.4320**	**2.3000e-004**	**0.0253**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0543**	**0.0543**	**1.4000e-004**		**0.0578**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3400e-003	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Total	**2.4320**	**2.3000e-004**	**0.0253**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0543**	**0.0543**	**1.4000e-004**		**0.0578**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction of Phase 3

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	107.65	1000sqft	2.47	107,650.00	0
Enclosed Parking with Elevator	140.06	1000sqft	1.07	46,624.00	0
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - Demo of asphalt for Phase 3

Grading - .

Architectural Coating -

Vehicle Trips - Construction Only Run

Consumer Products -

Area Coating -

Water And Wastewater - .

Construction Off-road Equipment Mitigation -

Fleet Mix - .

Landscape Equipment -

Project Characteristics -

Energy Use - .

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstructionPhase	NumDays	18.00	42.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	8.00	22.00
tblConstructionPhase	NumDays	18.00	22.00
tblConstructionPhase	NumDays	5.00	22.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.71	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	1.00

tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.7840e-003	0.00
tblFleetMix	LHD2	5.7840e-003	6.1460e-003
tblFleetMix	LHD2	5.7840e-003	0.00
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MCY	4.9410e-003	5.0140e-003
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MH	9.0400e-004	9.4400e-004
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	OBUS	1.7750e-003	2.4390e-003
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	SBUS	5.9800e-004	0.00

tblFleetMix	SBUS	5.9800e-004	6.8600e-004
tblFleetMix	SBUS	5.9800e-004	0.00
tblFleetMix	UBUS	1.5240e-003	0.00
tblFleetMix	UBUS	1.5240e-003	2.5190e-003
tblFleetMix	UBUS	1.5240e-003	0.00
tblLandUse	LandUseSquareFeet	140,060.00	46,624.00
tblLandUse	LotAcreage	3.22	1.07
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblWater	IndoorWaterUseRate	19,133,037.97	0.00
tblWater	OutdoorWaterUseRate	11,726,700.69	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.6858	17.9307	14.1696	0.0319	1.7361	0.7031	2.4391	0.2645	0.6476	0.8579	0.0000	3,079.0226	3,079.0226	0.9483	0.0000	3,102.7303
2023	24.7854	6.2750	7.0358	0.0198	0.8320	0.2636	1.0458	0.2245	0.2481	0.4213	0.0000	2,009.6780	2,009.6780	0.3009	0.0000	2,017.2008
Maximum	**24.7854**	**17.9307**	**14.1696**	**0.0319**	**1.7361**	**0.7031**	**2.4391**	**0.2645**	**0.6476**	**0.8579**	**0.0000**	**3,079.0226**	**3,079.0226**	**0.9483**	**0.0000**	**3,102.7303**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2022	1.6858	17.9307	14.1696	0.0319	0.8320	0.7031	1.4688	0.2245	0.6476	0.7531	0.0000	3,079.0226	3,079.0226	0.9483	0.0000	3,102.7303
2023	24.7854	6.2750	7.0358	0.0198	0.8320	0.2636	1.0458	0.2245	0.2481	0.4213	0.0000	2,009.6780	2,009.6780	0.3009	0.0000	2,017.2008
Maximum	**24.7854**	**17.9307**	**14.1696**	**0.0319**	**0.8320**	**0.7031**	**1.4688**	**0.2245**	**0.6476**	**0.7531**	**0.0000**	**3,079.0226**	**3,079.0226**	**0.9483**	**0.0000**	**3,102.7303**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**35.21**	**0.00**	**27.85**	**8.17**	**0.00**	**8.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Energy	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.4610**	**0.2645**	**0.2473**	**1.5900e-003**	**0.0000**	**0.0202**	**0.0202**	**0.0000**	**0.0202**	**0.0202**		**317.1924**	**317.1924**	**6.2200e-003**	**5.8100e-003**	**319.0805**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578

Energy	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.4610**	**0.2645**	**0.2473**	**1.5900e-003**	**0.0000**	**0.0202**	**0.0202**	**0.0000**	**0.0202**	**0.0202**		**317.1924**	**317.1924**	**6.2200e-003**	**5.8100e-003**	**319.0805**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2022	4/29/2022	5	21	
2	Site Preparation	Site Preparation	5/1/2022	5/31/2022	5	22	
3	Grading	Grading	5/1/2022	5/31/2022	5	22	
4	Building Construction	Building Construction	6/1/2022	5/30/2023	5	260	
5	Paving	Paving	6/1/2023	6/30/2023	5	22	
6	Architectural Coating	Architectural Coating	6/1/2023	7/28/2023	5	42	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 33

Acres of Paving: 1.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 161,475; Non-Residential Outdoor: 53,825; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Scrapers	1	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	0.00	135.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	4	59.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3879	0.0000	1.3879	0.2101	0.0000	0.2101			0.0000			0.0000
Off-Road	0.5284	4.8107	8.1887	0.0127		0.2394	0.2394		0.2203	0.2203		1,225.9598	1,225.9598	0.3965		1,235.8723
Total	**0.5284**	**4.8107**	**8.1887**	**0.0127**	**1.3879**	**0.2394**	**1.6273**	**0.2101**	**0.2203**	**0.4304**		**1,225.9598**	**1,225.9598**	**0.3965**		**1,235.8723**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0440	1.5017	0.4513	4.7700e-003	0.1119	4.4400e-003	0.1164	0.0306	4.2500e-003	0.0349		534.5485	534.5485	0.0555		535.9350
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0158	0.2268	8.1000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		81.0561	81.0561	1.6400e-003		81.0970

Total	**0.0712**	**1.5175**	**0.6781**	**5.5800e-003**	**0.2013**	**5.0100e-003**	**0.2064**	**0.0544**	**4.7700e-003**	**0.0591**		**615.6046**	**615.6046**	**0.0571**		**617.0320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5413	0.0000	0.5413	0.0820	0.0000	0.0820			0.0000			0.0000
Off-Road	0.5284	4.8107	8.1887	0.0127		0.2394	0.2394		0.2203	0.2203	0.0000	1,225.9598	1,225.9598	0.3965		1,235.8723
Total	**0.5284**	**4.8107**	**8.1887**	**0.0127**	**0.5413**	**0.2394**	**0.7807**	**0.0820**	**0.2203**	**0.3022**	**0.0000**	**1,225.9598**	**1,225.9598**	**0.3965**		**1,235.8723**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0440	1.5017	0.4513	4.7700e-003	0.1119	4.4400e-003	0.1164	0.0306	4.2500e-003	0.0349		534.5485	534.5485	0.0555		535.9350
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0158	0.2268	8.1000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		81.0561	81.0561	1.6400e-003		81.0970
Total	**0.0712**	**1.5175**	**0.6781**	**5.5800e-003**	**0.2013**	**5.0100e-003**	**0.2064**	**0.0544**	**4.7700e-003**	**0.0591**		**615.6046**	**615.6046**	**0.0571**		**617.0320**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3671	3.4526	5.4931	8.2800e-003		0.1760	0.1760		0.1620	0.1620		801.2542	801.2542	0.2591		807.7328
Total	**0.3671**	**3.4526**	**5.4931**	**8.2800e-003**	**0.0000**	**0.1760**	**0.1760**	**0.0000**	**0.1620**	**0.1620**		**801.2542**	**801.2542**	**0.2591**		**807.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0171	9.8900e-003	0.1417	5.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152		50.6601	50.6601	1.0200e-003		50.6856
Total	**0.0171**	**9.8900e-003**	**0.1417**	**5.1000e-004**	**0.0559**	**3.5000e-004**	**0.0562**	**0.0148**	**3.3000e-004**	**0.0152**		**50.6601**	**50.6601**	**1.0200e-003**		**50.6856**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3671	3.4526	5.4931	8.2800e-003		0.1760	0.1760		0.1620	0.1620	0.0000	801.2542	801.2542	0.2591		807.7328
Total	**0.3671**	**3.4526**	**5.4931**	**8.2800e-003**	**0.0000**	**0.1760**	**0.1760**	**0.0000**	**0.1620**	**0.1620**	**0.0000**	**801.2542**	**801.2542**	**0.2591**		**807.7328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0171	9.8900e-003	0.1417	5.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152		50.6601	50.6601	1.0200e-003		50.6856
Total	**0.0171**	**9.8900e-003**	**0.1417**	**5.1000e-004**	**0.0559**	**3.5000e-004**	**0.0562**	**0.0148**	**3.3000e-004**	**0.0152**		**50.6601**	**50.6601**	**1.0200e-003**		**50.6856**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.2743	14.4524	8.3080	0.0223		0.5261	0.5261		0.4848	0.4848		2,146.0522	2,146.0522	0.6865		2,163.2149
Total	**1.2743**	**14.4524**	**8.3080**	**0.0223**	**1.5908**	**0.5261**	**2.1169**	**0.1718**	**0.4848**	**0.6566**		**2,146.0522**	**2,146.0522**	**0.6865**		**2,163.2149**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0158	0.2268	8.1000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		81.0561	81.0561	1.6400e-003		81.0970
Total	**0.0273**	**0.0158**	**0.2268**	**8.1000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.2000e-004**	**0.0242**		**81.0561**	**81.0561**	**1.6400e-003**		**81.0970**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.2743	14.4524	8.3080	0.0223		0.5261	0.5261		0.4848	0.4848	0.0000	2,146.0522	2,146.0522	0.6865		2,163.2149
Total	**1.2743**	**14.4524**	**8.3080**	**0.0223**	**0.6204**	**0.5261**	**1.1465**	**0.0670**	**0.4848**	**0.5518**	**0.0000**	**2,146.0522**	**2,146.0522**	**0.6865**		**2,163.2149**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0158	0.2268	8.1000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.2000e-004	0.0242		81.0561	81.0561	1.6400e-003		81.0970
Total	**0.0273**	**0.0158**	**0.2268**	**8.1000e-004**	**0.0894**	**5.7000e-004**	**0.0900**	**0.0237**	**5.2000e-004**	**0.0242**		**81.0561**	**81.0561**	**1.6400e-003**		**81.0970**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4498	4.7622	4.3476	7.6200e-003		0.2370	0.2370		0.2181	0.2181		738.0967	738.0967	0.2387		744.0646
Total	**0.4498**	**4.7622**	**4.3476**	**7.6200e-003**		**0.2370**	**0.2370**		**0.2181**	**0.2181**		**738.0967**	**738.0967**	**0.2387**		**744.0646**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0677	2.3964	0.6633	6.5800e-003	0.1725	4.5800e-003	0.1771	0.0496	4.3800e-003	0.0540		718.6121	718.6121	0.0551		719.9902
Worker	0.2013	0.1167	1.6725	5.9900e-003	0.6595	4.1900e-003	0.6637	0.1749	3.8500e-003	0.1788		597.7887	597.7887	0.0121		598.0906

Total	**0.2690**	**2.5131**	**2.3358**	**0.0126**	**0.8320**	**8.7700e-003**	**0.8408**	**0.2245**	**8.2300e-003**	**0.2328**		**1,316.4008**	**1,316.4008**	**0.0672**		**1,318.0808**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4498	4.7622	4.3476	7.6200e-003		0.2370	0.2370		0.2181	0.2181	0.0000	738.0967	738.0967	0.2387		744.0646
Total	**0.4498**	**4.7622**	**4.3476**	**7.6200e-003**		**0.2370**	**0.2370**		**0.2181**	**0.2181**	**0.0000**	**738.0967**	**738.0967**	**0.2387**		**744.0646**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0677	2.3964	0.6633	6.5800e-003	0.1725	4.5800e-003	0.1771	0.0496	4.3800e-003	0.0540		718.6121	718.6121	0.0551		719.9902
Worker	0.2013	0.1167	1.6725	5.9900e-003	0.6595	4.1900e-003	0.6637	0.1749	3.8500e-003	0.1788		597.7887	597.7887	0.0121		598.0906
Total	**0.2690**	**2.5131**	**2.3358**	**0.0126**	**0.8320**	**8.7700e-003**	**0.8408**	**0.2245**	**8.2300e-003**	**0.2328**		**1,316.4008**	**1,316.4008**	**0.0672**		**1,318.0808**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4154	4.3604	4.2988	7.6200e-003		0.2075	0.2075		0.1909	0.1909		738.0911	738.0911	0.2387		744.0590
Total	**0.4154**	**4.3604**	**4.2988**	**7.6200e-003**		**0.2075**	**0.2075**		**0.1909**	**0.1909**		**738.0911**	**738.0911**	**0.2387**		**744.0590**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0516	1.8087	0.6191	6.3700e-003	0.1725	2.1800e-003	0.1747	0.0496	2.0800e-003	0.0517		696.7797	696.7797	0.0513		698.0609
Worker	0.1906	0.1060	1.5598	5.7600e-003	0.6595	4.1100e-003	0.6636	0.1749	3.7900e-003	0.1787		574.8072	574.8072	0.0110		575.0810
Total	**0.2421**	**1.9147**	**2.1789**	**0.0121**	**0.8320**	**6.2900e-003**	**0.8383**	**0.2245**	**5.8700e-003**	**0.2304**		**1,271.5869**	**1,271.5869**	**0.0622**		**1,273.1419**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.4154	4.3604	4.2988	7.6200e-003		0.2075	0.2075		0.1909	0.1909	0.0000	738.0911	738.0911	0.2387		744.0590
Total	**0.4154**	**4.3604**	**4.2988**	**7.6200e-003**		**0.2075**	**0.2075**		**0.1909**	**0.1909**	**0.0000**	**738.0911**	**738.0911**	**0.2387**		**744.0590**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0516	1.8087	0.6191	6.3700e-003	0.1725	2.1800e-003	0.1747	0.0496	2.0800e-003	0.0517		696.7797	696.7797	0.0513		698.0609
Worker	0.1906	0.1060	1.5598	5.7600e-003	0.6595	4.1100e-003	0.6636	0.1749	3.7900e-003	0.1787		574.8072	574.8072	0.0110		575.0810
Total	**0.2421**	**1.9147**	**2.1789**	**0.0121**	**0.8320**	**6.2900e-003**	**0.8383**	**0.2245**	**5.8700e-003**	**0.2304**		**1,271.5869**	**1,271.5869**	**0.0622**		**1,273.1419**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3586	3.6174	4.6959	6.9900e-003		0.1913	0.1913		0.1760	0.1760		677.0118	677.0118	0.2190		682.4858
Paving	0.0298					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3884**	**3.6174**	**4.6959**	**6.9900e-003**		**0.1913**	**0.1913**		**0.1760**	**0.1760**		**677.0118**	**677.0118**	**0.2190**		**682.4858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0144	0.2115	7.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		77.9400	77.9400	1.4800e-003		77.9771
Total	**0.0258**	**0.0144**	**0.2115**	**7.8000e-004**	**0.0894**	**5.6000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**77.9400**	**77.9400**	**1.4800e-003**		**77.9771**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3586	3.6174	4.6959	6.9900e-003		0.1913	0.1913		0.1760	0.1760	0.0000	677.0118	677.0118	0.2190		682.4858
Paving	0.0298					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3884**	**3.6174**	**4.6959**	**6.9900e-003**		**0.1913**	**0.1913**		**0.1760**	**0.1760**	**0.0000**	**677.0118**	**677.0118**	**0.2190**		**682.4858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0144	0.2115	7.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		77.9400	77.9400	1.4800e-003		77.9771
Total	**0.0258**	**0.0144**	**0.2115**	**7.8000e-004**	**0.0894**	**5.6000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**77.9400**	**77.9400**	**1.4800e-003**		**77.9771**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**24.3324**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0388	0.0216	0.3172	1.1700e-003	0.1341	8.4000e-004	0.1350	0.0356	7.7000e-004	0.0363		116.9099	116.9099	2.2300e-003		116.9656

Total	**0.0388**	**0.0216**	**0.3172**	**1.1700e-003**	**0.1341**	**8.4000e-004**	**0.1350**	**0.0356**	**7.7000e-004**	**0.0363**		**116.9099**	**116.9099**	**2.2300e-003**		**116.9656**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	24.1407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**24.3324**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0388	0.0216	0.3172	1.1700e-003	0.1341	8.4000e-004	0.1350	0.0356	7.7000e-004	0.0363		116.9099	116.9099	2.2300e-003		116.9656
Total	**0.0388**	**0.0216**	**0.3172**	**1.1700e-003**	**0.1341**	**8.4000e-004**	**0.1350**	**0.0356**	**7.7000e-004**	**0.0363**		**116.9099**	**116.9099**	**2.2300e-003**		**116.9656**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
Other Asphalt Surfaces	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
NaturalGas Unmitigated	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2695.67	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0291**	**0.2643**	**0.2220**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**317.1381**	**317.1381**	**6.0800e-003**	**5.8100e-003**	**319.0227**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.69567	0.0291	0.2643	0.2220	1.5900e-003		0.0201	0.0201		0.0201	0.0201		317.1381	317.1381	6.0800e-003	5.8100e-003	319.0227
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0291**	**0.2643**	**0.2220**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**317.1381**	**317.1381**	**6.0800e-003**	**5.8100e-003**	**319.0227**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Unmitigated	2.4320	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3400e-003	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Total	**2.4320**	**2.3000e-004**	**0.0253**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0543**	**0.0543**	**1.4000e-004**		**0.0578**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3400e-003	2.3000e-004	0.0253	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0543	0.0543	1.4000e-004		0.0578
Total	**2.4320**	**2.3000e-004**	**0.0253**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0543**	**0.0543**	**1.4000e-004**		**0.0578**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LA Times Construction of Phase 3

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	107.65	1000sqft	2.47	107,650.00	0
Enclosed Parking with Elevator	140.06	1000sqft	1.07	46,624.00	0
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - .

Off-road Equipment -

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Off-road Equipment - .

Trips and VMT - .

Demolition - Demo of asphalt for Phase 3

Grading - .

Architectural Coating -

Vehicle Trips - Construction Only Run

Consumer Products -

Area Coating -

Water And Wastewater - .

Construction Off-road Equipment Mitigation -

Fleet Mix - .

Landscape Equipment -

Project Characteristics -

Energy Use - .

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstructionPhase	NumDays	18.00	42.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	8.00	22.00
tblConstructionPhase	NumDays	18.00	22.00
tblConstructionPhase	NumDays	5.00	22.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.71	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.56	1.00

tblFleetMix	LDA	0.56	0.66
tblFleetMix	LDA	0.56	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LDT2	0.21	0.15
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.7840e-003	0.00
tblFleetMix	LHD2	5.7840e-003	6.1460e-003
tblFleetMix	LHD2	5.7840e-003	0.00
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MCY	4.9410e-003	5.0140e-003
tblFleetMix	MCY	4.9410e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MH	9.0400e-004	9.4400e-004
tblFleetMix	MH	9.0400e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	OBUS	1.7750e-003	2.4390e-003
tblFleetMix	OBUS	1.7750e-003	0.00
tblFleetMix	SBUS	5.9800e-004	0.00

tblFleetMix	SBUS	5.9800e-004	6.8600e-004
tblFleetMix	SBUS	5.9800e-004	0.00
tblFleetMix	UBUS	1.5240e-003	0.00
tblFleetMix	UBUS	1.5240e-003	2.5190e-003
tblFleetMix	UBUS	1.5240e-003	0.00
tblLandUse	LandUseSquareFeet	140,060.00	46,624.00
tblLandUse	LotAcreage	3.22	1.07
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblWater	IndoorWaterUseRate	19,133,037.97	0.00
tblWater	OutdoorWaterUseRate	11,726,700.69	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0802	0.8246	0.7554	2.0600e-003	0.0983	0.0291	0.1274	0.0220	0.0268	0.0488	0.0000	188.5965	188.5965	0.0351	0.0000	189.4731
2023	0.5518	0.4052	0.4414	1.2100e-003	0.0475	0.0151	0.0625	0.0128	0.0140	0.0268	0.0000	111.1100	111.1100	0.0172	0.0000	111.5398
Maximum	**0.5518**	**0.8246**	**0.7554**	**2.0600e-003**	**0.0983**	**0.0291**	**0.1274**	**0.0220**	**0.0268**	**0.0488**	**0.0000**	**188.5965**	**188.5965**	**0.0351**	**0.0000**	**189.4731**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2022	0.0802	0.8246	0.7554	2.0600e-003	0.0787	0.0291	0.1078	0.0195	0.0268	0.0463	0.0000	188.5964	188.5964	0.0351	0.0000	189.4730
2023	0.5518	0.4052	0.4414	1.2100e-003	0.0475	0.0151	0.0625	0.0128	0.0140	0.0268	0.0000	111.1100	111.1100	0.0172	0.0000	111.5397
Maximum	**0.5518**	**0.8246**	**0.7554**	**2.0600e-003**	**0.0787**	**0.0291**	**0.1078**	**0.0195**	**0.0268**	**0.0463**	**0.0000**	**188.5964**	**188.5964**	**0.0351**	**0.0000**	**189.4730**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**13.42**	**0.00**	**10.30**	**7.18**	**0.00**	**3.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2022**	**6-30-2022**	0.3746	0.3746
2	**7-1-2022**	**9-30-2022**	0.2627	0.2627
3	**10-1-2022**	**12-31-2022**	0.2638	0.2638
4	**1-1-2023**	**3-31-2023**	0.2238	0.2238
5	**4-1-2023**	**6-30-2023**	0.4672	0.4672
6	**7-1-2023**	**9-30-2023**	0.2570	0.2570
		Highest	0.4672	0.4672

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4437	3.0000e-005	3.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1500e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003
Energy	5.3100e-003	0.0482	0.0405	2.9000e-004		3.6700e-003	3.6700e-003		3.6700e-003	3.6700e-003	0.0000	399.6255	399.6255	0.0153	3.9300e-003	401.1794
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	20.3214	0.0000	20.3214	1.2010	0.0000	50.3455
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.4490**	**0.0483**	**0.0437**	**2.9000e-004**	**0.0000**	**3.6800e-003**	**3.6800e-003**	**0.0000**	**3.6800e-003**	**3.6800e-003**	**20.3214**	**399.6317**	**419.9531**	**1.2163**	**3.9300e-003**	**451.5314**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4437	3.0000e-005	3.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1500e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003
Energy	5.3100e-003	0.0482	0.0405	2.9000e-004		3.6700e-003	3.6700e-003		3.6700e-003	3.6700e-003	0.0000	399.6255	399.6255	0.0153	3.9300e-003	401.1794
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	20.3214	0.0000	20.3214	1.2010	0.0000	50.3455
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4490**	**0.0483**	**0.0437**	**2.9000e-004**	**0.0000**	**3.6800e-003**	**3.6800e-003**	**0.0000**	**3.6800e-003**	**3.6800e-003**	**20.3214**	**399.6317**	**419.9531**	**1.2163**	**3.9300e-003**	**451.5314**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2022	4/29/2022	5	21	
2	Site Preparation	Site Preparation	5/1/2022	5/31/2022	5	22	
3	Grading	Grading	5/1/2022	5/31/2022	5	22	
4	Building Construction	Building Construction	6/1/2022	5/30/2023	5	260	
5	Paving	Paving	6/1/2023	6/30/2023	5	22	

6	Architectural Coating	Architectural Coating	6/1/2023	7/28/2023	5	42	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 33

Acres of Paving: 1.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 161,475; Non-Residential Outdoor: 53,825; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Scrapers	1	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	0.00	135.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	59.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0146	0.0000	0.0146	2.2100e-003	0.0000	2.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5500e-003	0.0505	0.0860	1.3000e-004		2.5100e-003	2.5100e-003		2.3100e-003	2.3100e-003	0.0000	11.6778	11.6778	3.7800e-003	0.0000	11.7722

Total	**5.5500e-003**	**0.0505**	**0.0860**	**1.3000e-004**	**0.0146**	**2.5100e-003**	**0.0171**	**2.2100e-003**	**2.3100e-003**	**4.5200e-003**	**0.0000**	**11.6778**	**11.6778**	**3.7800e-003**	**0.0000**	**11.7722**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7000e-004	0.0162	4.8400e-003	5.0000e-005	1.1600e-003	5.0000e-005	1.2000e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	5.0592	5.0592	5.3000e-004	0.0000	5.0725
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.9000e-004	2.2500e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.7419	0.7419	1.0000e-005	0.0000	0.7423
Total	**7.6000e-004**	**0.0164**	**7.0900e-003**	**6.0000e-005**	**2.0800e-003**	**6.0000e-005**	**2.1300e-003**	**5.6000e-004**	**5.0000e-005**	**6.1000e-004**	**0.0000**	**5.8011**	**5.8011**	**5.4000e-004**	**0.0000**	**5.8148**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.6800e-003	0.0000	5.6800e-003	8.6000e-004	0.0000	8.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5500e-003	0.0505	0.0860	1.3000e-004		2.5100e-003	2.5100e-003		2.3100e-003	2.3100e-003	0.0000	11.6778	11.6778	3.7800e-003	0.0000	11.7722
Total	**5.5500e-003**	**0.0505**	**0.0860**	**1.3000e-004**	**5.6800e-003**	**2.5100e-003**	**8.1900e-003**	**8.6000e-004**	**2.3100e-003**	**3.1700e-003**	**0.0000**	**11.6778**	**11.6778**	**3.7800e-003**	**0.0000**	**11.7722**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7000e-004	0.0162	4.8400e-003	5.0000e-005	1.1600e-003	5.0000e-005	1.2000e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	5.0592	5.0592	5.3000e-004	0.0000	5.0725
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.9000e-004	2.2500e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.7419	0.7419	1.0000e-005	0.0000	0.7423
Total	**7.6000e-004**	**0.0164**	**7.0900e-003**	**6.0000e-005**	**2.0800e-003**	**6.0000e-005**	**2.1300e-003**	**5.6000e-004**	**5.0000e-005**	**6.1000e-004**	**0.0000**	**5.8011**	**5.8011**	**5.4000e-004**	**0.0000**	**5.8148**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0400e-003	0.0380	0.0604	9.0000e-005		1.9400e-003	1.9400e-003		1.7800e-003	1.7800e-003	0.0000	7.9957	7.9957	2.5900e-003	0.0000	8.0604
Total	**4.0400e-003**	**0.0380**	**0.0604**	**9.0000e-005**	**0.0000**	**1.9400e-003**	**1.9400e-003**	**0.0000**	**1.7800e-003**	**1.7800e-003**	**0.0000**	**7.9957**	**7.9957**	**2.5900e-003**	**0.0000**	**8.0604**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.4700e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4858	0.4858	1.0000e-005	0.0000	0.4860
Total	**1.9000e-004**	**1.2000e-004**	**1.4700e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4858**	**0.4858**	**1.0000e-005**	**0.0000**	**0.4860**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0400e-003	0.0380	0.0604	9.0000e-005		1.9400e-003	1.9400e-003		1.7800e-003	1.7800e-003	0.0000	7.9957	7.9957	2.5900e-003	0.0000	8.0604
Total	**4.0400e-003**	**0.0380**	**0.0604**	**9.0000e-005**	**0.0000**	**1.9400e-003**	**1.9400e-003**	**0.0000**	**1.7800e-003**	**1.7800e-003**	**0.0000**	**7.9957**	**7.9957**	**2.5900e-003**	**0.0000**	**8.0604**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.4700e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4858	0.4858	1.0000e-005	0.0000	0.4860
Total	**1.9000e-004**	**1.2000e-004**	**1.4700e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4858**	**0.4858**	**1.0000e-005**	**0.0000**	**0.4860**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0175	0.0000	0.0175	1.8900e-003	0.0000	1.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1590	0.0914	2.5000e-004		5.7900e-003	5.7900e-003		5.3300e-003	5.3300e-003	0.0000	21.4155	21.4155	6.8500e-003	0.0000	21.5868
Total	**0.0140**	**0.1590**	**0.0914**	**2.5000e-004**	**0.0175**	**5.7900e-003**	**0.0233**	**1.8900e-003**	**5.3300e-003**	**7.2200e-003**	**0.0000**	**21.4155**	**21.4155**	**6.8500e-003**	**0.0000**	**21.5868**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.3600e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7773	0.7773	2.0000e-005	0.0000	0.7776
Total	**3.1000e-004**	**2.0000e-004**	**2.3600e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.7773**	**0.7773**	**2.0000e-005**	**0.0000**	**0.7776**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8200e-003	0.0000	6.8200e-003	7.4000e-004	0.0000	7.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1590	0.0914	2.5000e-004		5.7900e-003	5.7900e-003		5.3300e-003	5.3300e-003	0.0000	21.4155	21.4155	6.8500e-003	0.0000	21.5868
Total	**0.0140**	**0.1590**	**0.0914**	**2.5000e-004**	**6.8200e-003**	**5.7900e-003**	**0.0126**	**7.4000e-004**	**5.3300e-003**	**6.0700e-003**	**0.0000**	**21.4155**	**21.4155**	**6.8500e-003**	**0.0000**	**21.5868**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.3600e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7773	0.7773	2.0000e-005	0.0000	0.7776
Total	**3.1000e-004**	**2.0000e-004**	**2.3600e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.7773**	**0.7773**	**2.0000e-005**	**0.0000**	**0.7776**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0344	0.3643	0.3326	5.8000e-004		0.0181	0.0181		0.0167	0.0167	0.0000	51.2236	51.2236	0.0166	0.0000	51.6378

Total	**0.0344**	**0.3643**	**0.3326**	**5.8000e-004**		**0.0181**	**0.0181**		**0.0167**	**0.0167**	**0.0000**	**51.2236**	**51.2236**	**0.0166**	**0.0000**	**51.6378**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3000e-003	0.1860	0.0532	5.0000e-004	0.0130	3.6000e-004	0.0134	3.7500e-003	3.4000e-004	4.0900e-003	0.0000	49.3549	49.3549	3.9000e-003	0.0000	49.4525
Worker	0.0157	0.0101	0.1209	4.4000e-004	0.0496	3.2000e-004	0.0499	0.0132	2.9000e-004	0.0135	0.0000	39.8647	39.8647	8.0000e-004	0.0000	39.8849
Total	**0.0210**	**0.1961**	**0.1741**	**9.4000e-004**	**0.0626**	**6.8000e-004**	**0.0632**	**0.0169**	**6.3000e-004**	**0.0175**	**0.0000**	**89.2196**	**89.2196**	**4.7000e-003**	**0.0000**	**89.3374**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0344	0.3643	0.3326	5.8000e-004		0.0181	0.0181		0.0167	0.0167	0.0000	51.2236	51.2236	0.0166	0.0000	51.6378
Total	**0.0344**	**0.3643**	**0.3326**	**5.8000e-004**		**0.0181**	**0.0181**		**0.0167**	**0.0167**	**0.0000**	**51.2236**	**51.2236**	**0.0166**	**0.0000**	**51.6378**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3000e-003	0.1860	0.0532	5.0000e-004	0.0130	3.6000e-004	0.0134	3.7500e-003	3.4000e-004	4.0900e-003	0.0000	49.3549	49.3549	3.9000e-003	0.0000	49.4525
Worker	0.0157	0.0101	0.1209	4.4000e-004	0.0496	3.2000e-004	0.0499	0.0132	2.9000e-004	0.0135	0.0000	39.8647	39.8647	8.0000e-004	0.0000	39.8849
Total	**0.0210**	**0.1961**	**0.1741**	**9.4000e-004**	**0.0626**	**6.8000e-004**	**0.0632**	**0.0169**	**6.3000e-004**	**0.0175**	**0.0000**	**89.2196**	**89.2196**	**4.7000e-003**	**0.0000**	**89.3374**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0222	0.2333	0.2300	4.1000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	35.8228	35.8228	0.0116	0.0000	36.1124
Total	**0.0222**	**0.2333**	**0.2300**	**4.1000e-004**		**0.0111**	**0.0111**		**0.0102**	**0.0102**	**0.0000**	**35.8228**	**35.8228**	**0.0116**	**0.0000**	**36.1124**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8200e-003	0.0977	0.0345	3.4000e-004	9.0900e-003	1.2000e-004	9.2100e-003	2.6200e-003	1.1000e-004	2.7400e-003	0.0000	33.4734	33.4734	2.5300e-003	0.0000	33.5367
Worker	0.0104	6.3900e-003	0.0787	3.0000e-004	0.0347	2.2000e-004	0.0349	9.2000e-003	2.0000e-004	9.4000e-003	0.0000	26.8084	26.8084	5.1000e-004	0.0000	26.8212
Total	**0.0132**	**0.1041**	**0.1133**	**6.4000e-004**	**0.0437**	**3.4000e-004**	**0.0441**	**0.0118**	**3.1000e-004**	**0.0121**	**0.0000**	**60.2818**	**60.2818**	**3.0400e-003**	**0.0000**	**60.3579**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0222	0.2333	0.2300	4.1000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	35.8228	35.8228	0.0116	0.0000	36.1124
Total	**0.0222**	**0.2333**	**0.2300**	**4.1000e-004**		**0.0111**	**0.0111**		**0.0102**	**0.0102**	**0.0000**	**35.8228**	**35.8228**	**0.0116**	**0.0000**	**36.1124**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8200e-003	0.0977	0.0345	3.4000e-004	9.0900e-003	1.2000e-004	9.2100e-003	2.6200e-003	1.1000e-004	2.7400e-003	0.0000	33.4734	33.4734	2.5300e-003	0.0000	33.5367
Worker	0.0104	6.3900e-003	0.0787	3.0000e-004	0.0347	2.2000e-004	0.0349	9.2000e-003	2.0000e-004	9.4000e-003	0.0000	26.8084	26.8084	5.1000e-004	0.0000	26.8212
Total	**0.0132**	**0.1041**	**0.1133**	**6.4000e-004**	**0.0437**	**3.4000e-004**	**0.0441**	**0.0118**	**3.1000e-004**	**0.0121**	**0.0000**	**60.2818**	**60.2818**	**3.0400e-003**	**0.0000**	**60.3579**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9400e-003	0.0398	0.0517	8.0000e-005		2.1000e-003	2.1000e-003		1.9400e-003	1.9400e-003	0.0000	6.7559	6.7559	2.1900e-003	0.0000	6.8106
Paving	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.2700e-003**	**0.0398**	**0.0517**	**8.0000e-005**		**2.1000e-003**	**2.1000e-003**		**1.9400e-003**	**1.9400e-003**	**0.0000**	**6.7559**	**6.7559**	**2.1900e-003**	**0.0000**	**6.8106**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	2.2000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7474	0.7474	1.0000e-005	0.0000	0.7478
Total	**2.9000e-004**	**1.8000e-004**	**2.2000e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.7474**	**0.7474**	**1.0000e-005**	**0.0000**	**0.7478**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9400e-003	0.0398	0.0517	8.0000e-005		2.1000e-003	2.1000e-003		1.9400e-003	1.9400e-003	0.0000	6.7559	6.7559	2.1800e-003	0.0000	6.8105
Paving	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.2700e-003**	**0.0398**	**0.0517**	**8.0000e-005**		**2.1000e-003**	**2.1000e-003**		**1.9400e-003**	**1.9400e-003**	**0.0000**	**6.7559**	**6.7559**	**2.1800e-003**	**0.0000**	**6.8105**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	2.2000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.7474	0.7474	1.0000e-005	0.0000	0.7478
Total	**2.9000e-004**	**1.8000e-004**	**2.2000e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.7474**	**0.7474**	**1.0000e-005**	**0.0000**	**0.7478**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5070					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	4.0200e-003	0.0274	0.0380	6.0000e-005		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	5.3618	5.3618	3.2000e-004	0.0000	5.3699
Total	**0.5110**	**0.0274**	**0.0380**	**6.0000e-005**		**1.4900e-003**	**1.4900e-003**		**1.4900e-003**	**1.4900e-003**	**0.0000**	**5.3618**	**5.3618**	**3.2000e-004**	**0.0000**	**5.3699**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	5.1000e-004	6.2900e-003	2.0000e-005	2.7700e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.1403	2.1403	4.0000e-005	0.0000	2.1413
Total	**8.3000e-004**	**5.1000e-004**	**6.2900e-003**	**2.0000e-005**	**2.7700e-003**	**2.0000e-005**	**2.7800e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.1403**	**2.1403**	**4.0000e-005**	**0.0000**	**2.1413**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5070					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0200e-003	0.0274	0.0380	6.0000e-005		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	5.3618	5.3618	3.2000e-004	0.0000	5.3699
Total	**0.5110**	**0.0274**	**0.0380**	**6.0000e-005**		**1.4900e-003**	**1.4900e-003**		**1.4900e-003**	**1.4900e-003**	**0.0000**	**5.3618**	**5.3618**	**3.2000e-004**	**0.0000**	**5.3699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	5.1000e-004	6.2900e-003	2.0000e-005	2.7700e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.1403	2.1403	4.0000e-005	0.0000	2.1413
Total	**8.3000e-004**	**5.1000e-004**	**6.2900e-003**	**2.0000e-005**	**2.7700e-003**	**2.0000e-005**	**2.7800e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.1403**	**2.1403**	**4.0000e-005**	**0.0000**	**2.1413**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.663075	0.046671	0.153017	0.102012	0.017478	0.006146	0.000000	0.000000	0.002439	0.002519	0.005014	0.000686	0.000944
Other Asphalt Surfaces	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	347.1197	347.1197	0.0143	2.9600e-003	348.3616
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	347.1197	347.1197	0.0143	2.9600e-003	348.3616

NaturalGas Mitigated	5.3100e-003	0.0482	0.0405	2.9000e-004		3.6700e-003	3.6700e-003		3.6700e-003	3.6700e-003	0.0000	52.5058	52.5058	1.0100e-003	9.6000e-004	52.8178
NaturalGas Unmitigated	5.3100e-003	0.0482	0.0405	2.9000e-004		3.6700e-003	3.6700e-003		3.6700e-003	3.6700e-003	0.0000	52.5058	52.5058	1.0100e-003	9.6000e-004	52.8178

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	983921	5.3100e-003	0.0482	0.0405	2.9000e-004		3.6700e-003	3.6700e-003		3.6700e-003	3.6700e-003	0.0000	52.5058	52.5058	1.0100e-003	9.6000e-004	52.8178
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3100e-003**	**0.0482**	**0.0405**	**2.9000e-004**		**3.6700e-003**	**3.6700e-003**		**3.6700e-003**	**3.6700e-003**	**0.0000**	**52.5058**	**52.5058**	**1.0100e-003**	**9.6000e-004**	**52.8178**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	983921	5.3100e-003	0.0482	0.0405	2.9000e-004		3.6700e-003	3.6700e-003		3.6700e-003	3.6700e-003	0.0000	52.5058	52.5058	1.0100e-003	9.6000e-004	52.8178
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3100e-003**	**0.0482**	**0.0405**	**2.9000e-004**		**3.6700e-003**	**3.6700e-003**		**3.6700e-003**	**3.6700e-003**	**0.0000**	**52.5058**	**52.5058**	**1.0100e-003**	**9.6000e-004**	**52.8178**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	90450.6	28.8195	1.1900e-003	2.5000e-004	28.9226
General Office Building	998992	318.3003	0.0131	2.7200e-003	319.4390
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**347.1197**	**0.0143**	**2.9700e-003**	**348.3616**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	90450.6	28.8195	1.1900e-003	2.5000e-004	28.9226
General Office Building	998992	318.3003	0.0131	2.7200e-003	319.4390
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**347.1197**	**0.0143**	**2.9700e-003**	**348.3616**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4437	3.0000e-005	3.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1500e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003
Unmitigated	0.4437	3.0000e-005	3.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1500e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0507					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.9000e-004	3.0000e-005	3.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1500e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003
Total	**0.4437**	**3.0000e-005**	**3.1600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**2.0000e-005**	**0.0000**	**6.5600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0507					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.9000e-004	3.0000e-005	3.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1500e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003
Total	**0.4437**	**3.0000e-005**	**3.1600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.1500e-003**	**6.1500e-003**	**2.0000e-005**	**0.0000**	**6.5600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000

General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.3214	1.2010	0.0000	50.3455

Unmitigated	20.3214	1.2010	0.0000	50.3455

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	100.11	20.3214	1.2010	0.0000	50.3455
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.3214**	**1.2010**	**0.0000**	**50.3455**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	100.11	20.3214	1.2010	0.0000	50.3455
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.3214**	**1.2010**	**0.0000**	**50.3455**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

EDR REPORT

Former LA Times Site
1375 Sunflower Ave
Costa Mesa, CA 92626

Inquiry Number: 5761845.2s
August 22, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1375 SUNFLOWER AVE
COSTA MESA, CA 92626

COORDINATES

Latitude (North):	33.6938720 - 33˚ 41' 37.93''
Longitude (West):	117.9161250 - 117˚ 54' 58.05''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	415092.2
UTM Y (Meters):	3728397.0
Elevation:	31 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640950 NEWPORT BEACH, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140514, 20140513
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1375 SUNFLOWER AVE
COSTA MESA, CA 92626

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LOS ANGELES TIMES-SO	1375 SUNFLOWER AVE	RGA LUST		TP
A2	CA-ORANGE COUNTY PLA	1375 SUNFLOWER AVE	FINDS		TP
A3	L A TIMES	1375 SUNFLOWER	FINDS		TP
A4	LOS ANGELES TIMES-NO	1375 SUNFLOWER AVE	RGA LUST		TP
A5	LOS ANGELES TIMES -	1375 SUNFLOWER AVENU	HAZNET		TP
A6	LOS ANGELES TIMES CO	1375 SUNFLOWER AVE	SWEEPS UST, EMI, CERS		TP
A7	LOS ANGELES TIMES -	1375 SUNFLOWER AVENU	FINDS		TP
A8	LOS ANGELES TIMES	1375 SUNFLOWER AVE.	EMI		TP
A9	TREH/KEARNY COSTA ME	1375 SUNFLOWER AVE	FINDS, ECHO		TP
A10	THE PRESS OWNER LLC	1375 SUNFLOWER	RCRA NonGen / NLR		TP
A11	L A TIMES	1375 SUNFLOWER	RGA LUST		TP
A12		1375 SUNFLOWER AVE	AST		TP
A13	1X LOS ANGELES TIMES	1375 SUNFLOWER AVE	HAZNET		TP
A14	LOS ANGELES TIMES-NO	1375 SUNFLOWER	RGA LUST		TP
A15	L A TIMES	1375 SUNFLOWER AVE	RGA LUST		TP
A16	LOS ANGELES TIMES	1375 SUNFLOWER AVE	RGA LUST		TP
A17	THE PRESS OWNER LLC	1375 SUNFLOWER	ECHO		TP
A18	LOS ANGELES TIMES CO	1375 SUNFLOWER AVE	HAZNET		TP
A19	LOS ANGELES TIMES	1375 SUNFLOWER AVENU	RGA LUST		TP
A20	LOS ANGELES TIMES	1375	RGA LUST		TP
A21	1X L A TIMES	1375 SUNFLOWER STREE	HAZNET		TP
A22	TIMES MIRROR COMPANY	1375 SUNFLOWER AVENU	RCRA-SQG		TP
A23	LOS ANGELES TIMES-SO	1375 SUNFLOWER	RGA LUST		TP
A24	FORMER LOS ANGELES T	1375 W. SUNFLOWER AV	CPS-SLIC, CERS		TP
A25	L.A. TIMES	1375 SUNFLOWER AVENU	RGA LUST		TP
A26	LOS ANGELES TIMES CO	1375 SUNFLOWER AVE	RCRA-SQG, ENVIROSTOR, LUST, CPS-SLIC, HIST UST, CA...		TP
A27	GW CLEANUP-C.M.NASUN	1375 SUNFLOWER	FINDS		TP
A28	CA-ORANGE COUNTY PLA	1375 SUNFLOWER AVE	UST		TP
A29	L. A. TIMES COSTA ME	UNKNOWN	CERS	Higher	1 ft.
A30	L. A. TIMES COSTA ME	UNKNOWN	FINDS	Higher	1 ft.
B31	IKEA US WEST INC #16	1475 S COAST DR	RCRA NonGen / NLR	Lower	97, 0.018, SSE
B32	IKEA US WEST INC #16	1475 S COAST DR	CERS HAZ WASTE, HAZNET, CERS	Lower	97, 0.018, SSE
33	MESA WATER, WELL #7	3325 HARBOR BLVD	CERS HAZ WASTE, CERS	Lower	104, 0.020, WSW
34	CODAN US CORPORATION	3511 W SUNFLOWER AVE	RCRA NonGen / NLR	Higher	542, 0.103, North
C35	COSTA MESA COMMERCE	3303 S HARBOR BLVD	RCRA-SQG	Lower	558, 0.106, WSW
C36	ALLURA PRINTING INC	3303 HARBOR BLVD STE	RCRA NonGen / NLR	Lower	558, 0.106, WSW
C37	PERFECT PRINTING	3303 HARBOR BLVD	RCRA-SQG, FINDS, ECHO	Lower	558, 0.106, WSW
38		3333 HARBOR BOULEVAR	RCRA-LQG	Lower	564, 0.107, West
D39	MINSTAR (AMF-VOIT)	3801 HARBOR	LUST, HIST CORTESE	Higher	572, 0.108, NW

MAPPED SITES SUMMARY

Target Property Address:
1375 SUNFLOWER AVE
COSTA MESA, CA 92626

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
D40	A M F VOIT INC	3801 S HARBOR BLVD	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA NonGen /...	Higher	572, 0.108, NW
D41	AMF VOIT INC	3801 S HARBOR BLVD	ENVIROSTOR, LUST, HWP, CERS	Higher	572, 0.108, NW
E42	DRYCLEAN USA	3701 S HARBOR BLVD S	EDR Hist Cleaner	Higher	651, 0.123, NW
E43	DRY CLEAN USA	3701 S HARBOR BLVD E	RCRA-SQG, FINDS, ECHO	Higher	651, 0.123, NW
E44	DRY CLEAN U.S.A.	3701 S HARBOR BLVD U	DRYCLEANERS	Higher	651, 0.123, NW
F45	LOGIC PAKAGING INC	3530 W LAKE CENTER D	CERS HAZ WASTE, HAZNET, CERS	Higher	896, 0.170, North
F46	SOUTH COAST CIRCUITS	3524 W LAKE CENTER D	CERS HAZ WASTE, CERS	Higher	897, 0.170, North
47	BABCOCK ELECTRO-MECH	3501 HARBOR BLVD	RCRA-SQG, FINDS, ECHO	Higher	932, 0.177, NW
G48	SOUTHERN CALIFORNIA	3535 HARBOR BLVD STE	CERS HAZ WASTE, HAZNET, CERS	Higher	1046, 0.198, NW
G49	SOUTHERN CALIFORNIA	3535 HARBOR BLVD STE	RCRA NonGen / NLR	Higher	1046, 0.198, NW
H50	SOUTH COAST CIRCUITS	3512 W LAKE CENTER D	CERS HAZ WASTE, CERS	Higher	1081, 0.205, North
G51	AFFINITY MEDICAL TEC	3545 HARBOR BLVD STE	RCRA NonGen / NLR	Higher	1158, 0.219, NW
H52	BRITTANY JOHNSON	3506 WEST LAKE CENTE	RCRA NonGen / NLR	Higher	1181, 0.224, North
H53	SOUTH COAST CIRCUITS	3506 WEST LAKE CENTE	ENVIROSTOR	Higher	1181, 0.224, North
H54	SOUTH COAST CIRCUITS	3506 W LAKE CENTER D	CERS HAZ WASTE, CIWQS, CERS	Higher	1181, 0.224, North
H55	SOUTH COAST CIRCUITS	3506 W LAKE CENTER D	RCRA-LQG	Higher	1181, 0.224, North
I56	ICN PHARMACEUTICALS	3300 HYLAND	LUST, HIST CORTESE, CERS	Lower	1630, 0.309, West
I57	3300 HYLAND I LLC	3300 HYLAND AVE	LUST, HAZNET	Lower	1630, 0.309, West
58	STATE FARM INSURANCE	3333 HYLAND AVE	RCRA-SQG, LUST, SWEEPS UST, HIST UST, CA FID UST,...	Lower	1742, 0.330, West
J59	ARCO #6131	3201 HARBOR	LUST, CERS	Higher	1784, 0.338, SSW
J60	MOBIL #18-HDR	3195 HARBOR	LUST, SWEEPS UST, CA FID UST, Cortese, HIST...	Higher	1910, 0.362, SSW
61	CHEVRON 94660	3190 HARBOR BLVD.	RCRA-LQG, LUST, CA FID UST, CHMIRS, FINDS, ECHO,...	Higher	1943, 0.368, SSW
62	C J SEGERSTROM & SON	3315 FAIRVIEW	LUST, HIST UST, CA FID UST, CERS TANKS, CHMIRS,...	Higher	1991, 0.377, ESE
63	AUTOMOBILE CLUB OF S	3333 FAIRVIEW	LUST, SWEEPS UST, CA FID UST, HAZNET, HIST...	Lower	2235, 0.423, East
K64	SHELL SERVICE STATIO	3820 S FAIRVIEW / SU	RCRA-SQG, LUST, FINDS, ECHO	Lower	2310, 0.438, ENE
K65	SHELL #3820	3820 FAIRVIEW AVE	LUST, CERS	Lower	2310, 0.438, ENE
66	UNOCAL #5404	3599 HARBOR	LUST, CERS HAZ WASTE, HIST UST, CERS TANKS,...	Higher	2354, 0.446, NNW
K67	ARCO #3083	3470 FAIRVIEW	HIST CORTESE	Lower	2438, 0.462, ENE
K68	MOBIL #18-JMY	3470 FAIRVIEW	LUST, SWEEPS UST, CA FID UST, Cortese, HIST...	Lower	2438, 0.462, ENE
69	AVIATION EQUIPMENT	1571 MACARTHUR BLVD.	ENVIROSTOR, CERS HAZ WASTE, Orange Co. Industrial...	Higher	3002, 0.569, NW
70	SEGERSTROM & SONS	3529 GREENVILLE ST	ENVIROSTOR, LUST, SCH, HIST CORTESE	Higher	3781, 0.716, ENE
71	PIONEER CIRCUITS, IN	3000 S. SHANNON STRE	RCRA-LQG, ENVIROSTOR, CERS HAZ WASTE, CERS	Higher	4433, 0.840, NNW
72	PRINTED CIRCUIT SOLU	3700 W SERGESTROM AV	RCRA-SQG, ENVIROSTOR	Higher	4618, 0.875, North
73	TRICO (FMR. UNITED C	18101-18111 MOUNT WA	ENVIROSTOR	Higher	4752, 0.900, WNW
74	RBC TRANSPORT DYNAMI	3131 W SEGERSTROM AV	ENVIROSTOR, EMI, NPDES, WDS, CIWQS, CERS	Higher	4994, 0.946, NNE
L75	VELIE CIRCUITS, INC.	1267 LOGAN AVENUE	ENVIROSTOR	Higher	5005, 0.948, SSE
L76	METROPOLITAN CIRCUIT	1267 LOGAN AVENUE	RESPONSE, ENVIROSTOR, HIST Cal-Sites, CA BOND EXP....	Higher	5005, 0.948, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
LOS ANGELES TIMES-SO 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
CA-ORANGE COUNTY PLA 1375 SUNFLOWER AVE COSTA MESA, CA 92626	FINDS Registry ID:: 110066071903	N/A
L A TIMES 1375 SUNFLOWER COSTA MESA, CA 92626	FINDS Registry ID:: 110065638180	N/A
LOS ANGELES TIMES-NO 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES - 1375 SUNFLOWER AVENU COSTA MESA, CA 92626	HAZNET GEPAID: CAT080011901	N/A
LOS ANGELES TIMES CO 1375 SUNFLOWER AVE COSTA MESA, CA 92626	SWEEPS UST Status: A Tank Status: A Comp Number: 161 EMI Facility Id: 124906 CERS	N/A
LOS ANGELES TIMES - 1375 SUNFLOWER AVENU COSTA MESA, CA 92626	FINDS Registry ID:: 110060900226	N/A
LOS ANGELES TIMES 1375 SUNFLOWER AVE. COSTA MESA, CA 92626	EMI Facility Id: 124906	N/A
TREH/KEARNY COSTA ME 1375 SUNFLOWER AVE COSTA MESA, CA 92626	FINDS Registry ID:: 110070095917 ECHO	N/A

EXECUTIVE SUMMARY

	Registry ID: 110070095917	
THE PRESS OWNER LLC 1375 SUNFLOWER COSTA MESA, CA 92626	RCRA NonGen / NLR EPA ID:: CAC002991831	CAC002991831
L A TIMES 1375 SUNFLOWER COSTA MESA, CA	RGA LUST	N/A
1375 SUNFLOWER AVE 1375 SUNFLOWER AVE COSTA MESA, CA	AST Database: AST, Date of Government Version: 07/06/2016	N/A
1X LOS ANGELES TIMES 1375 SUNFLOWER AVE COSTA MESA, CA 90053	HAZNET GEPAID: CAX000133769	N/A
LOS ANGELES TIMES-NO 1375 SUNFLOWER COSTA MESA, CA	RGA LUST	N/A
L A TIMES 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
THE PRESS OWNER LLC 1375 SUNFLOWER COSTA MESA, CA 92626	ECHO Registry ID: 110070510647	N/A
LOS ANGELES TIMES CO 1375 SUNFLOWER AVE COSTA MESA, CA 92626	HAZNET GEPAID: CAD043644236	N/A
LOS ANGELES TIMES 1375 SUNFLOWER AVENU COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES 1375 COSTA MESA, CA	RGA LUST	N/A

EXECUTIVE SUMMARY

1X L A TIMES 1375 SUNFLOWER STREE COSTA MESA, CA 92718	HAZNET GEPAID: CAC000684240	N/A
TIMES MIRROR COMPANY 1375 SUNFLOWER AVENU COSTA MESA, CA 92626	RCRA-SQG EPA ID:: CAT080011901	CAT080011901
LOS ANGELES TIMES-SO 1375 SUNFLOWER COSTA MESA, CA	RGA LUST	N/A
FORMER LOS ANGELES T 1375 W. SUNFLOWER AV COSTA MESA, CA 92526	CPS-SLIC Database: CPS-SLIC, Date of Government Version: 12/10/2018 Facility Status: Open - Site Assessment Global Id: T10000011210 CERS	N/A
L.A. TIMES 1375 SUNFLOWER AVENU COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES CO 1375 SUNFLOWER AVE COSTA MESA, CA 92626	RCRA-SQG EPA ID:: CAD043644236 ENVIROSTOR Facility Id: 71003669 Status: Inactive - Needs Evaluation LUST Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Status: Open - Verification Monitoring Facility Id: 88UT115 Facility Id: 92UT073 Facility Id: 91UT064 Facility Status: Remedial action (cleanup) Underway Facility Status: Post remedial action monitoring Facility Status: Case Closed Global Id: T0605999595 Global Id: T0605901160 Global Id: T0605979014 Global ID: T0605901160 Global ID: T0605979014 CPS-SLIC Database: SLIC REG 8, Date of Government Version: 04/03/2008 Facility Status: Closed HIST UST	CAD043644236

EXECUTIVE SUMMARY

Facility Id: 00000019406

CA FID UST
Facility Id: 30001018
Status: A

Orange Co. Industrial Site
Current Status: CLOSED 5/15/1991
Case ID: 91IC005

ICIS
FRS ID:: 110001152984

US AIRS
Database: US AIRS (AFS), Date of Government Version: 10/12/2016
EPA plant ID:: 110001152984

FINDS
Registry ID:: 110001152984

ECHO
Registry ID: 110001152984

Cortese
Cleanup Status: OPEN - VERIFICATION MONITORING

EMI
Facility Id: 4623

ENF
Status: Historical
Status: Historical
Facility Id: 246123

HIST CORTESE
Reg Id: 083001520T

NPDES
Facility Status: Active
Facility Status: Terminated

WDS
Facility Status: A
Facility Id: 8 30I016012
Facility Id: 8 302818001

CIWQS
CERS

GW CLEANUP-C.M.NASUN 1375 SUNFLOWER COSTA MESA, CA 92626	FINDS Registry ID:: 110065539046	N/A
CA-ORANGE COUNTY PLA 1375 SUNFLOWER AVE COSTA MESA, CA 92626	UST Database: UST, Date of Government Version: 06/10/2019	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal RCRA generators list

RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties

INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register
PFAS ..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CERS TANKS ..... California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing

EXECUTIVE SUMMARY

US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CUPA Listings	CUPA Resources List
Financial Assurance	Financial Assurance Information Listing
ICE	ICE
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historical Auto Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 04/11/2019 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC Site ID: 0900367 EPA Id: CAD008369753	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D40***	***120***

EXECUTIVE SUMMARY

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC EPA ID:: CAD008369753	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D40***	***120***

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC EPA ID:: CAD008369753	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D40***	***120***

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/25/2019 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SOUTH COAST CIRCUITS EPA ID:: CAR000018010	3506 W LAKE CENTER D	N 1/8 - 1/4 (0.224 mi.)	H55	198

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3333 HARBOR BOULEVAR	W 0 - 1/8 (0.107 mi.)	38	118

EPA ID:: CAD981683626

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/25/2019 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DRY CLEAN USA EPA ID:: CAD983587148	***3701 S HARBOR BLVD E***	***NW 0 - 1/8 (0.123 mi.)***	***E43***	***132***
BABCOCK ELECTRO-MECH EPA ID:: CAD087387759	***3501 HARBOR BLVD***	***NW 1/8 - 1/4 (0.177 mi.)***	***47***	***145***

Lower Elevation	Address	Direction / Distance	Map ID	Page
COSTA MESA COMMERCE EPA ID:: CAR000157313	3303 S HARBOR BLVD	WSW 0 - 1/8 (0.106 mi.)	C35	114
PERFECT PRINTING EPA ID:: CAD983673468	***3303 HARBOR BLVD***	***WSW 0 - 1/8 (0.106 mi.)***	***C37***	***116***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN CIRCUIT Database: RESPONSE, Date of Government Version: 04/29/2019 Status: Certified Facility Id: 30360008	***1267 LOGAN AVENUE***	***SSE 1/2 - 1 (0.948 mi.)***	***L76***	***407***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to,

identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 04/29/2019 has revealed that there are 10 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMF VOIT INC Facility Id: 80001572 Status: Refer: RWQCB	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D41***	***126***
SOUTH COAST CIRCUITS Facility Id: 71003634 Status: Inactive - Needs Evaluation	3506 WEST LAKE CENTE	N 1/8 - 1/4 (0.224 mi.)	H53	160
AVIATION EQUIPMENT Facility Id: 30370195 Facility Id: 71003283 Status: Refer: 1248 Local Agency Status: Refer: Local Agency	***1571 MACARTHUR BLVD.***	***NW 1/2 - 1 (0.569 mi.)***	***69***	***308***
SEGERSTROM & SONS Facility Id: 30010009 Status: No Further Action	***3529 GREENVILLE ST***	***ENE 1/2 - 1 (0.716 mi.)***	***70***	***347***
PIONEER CIRCUITS, IN Facility Id: 71003564 Status: Inactive - Needs Evaluation	***3000 S. SHANNON STRE***	***NNW 1/2 - 1 (0.840 mi.)***	***71***	***351***
PRINTED CIRCUIT SOLU Facility Id: 71003772 Status: Inactive - Needs Evaluation	***3700 W SERGESTROM AV***	***N 1/2 - 1 (0.875 mi.)***	***72***	***389***
TRICO (FMR. UNITED C Facility Id: 60002073 Status: Certified	18101-18111 MOUNT WA	WNW 1/2 - 1 (0.900 mi.)	73	393
RBC TRANSPORT DYNAMI Facility Id: 71002407 Status: Inactive - Needs Evaluation	***3131 W SEGERSTROM AV***	***NNE 1/2 - 1 (0.946 mi.)***	***74***	***394***
VELIE CIRCUITS, INC. Facility Id: 71002691 Status: No Action Required	1267 LOGAN AVENUE	SSE 1/2 - 1 (0.948 mi.)	L75	406
METROPOLITAN CIRCUIT Facility Id: 30360008 Status: Certified	***1267 LOGAN AVENUE***	***SSE 1/2 - 1 (0.948 mi.)***	***L76***	***407***

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 14 LUST sites within

approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MINSTAR (AMF-VOIT)	***3801 HARBOR***	***NW 0 - 1/8 (0.108 mi.)***	***D39***	***119***
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0605900473				
AMF VOIT INC	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D41***	***126***
Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Global Id: T0605900473				
ARCO #6131	***3201 HARBOR***	***SSW 1/4 - 1/2 (0.338 mi.)***	***J59***	***223***
Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Facility Id: 92UT012 Facility Status: Remedial action (cleanup) Underway Global Id: T0605901336 Global ID: T0605901336				
MOBIL #18-HDR	***3195 HARBOR***	***SSW 1/4 - 1/2 (0.362 mi.)***	***J60***	***227***
Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 12/10/2018 Status: Open - Site Assessment Facility Id: 87UT226 Facility Status: Remedial action (cleanup) Underway Global Id: T0605900556 Global ID: T0605900556				
CHEVRON 94660	***3190 HARBOR BLVD.***	***SSW 1/4 - 1/2 (0.368 mi.)***	***61***	***238***
Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Facility Id: 98UT111 Facility Id: 89UT031 Facility Status: Case Closed Global Id: T0605900914 Global Id: T0605998652 Global ID: T0605900914 Global ID: T0605998652				
C J SEGERSTROM & SON	***3315 FAIRVIEW***	***ESE 1/4 - 1/2 (0.377 mi.)***	***62***	***257***
Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Facility Id: 95UT073 Facility Status: Case Closed Global Id: T0605901920 Global ID: T0605901920				
UNOCAL #5404	***3599 HARBOR***	***NNW 1/4 - 1/2 (0.446 mi.)***	***66***	***284***
Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019 Database: LUST REG 8, Date of Government Version: 02/14/2005 Database: LUST, Date of Government Version: 12/10/2018				

Status: Open - Remediation
Facility Id: 91UT134
Facility Status: Post remedial action monitoring
Global Id: T0605901461
Global ID: T0605901461

Lower Elevation	Address	Direction / Distance	Map ID	Page
ICN PHARMACEUTICALS	***3300 HYLAND***	***W 1/4 - 1/2 (0.309 mi.)***	***I56***	***207***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 12/10/2018
Status: Completed - Case Closed
Facility Status: Case Closed
Global Id: T0605900064
Global ID: T0605900064

3300 HYLAND I LLC	***3300 HYLAND AVE***	***W 1/4 - 1/2 (0.309 mi.)***	***I57***	***210***

Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019
Facility Id: 89UT150

STATE FARM INSURANCE	***3333 HYLAND AVE***	***W 1/4 - 1/2 (0.330 mi.)***	***58***	***210***

Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019
Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 12/10/2018
Status: Completed - Case Closed
Facility Id: 90UT111
Facility Id: 93UT001
Facility Status: Case Closed
Global Id: T0605901167
Global Id: T0605957851
Global ID: T0605901167
Global ID: T0605957851

AUTOMOBILE CLUB OF S	***3333 FAIRVIEW***	***E 1/4 - 1/2 (0.423 mi.)***	***63***	***266***

Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019
Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 12/10/2018
Status: Completed - Case Closed
Facility Id: 97UT003
Facility Status: Case Closed
Global Id: T0605902033
Global ID: T0605902033

SHELL SERVICE STATIO	***3820 S FAIRVIEW / SU***	***ENE 1/4 - 1/2 (0.438 mi.)***	***K64***	***271***

Database: LUST, Date of Government Version: 12/10/2018
Status: Completed - Case Closed
Global Id: T0605902158

SHELL #3820	***3820 FAIRVIEW AVE***	***ENE 1/4 - 1/2 (0.438 mi.)***	***K65***	***282***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Pollution Characterization
Global ID: T0605902158

MOBIL #18-JMY	***3470 FAIRVIEW***	***ENE 1/4 - 1/2 (0.462 mi.)***	***K68***	***297***

Database: ORANGE CO. LUST, Date of Government Version: 05/01/2019
Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: LUST, Date of Government Version: 12/10/2018
Status: Open - Remediation
Status: Completed - Case Closed

Facility Id: 86UT174
Facility Id: 94UT055
Facility Status: Remedial action (cleanup) Underway
Facility Status: Case Closed
Global Id: T0605900040
Global Id: T0605901818
Global ID: T0605900040
Global ID: T0605901818

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN CIRCUIT	*1267 LOGAN AVENUE*	*SSE 1/2 - 1 (0.948 mi.)*	*L76*	*407*

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 04/09/2019 has revealed that there are 7 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOGIC PAKAGING INC	*3530 W LAKE CENTER D*	*N 1/8 - 1/4 (0.170 mi.)*	*F45*	*134*
SOUTH COAST CIRCUITS	*3524 W LAKE CENTER D*	*N 1/8 - 1/4 (0.170 mi.)*	*F46*	*140*
SOUTHERN CALIFORNIA	*3535 HARBOR BLVD STE*	*NW 1/8 - 1/4 (0.198 mi.)*	*G48*	*147*
SOUTH COAST CIRCUITS	*3512 W LAKE CENTER D*	*N 1/8 - 1/4 (0.205 mi.)*	*H50*	*152*
SOUTH COAST CIRCUITS	*3506 W LAKE CENTER D*	*N 1/8 - 1/4 (0.224 mi.)*	*H54*	*161*

Lower Elevation	Address	Direction / Distance	Map ID	Page
IKEA US WEST INC #16	*1475 S COAST DR*	*SSE 0 - 1/8 (0.018 mi.)*	*B32*	*105*
MESA WATER, WELL #7	*3325 HARBOR BLVD*	*WSW 0 - 1/8 (0.020 mi.)*	*33*	*109*

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or

dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there are 7 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CODAN US CORPORATION EPA ID:: CAL000140322	3511 W SUNFLOWER AVE	N 0 - 1/8 (0.103 mi.)	34	113
A M F VOIT INC EPA ID:: CAD008369753	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D40***	***120***
SOUTHERN CALIFORNIA EPA ID:: CAL000316360	3535 HARBOR BLVD STE	NW 1/8 - 1/4 (0.198 mi.)	G49	151
AFFINITY MEDICAL TEC EPA ID:: CAL000388684	3545 HARBOR BLVD STE	NW 1/8 - 1/4 (0.219 mi.)	G51	158
BRITTANY JOHNSON EPA ID:: CAC002985047	3506 WEST LAKE CENTE	N 1/8 - 1/4 (0.224 mi.)	H52	159

Lower Elevation	Address	Direction / Distance	Map ID	Page
IKEA US WEST INC #16 EPA ID:: CAL000290414	1475 S COAST DR	SSE 0 - 1/8 (0.018 mi.)	B31	104
ALLURA PRINTING INC EPA ID:: CAL000373896	3303 HARBOR BLVD STE	WSW 0 - 1/8 (0.106 mi.)	C36	115

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 02/15/2019 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
L. A. TIMES COSTA ME Registry ID:: 110041429095	UNKNOWN	0 - 1/8 (0.000 mi.)	A30	104

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN CIRCUIT	***1267 LOGAN AVENUE***	***SSE 1/2 - 1 (0.948 mi.)***	***L76***	***407***

EXECUTIVE SUMMARY

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 03/25/2019 has revealed that there are 3 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL #18-HDR	***3195 HARBOR***	***SSW 1/4 - 1/2 (0.362 mi.)***	***J60***	***227***
Cleanup Status: OPEN - SITE ASSESSMENT				
UNOCAL #5404	***3599 HARBOR***	***NNW 1/4 - 1/2 (0.446 mi.)***	***66***	***284***
Cleanup Status: OPEN - REMEDIATION				

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL #18-JMY	***3470 FAIRVIEW***	***ENE 1/4 - 1/2 (0.462 mi.)***	***K68***	***297***
Cleanup Status: OPEN - REMEDIATION				

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DRY CLEAN U.S.A.	3701 S HARBOR BLVD U	NW 0 - 1/8 (0.123 mi.)	E44	133
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/19/2019				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 10 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MINSTAR (AMF-VOIT)	***3801 HARBOR***	***NW 0 - 1/8 (0.108 mi.)***	***D39***	***119***
Reg Id: 083000587T				
MOBIL #18-HDR	***3195 HARBOR***	***SSW 1/4 - 1/2 (0.362 mi.)***	***J60***	***227***
Reg Id: 083000703T				
CHEVRON 94660	***3190 HARBOR BLVD.***	***SSW 1/4 - 1/2 (0.368 mi.)***	***61***	***238***
Reg Id: 083001156T				
C J SEGERSTROM & SON	***3315 FAIRVIEW***	***ESE 1/4 - 1/2 (0.377 mi.)***	***62***	***257***
Reg Id: 083002787T				
UNOCAL #5404	***3599 HARBOR***	***NNW 1/4 - 1/2 (0.446 mi.)***	***66***	***284***
Reg Id: 083001957T				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ICN PHARMACEUTICALS	***3300 HYLAND***	***W 1/4 - 1/2 (0.309 mi.)***	***I56***	***207***

Reg Id: 083000081T				
STATE FARM INSURANCE Reg Id: 083001527T	***3333 HYLAND AVE***	***W 1/4 - 1/2 (0.330 mi.)***	***58***	***210***
AUTOMOBILE CLUB OF S Reg Id: 083000754T Reg Id: 083002970T	***3333 FAIRVIEW***	***E 1/4 - 1/2 (0.423 mi.)***	***63***	***266***
ARCO #3083 Reg Id: 083000049T	3470 FAIRVIEW	ENE 1/4 - 1/2 (0.462 mi.)	K67	297
MOBIL #18-JMY Reg Id: 083002609T	***3470 FAIRVIEW***	***ENE 1/4 - 1/2 (0.462 mi.)***	***K68***	***297***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 05/20/2019 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMF VOIT INC EPA Id: CAD008369753 Cleanup Status: CLOSED	***3801 S HARBOR BLVD***	***NW 0 - 1/8 (0.108 mi.)***	***D41***	***126***

CERS: The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

A review of the CERS list, as provided by EDR, and dated 04/09/2019 has revealed that there is 1 CERS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
L. A. TIMES COSTA ME	UNKNOWN	0 - 1/8 (0.000 mi.)	A29	103

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist

EXECUTIVE SUMMARY

Cleaner site within approximately 0.125 miles of the target property.

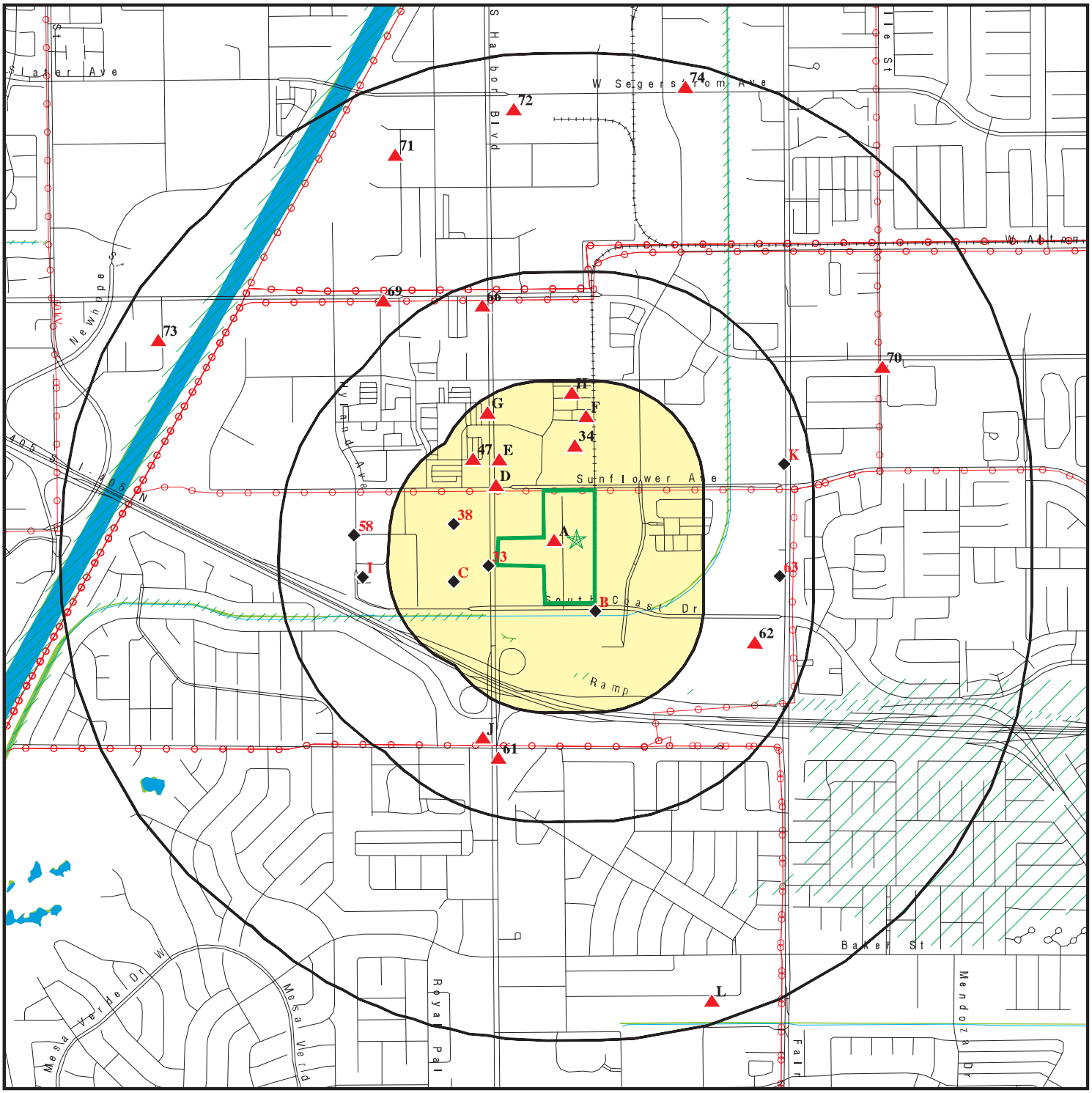
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DRYCLEAN USA	3701 S HARBOR BLVD S	NW 0 - 1/8 (0.123 mi.)	E42	131

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
SAKIOKA FARMS (FORMER MOBIL)	LUST
SAKIOKA FARMS	CPS-SLIC
SUNFLOWER PLAZA METRO CLEANERS	CPS-SLIC

OVERVIEW MAP - 5761845.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former LA Times Site	CLIENT: Psomas
ADDRESS: 1375 Sunflower Ave Costa Mesa CA 92626	CONTACT: Jan Powell INQUIRY #: 5761845.2s
LAT/LONG: 33.693872 / 117.916125	DATE: August 22, 2019 9:57 am

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DETAIL MAP - 5761845.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former LA Times Site	CLIENT: Psomas
ADDRESS: 1375 Sunflower Ave Costa Mesa CA 92626	CONTACT: Jan Powell INQUIRY #: 5761845.2s
LAT/LONG: 33.693872 / 117.916125	DATE: August 22, 2019 10:02 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		1	0	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		1	0	0	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		1	0	0	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		1	1	NR	NR	NR	2
RCRA-SQG	0.250	2	3	1	NR	NR	NR	6
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000	1	1	1	0	8	NR	11
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500	1	2	0	12	NR	NR	15

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500	2	0	0	0	NR	NR	2
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250	1	0	0	NR	NR	NR	1
AST	0.250	1	0	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	1	NR	1
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		2	5	NR	NR	NR	7
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250	1	0	0	NR	NR	NR	1
HIST UST	0.250	1	0	0	NR	NR	NR	1
CA FID UST	0.250	1	0	0	NR	NR	NR	1
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
Orange Co. Industrial Site	0.001	1	0	NR	NR	NR	NR	1
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	4	3	NR	NR	NR	8
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001	1	0	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001	1	0	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	6	1	NR	NR	NR	NR	7
ECHO	0.001	3	0	NR	NR	NR	NR	3
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
Cortese	0.500	1	0	0	3	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		1	0	NR	NR	NR	1
EMI	0.001	3	0	NR	NR	NR	NR	3
ENF	0.001	1	0	NR	NR	NR	NR	1
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001	4	0	NR	NR	NR	NR	4
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500	1	1	0	9	NR	NR	11
HWP	1.000		1	0	0	0	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001	1	0	NR	NR	NR	NR	1
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001	1	0	NR	NR	NR	NR	1
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001	1	0	NR	NR	NR	NR	1
CERS	0.001	3	1	NR	NR	NR	NR	4
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001	10	0	NR	NR	NR	NR	10
- Totals --		50	22	11	24	11	0	118

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **LOS ANGELES TIMES-SOUTH TANKS** | **RGA LUST** | **S114645328**
1375 SUNFLOWER AVE | **N/A**
COSTA MESA, CA

Site 1 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name:	LOS ANGELES TIMES-SOUTH TANKS
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
State:	COSTA MESA

2003 LOS ANGELES TIMES-SOUTH TANKS 1375 SUNFLOWER AVE

A2 Target Property | **CA-ORANGE COUNTY PLANT** | **FINDS** | **1023314140**
1375 SUNFLOWER AVE | **N/A**
COSTA MESA, CA 92626

Site 2 of 30 in cluster A

Actual: 31 ft.

FINDS:

Registry ID: 110066071903

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A3 Target Property | **L A TIMES** | **FINDS** | **1023273675**
1375 SUNFLOWER | **N/A**
COSTA MESA, CA 92626

Site 3 of 30 in cluster A

Actual: 31 ft.

FINDS:

Registry ID: 110065638180

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A4 Target Property | **LOS ANGELES TIMES-NORTH TANKS** | **RGA LUST** | **S114645325**
1375 SUNFLOWER AVE | **N/A**
COSTA MESA, CA

Site 4 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name:	LOS ANGELES TIMES-NORTH TANKS
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
State:	COSTA MESA
	2003 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER AVE

A5 Target Property | **LOS ANGELES TIMES - COSTA MESA** | **HAZNET** | **S123770492**
1375 SUNFLOWER AVENUE | **N/A**
COSTA MESA, CA 92626

Site 5 of 30 in cluster A

Actual: 31 ft.

HAZNET:

Name:	LOS ANGELES TIMES - COSTA MESA
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	1985
GEPAID:	CAT080011901
Contact:	AL PEREZ
Telephone:	2132375068
Mailing Name:	Not reported
Mailing Address:	145 S SPRING STREET 9TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900534105
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	6.255
CA Waste Code:	-
Method:	01-
Facility County:	Orange

Name:	LOS ANGELES TIMES - COSTA MESA
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	1984
GEPAID:	CAT080011901
Contact:	AL PEREZ
Telephone:	2132375068
Mailing Name:	Not reported
Mailing Address:	145 S SPRING STREET 9TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900534105
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	0
CA Waste Code:	223-Unspecified oil-containing waste
Method:	01-
Facility County:	Orange

Name:	LOS ANGELES TIMES - COSTA MESA
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	1984

LOS ANGELES TIMES - COSTA MESA (Continued) **S123770492**

GEPAID:	CAT080011901
Contact:	AL PEREZ
Telephone:	2132375068
Mailing Name:	Not reported
Mailing Address:	145 S SPRING STREET 9TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900534105
Gen County:	Orange
TSD EPA ID:	CAD020748125
TSD County:	Santa Barbara
Tons:	18.8484
CA Waste Code:	223-Unspecified oil-containing waste
Method:	D80-Disposal, Land Fill
Facility County:	Orange

Name:	LOS ANGELES TIMES - COSTA MESA
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	1984
GEPAID:	CAT080011901
Contact:	AL PEREZ
Telephone:	2132375068
Mailing Name:	Not reported
Mailing Address:	145 S SPRING STREET 9TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900534105
Gen County:	Orange
TSD EPA ID:	CAD029654894
TSD County:	Los Angeles
Tons:	17.7225
CA Waste Code:	223-Unspecified oil-containing waste
Method:	D99-Disposal, Other
Facility County:	Orange

Name:	LOS ANGELES TIMES - COSTA MESA
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	1984
GEPAID:	CAT080011901
Contact:	AL PEREZ
Telephone:	2132375068
Mailing Name:	Not reported
Mailing Address:	145 S SPRING STREET 9TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900534105
Gen County:	Orange
TSD EPA ID:	CAD07786749
TSD County:	0
Tons:	0
CA Waste Code:	611-Contaminated soil from site clean-up
Method:	-
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
14 additional CA_HAZNET: record(s) in the EDR Site Report.

A6 Target Property | **LOS ANGELES TIMES COMMUNICATIONS LLC**
1375 SUNFLOWER AVE
COSTA MESA, CA 92626 | **SWEEPS UST**
EMI
CERS | **1005584961**
N/A

Site 6 of 30 in cluster A

Actual: 31 ft.

SWEEPS UST:

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000004
Tank Status:	Not reported
Capacity:	6000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	7

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000007
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000009

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Tank Status:	Not reported
Capacity:	12000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000010
Tank Status:	Not reported
Capacity:	12000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000012
Tank Status:	Not reported
Capacity:	12000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000015
Tank Status:	Not reported
Capacity:	6000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000017
Tank Status:	Not reported
Capacity:	100000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000011
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	6

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Active
Comp Number:	161
Number:	9

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000013
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000014
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000016
Tank Status:	A
Capacity:	5000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	P
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000019
Tank Status:	A
Capacity:	100000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	P
Content:	Not reported
Number Of Tanks:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000020
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

EMI:

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA
Year:	2002
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	9
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA
Year:	2003
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	9
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA
Year:	2004
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9.36473
Reactive Organic Gases Tons/Yr:	9.25
Carbon Monoxide Emissions Tons/Yr:	0.9073
NOX - Oxides of Nitrogen Tons/Yr:	0.743
SOX - Oxides of Sulphur Tons/Yr:	0.00931
Particulate Matter Tons/Yr:	0.09681
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.09

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA
Year:	2005
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7.67359
Reactive Organic Gases Tons/Yr:	6.14055049
Carbon Monoxide Emissions Tons/Yr:	.22865
NOX - Oxides of Nitrogen Tons/Yr:	.2306
SOX - Oxides of Sulphur Tons/Yr:	.00545

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Particulate Matter Tons/Yr:	.05923
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.05908936

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Year:	2006
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.930201051660002933
Reactive Organic Gases Tons/Yr:	3.808
Carbon Monoxide Emissions Tons/Yr:	.263
NOX - Oxides of Nitrogen Tons/Yr:	.673
SOX - Oxides of Sulphur Tons/Yr:	.008
Particulate Matter Tons/Yr:	.323
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.2492

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA
Year:	2007
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.930201051660002933
Reactive Organic Gases Tons/Yr:	3.808
Carbon Monoxide Emissions Tons/Yr:	.263
NOX - Oxides of Nitrogen Tons/Yr:	.673
SOX - Oxides of Sulphur Tons/Yr:	.008
Particulate Matter Tons/Yr:	.323
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.2492

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Year:	2008
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.186234629807863300
Reactive Organic Gases Tons/Yr:	4.08357208499

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Carbon Monoxide Emissions Tons/Yr:	.93703
NOX - Oxides of Nitrogen Tons/Yr:	.62
SOX - Oxides of Sulphur Tons/Yr:	.009732958268
Particulate Matter Tons/Yr:	.343850090168
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.271850090168

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Year:	2012
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.018805641504
Reactive Organic Gases Tons/Yr:	0.01491
Carbon Monoxide Emissions Tons/Yr:	0.0425
NOX - Oxides of Nitrogen Tons/Yr:	0.1917
SOX - Oxides of Sulphur Tons/Yr:	0.000140105
Particulate Matter Tons/Yr:	0.01347
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.01312332

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Year:	2013
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.036474992522
Reactive Organic Gases Tons/Yr:	0.02237
Carbon Monoxide Emissions Tons/Yr:	0.16514
NOX - Oxides of Nitrogen Tons/Yr:	0.3271
SOX - Oxides of Sulphur Tons/Yr:	0.000970105
Particulate Matter Tons/Yr:	0.02404
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.02373832

CERS:

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	478170
CERS ID:	110001152984
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	Mary Ellen Vojtek

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Entity Title:	Not reported
Affiliation Address:	202 W 1ST ST 1ST FL
Affiliation City:	LOSANGELES
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

A7 Target Property **LOS ANGELES TIMES - COSTA MESA** **FINDS** **1023195959**
1375 SUNFLOWER AVENUE **N/A**
COSTA MESA, CA 92626

Site 7 of 30 in cluster A

Actual: 31 ft.

FINDS:

Registry ID: 110060900226

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A8 Target Property **LOS ANGELES TIMES** **EMI** **S106834724**
1375 SUNFLOWER AVE. **N/A**
COSTA MESA, CA 92626

Site 8 of 30 in cluster A

Actual: 31 ft.

EMI:

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE.
City,State,Zip:	COSTA MESA, CA
Year:	2001
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	B
Total Organic Hydrocarbon Gases Tons/Yr:	10
Reactive Organic Gases Tons/Yr:	10
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	11
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE.
City,State,Zip:	COSTA MESA, CA 92626

LOS ANGELES TIMES (Continued) **S106834724**

Year:	2009
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.1370514971565799
Reactive Organic Gases Tons/Yr:	3.023142
Carbon Monoxide Emissions Tons/Yr:	1.08412
NOX - Oxides of Nitrogen Tons/Yr:	0.48235
SOX - Oxides of Sulphur Tons/Yr:	0.0106245
Particulate Matter Tons/Yr:	0.350657
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.27846675199999998

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE.
City,State,Zip:	COSTA MESA, CA 92626
Year:	2010
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.87149321585437101
Reactive Organic Gases Tons/Yr:	0.81301999999999996
Carbon Monoxide Emissions Tons/Yr:	0.44932
NOX - Oxides of Nitrogen Tons/Yr:	0.33898
SOX - Oxides of Sulphur Tons/Yr:	5.9699999999999996E-3
Particulate Matter Tons/Yr:	0.30769999999999997
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.23409568

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE.
City,State,Zip:	COSTA MESA, CA 92626
Year:	2011
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.044681894431
Reactive Organic Gases Tons/Yr:	0.02583
Carbon Monoxide Emissions Tons/Yr:	0.18407
NOX - Oxides of Nitrogen Tons/Yr:	0.23958
SOX - Oxides of Sulphur Tons/Yr:	0.00389
Particulate Matter Tons/Yr:	0.02813
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.02770856

A9 Target Property | **TREH/KEARNY COSTA MESA, LLC**
1375 SUNFLOWER AVE
COSTA MESA, CA 92626 | **FINDS** | **1023698823**
ECHO | **N/A**

Site 9 of 30 in cluster A

Actual: 31 ft.

FINDS:

Registry ID: 110070095917

Environmental Interest/Information System
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1023698823
Registry ID: 110070095917
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110070095917

A10 Target Property | **THE PRESS OWNER LLC**
1375 SUNFLOWER
COSTA MESA, CA 92626 | **RCRA NonGen / NLR** | **1024771919**
CAC002991831

Site 10 of 30 in cluster A

Actual: 31 ft.

RCRA NonGen / NLR:
Date form received by agency: 12/05/2018
Facility name: THE PRESS OWNER LLC
Facility address: 1375 SUNFLOWER
COSTA MESA, CA 92626
EPA ID: CAC002991831
Mailing address: 3335 SUSAN STREET #125
COSTA MESA, CA 92626
Contact: HAYLEY FISHER
Contact address: 3335 SUSAN STREET #125
COSTA MESA, CA 92626
Contact country: Not reported
Contact telephone: 626-487-5657
Contact email: HFISHER@STEELWAVELLC.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: THE PRESS OWNER LLC
Owner/operator address: 3335 SUSAN STREET #125
COSTA MESA, CA 92626
Owner/operator country: Not reported
Owner/operator telephone: 626-487-5657

THE PRESS OWNER LLC (Continued) **1024771919**

Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	HAYLEY FISHER
Owner/operator address:	3335 SUSAN STREET #125 COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	626-487-5657
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

A11 **L A TIMES** **RGA LUST** **S114640937**
Target **1375 SUNFLOWER** **N/A**
Property **COSTA MESA, CA**

Site 11 of 30 in cluster A

Actual:
31 ft.

RGA LUST:

Name:	L A TIMES
Address:	1375 SUNFLOWER
City:	COSTA MESA
State:	COSTA MESA
	2012 L A TIMES 1375 SUNFLOWER
Name:	L A TIMES
Address:	1375 SUNFLOWER
City:	COSTA MESA
State:	COSTA MESA
	2011 L A TIMES 1375 SUNFLOWER
Name:	L A TIMES

L A TIMES (Continued) **S114640937**

Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2010 L A TIMES 1375 SUNFLOWER
Name: L A TIMES
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2009 L A TIMES 1375 SUNFLOWER
Name: L A TIMES
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2008 L A TIMES 1375 SUNFLOWER
Name: L A TIMES
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2007 L A TIMES 1375 SUNFLOWER
Name: L A TIMES
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2006 L A TIMES 1375 SUNFLOWER
Name: L A TIMES
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2005 L A TIMES 1375 SUNFLOWER

A12 **AST** **A100336716**
Target Property **1375 SUNFLOWER AVE** **N/A**
COSTA MESA, CA

Site 12 of 30 in cluster A

Actual: 31 ft.

AST:

Name:	Not reported
Address:	1375 SUNFLOWER AVE
City/Zip:	COSTA MESA,
Certified Unified Program Agencies:	Orange
Owner:	LOS ANGELES TIMES
Total Gallons:	1,320
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported

(Continued) **A100336716**

Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

A13 **1X LOS ANGELES TIMES/COSTA MESA** **HAZNET** **S123778363**
Target **1375 SUNFLOWER AVE** **N/A**
Property **COSTA MESA, CA 90053**

Site 13 of 30 in cluster A

Actual:
31 ft.

HAZNET:

Name:	1X LOS ANGELES TIMES/COSTA MESA
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 900530000
Year:	1986
GEPAID:	CAX000133769
Contact:	MIKE MANFRO
Telephone:	2139725715
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER AVE
Mailing City,St,Zip:	LOS ANGELES, CA 900530000
Gen County:	Los Angeles
TSD EPA ID:	CAD020748125
TSD County:	Santa Barbara
Tons:	5.0457
CA Waste Code:	223-Unspecified oil-containing waste
Method:	D80-Disposal, Land Fill
Facility County:	Orange

Name:	1X LOS ANGELES TIMES/COSTA MESA
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 900530000
Year:	1985
GEPAID:	CAX000133769
Contact:	MIKE MANFRO
Telephone:	2139725715
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER AVE
Mailing City,St,Zip:	LOS ANGELES, CA 900530000
Gen County:	Los Angeles
TSD EPA ID:	CAD020748125
TSD County:	Santa Barbara
Tons:	5.5044
CA Waste Code:	223-Unspecified oil-containing waste
Method:	UNK-
Facility County:	Orange

Name:	1X LOS ANGELES TIMES/COSTA MESA
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 900530000
Year:	1985
GEPAID:	CAX000133769

1X LOS ANGELES TIMES/COSTA MESA (Continued) **S123778363**

Contact:	MIKE MANFRO
Telephone:	2139725715
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER AVE
Mailing City,St,Zip:	LOS ANGELES, CA 900530000
Gen County:	Los Angeles
TSD EPA ID:	CAT080010283
TSD County:	Kern
Tons:	0
CA Waste Code:	221-Waste oil and mixed oil
Method:	04-
Facility County:	Orange

Name:	1X LOS ANGELES TIMES/COSTA MESA
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 900530000
Year:	1985
GEPAID:	CAX000133769
Contact:	MIKE MANFRO
Telephone:	2139725715
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER AVE
Mailing City,St,Zip:	LOS ANGELES, CA 900530000
Gen County:	Los Angeles
TSD EPA ID:	CAT080010283
TSD County:	Kern
Tons:	11.676
CA Waste Code:	221-Waste oil and mixed oil
Method:	D81-Disposal, Land Application
Facility County:	Orange

Name:	1X LOS ANGELES TIMES/COSTA MESA
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 900530000
Year:	1985
GEPAID:	CAX000133769
Contact:	MIKE MANFRO
Telephone:	2139725715
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER AVE
Mailing City,St,Zip:	LOS ANGELES, CA 900530000
Gen County:	Los Angeles
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	8.757
CA Waste Code:	221-Waste oil and mixed oil
Method:	R01-Recycler
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
4 additional CA_HAZNET: record(s) in the EDR Site Report.

A14 Target Property | **LOS ANGELES TIMES-NORTH TANKS**
1375 SUNFLOWER
COSTA MESA, CA | **RGA LUST** | **S114645326**
N/A

Site 14 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2012 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2011 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2010 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2009 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2008 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2007 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2006 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2005 LOS ANGELES TIMES-NORTH TANKS 1375 SUNFLOWER

A15 Target Property | **L A TIMES**
1375 SUNFLOWER AVE
COSTA MESA, CA | **RGA LUST** | **S114640936**
N/A

Site 15 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name: L A TIMES
Address: 1375 SUNFLOWER AVE
City: COSTA MESA
State: COSTA MESA
2003 L A TIMES 1375 SUNFLOWER AVE

A16 Target Property | **LOS ANGELES TIMES**
1375 SUNFLOWER AVE
COSTA MESA, CA | **RGA LUST** | **S114645330**
N/A

Site 16 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVE		
City:	COSTA MESA		
State:	COSTA MESA		
	2002	LOS ANGELES TIMES	1375 SUNFLOWER AVE
Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVE		
City:	COSTA MESA		
State:	COSTA MESA		
	2001	LOS ANGELES TIMES	1375 SUNFLOWER AVE

A17 Target Property | **THE PRESS OWNER LLC**
1375 SUNFLOWER
COSTA MESA, CA 92626 | **ECHO** | **1024721712**
N/A

Site 17 of 30 in cluster A

Actual: 31 ft.

ECHO:

Envid:	1024721712
Registry ID:	110070510647
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110070510647

A18 Target Property | **LOS ANGELES TIMES COMMUNICATIONS LLC**
1375 SUNFLOWER AVE
COSTA MESA, CA 92626 | **HAZNET** | **S113000577**
N/A

Site 18 of 30 in cluster A

Actual: 31 ft.

HAZNET:

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2016
GEPAID:	CAD043644236
Contact:	RACINE WATTS
Telephone:	2132375680
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	0.756
CA Waste Code:	134-Aqueous solution with total organic residues less than 10 percent
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Orange

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 926260000

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **S113000577**

Year:	2015
GEPAID:	CAD043644236
Contact:	RACINE WATTS
Telephone:	2132375680
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	CAD044429835
TSD County:	Los Angeles
Tons:	0.2075
CA Waste Code:	331-Off-specification, aged or surplus organics
Method:	H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Orange

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2015
GEPAID:	CAD043644236
Contact:	RACINE WATTS
Telephone:	2132375680
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	CAD044429835
TSD County:	Los Angeles
Tons:	0.1125
CA Waste Code:	141-Off-specification, aged or surplus inorganics
Method:	H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Orange

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2015
GEPAID:	CAD043644236
Contact:	RACINE WATTS
Telephone:	2132375680
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	3.42
CA Waste Code:	221-Waste oil and mixed oil
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Orange

Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 926260000

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **S113000577**

Year:	2015
GEPAID:	CAD043644236
Contact:	RACINE WATTS
Telephone:	2132375680
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	20.87085
CA Waste Code:	223-Unspecified oil-containing waste
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
341 additional CA_HAZNET: record(s) in the EDR Site Report.

A19 **LOS ANGELES TIMES** **RGA LUST** **S114645331**
Target **1375 SUNFLOWER AVENUE** **N/A**
Property **COSTA MESA, CA**

Site 19 of 30 in cluster A

Actual:
31 ft.

RGA LUST:

Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVENUE		
City:	COSTA MESA		
State:	COSTA MESA		
	1998	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVENUE		
City:	COSTA MESA		
State:	COSTA MESA		
	1997	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVENUE		
City:	COSTA MESA		
State:	COSTA MESA		
	1996	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVENUE		
City:	COSTA MESA		
State:	COSTA MESA		
	1995	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVENUE		
City:	COSTA MESA		
State:	COSTA MESA		
	1994	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
Name:	LOS ANGELES TIMES		
Address:	1375 SUNFLOWER AVENUE		
City:	COSTA MESA		
State:	COSTA MESA		
	1993	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE

A20 Target Property | **LOS ANGELES TIMES** | **RGA LUST** | **S114645332**
1375 | **N/A**
COSTA MESA, CA

Site 20 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name:	LOS ANGELES TIMES
Address:	1375
City:	COSTA MESA
State:	COSTA MESA
	2000 LOS ANGELES TIMES 1375

A21 Target Property | **1X L A TIMES** | **HAZNET** | **S123744237**
1375 SUNFLOWER STREET | **N/A**
COSTA MESA, CA 92718

Site 21 of 30 in cluster A

Actual: 31 ft.

HAZNET:

Name:	1X L A TIMES
Address:	1375 SUNFLOWER STREET
City,State,Zip:	COSTA MESA, CA 927180000
Year:	1992
GEPAID:	CAC000684240
Contact:	ARRON MCNAIR
Telephone:	7147241234
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER STREET
Mailing City,St,Zip:	COSTA MESA, CA 927180000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	20.85
CA Waste Code:	241-Tank bottom waste
Method:	R01-Recycler
Facility County:	Orange

Name:	1X L A TIMES
Address:	1375 SUNFLOWER STREET
City,State,Zip:	COSTA MESA, CA 927180000
Year:	1992
GEPAID:	CAC000684240
Contact:	ARRON MCNAIR
Telephone:	7147241234
Mailing Name:	Not reported
Mailing Address:	1375 SUNFLOWER STREET
Mailing City,St,Zip:	COSTA MESA, CA 927180000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	12.51
CA Waste Code:	222-Oil/water separation sludge
Method:	R01-Recycler
Facility County:	Orange

A22 Target Property	**TIMES MIRROR COMPANY THE 1375 SUNFLOWER AVENUE COSTA MESA, CA 92626**	**RCRA-SQG**	**1000221231 CAT080011901**

Site 22 of 30 in cluster A

Actual: 31 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	TIMES MIRROR COMPANY THE
Facility address:	1375 SUNFLOWER AVENUE COSTA MESA, CA 92626
EPA ID:	CAT080011901
Mailing address:	220 W FIRST ST LOS ANGELES, CA 90053
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	THE TIMES MIRROR COMPANY
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

TIMES MIRROR COMPANY THE (Continued) **1000221231**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	10/27/1980
Site name:	TIMES MIRROR COMPANY THE
Classification:	Large Quantity Generator
Violation Status:	No violations found

A23 Target Property **LOS ANGELES TIMES-SOUTH TANKS** **RGA LUST** **S114645329**
1375 SUNFLOWER **N/A**
COSTA MESA, CA

Site 23 of 30 in cluster A

Actual: 31 ft.

RGA LUST:

Name:	LOS ANGELES TIMES-SOUTH TANKS		
Address:	1375 SUNFLOWER		
City:	COSTA MESA		
State:	COSTA MESA		
	2012	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
Name:	LOS ANGELES TIMES-SOUTH TANKS		
Address:	1375 SUNFLOWER		
City:	COSTA MESA		
State:	COSTA MESA		
	2011	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
Name:	LOS ANGELES TIMES-SOUTH TANKS		
Address:	1375 SUNFLOWER		
City:	COSTA MESA		
State:	COSTA MESA		
	2010	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
Name:	LOS ANGELES TIMES-SOUTH TANKS		
Address:	1375 SUNFLOWER		
City:	COSTA MESA		
State:	COSTA MESA		
	2009	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
Name:	LOS ANGELES TIMES-SOUTH TANKS		
Address:	1375 SUNFLOWER		
City:	COSTA MESA		
State:	COSTA MESA		
	2008	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
Name:	LOS ANGELES TIMES-SOUTH TANKS		
Address:	1375 SUNFLOWER		
City:	COSTA MESA		
State:	COSTA MESA		
	2007	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER

LOS ANGELES TIMES-SOUTH TANKS (Continued) **S114645329**

Name: LOS ANGELES TIMES-SOUTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2006 LOS ANGELES TIMES-SOUTH TANKS 1375 SUNFLOWER
Name: LOS ANGELES TIMES-SOUTH TANKS
Address: 1375 SUNFLOWER
City: COSTA MESA
State: COSTA MESA
2005 LOS ANGELES TIMES-SOUTH TANKS 1375 SUNFLOWER

A24 Target Property **FORMER LOS ANGELES TIMES**
1375 W. SUNFLOWER AVENUE
COSTA MESA, CA 92526

CPS-SLIC **S121476005**
CERS **N/A**

Site 24 of 30 in cluster A

Actual: 31 ft.

CPS-SLIC:

Name:	FORMER LOS ANGELES TIMES
Address:	1375 W. SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 92526
Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	01/12/2018
Global Id:	T10000011210
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	33.69387
Longitude:	-117.91612
Case Type:	Cleanup Program Site
Case Worker:	CAB
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE), Diesel, Other Petroleum
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	FORMER LOS ANGELES TIMES
Address:	1375 W. SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 92526
Site ID:	431818
CERS ID:	T10000011210
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

FORMER LOS ANGELES TIMES (Continued) **S121476005**

Affiliation Phone: 9517824495

A25 Target Property **L.A. TIMES** **RGA LUST** **S114641047**
1375 SUNFLOWER AVENUE **N/A**
COSTA MESA, CA

Site 25 of 30 in cluster A

Actual: 31 ft.

RGA LUST:
Name: L.A. TIMES
Address: 1375 SUNFLOWER AVENUE
City: COSTA MESA
State: COSTA MESA
1992 L.A. TIMES 1375 SUNFLOWER AVENUE

A26 Target Property **LOS ANGELES TIMES COMMUNICATIONS LLC** **RCRA-SQG** **1000102036**
1375 SUNFLOWER AVE **ENVIROSTOR** **CAD043644236**
COSTA MESA, CA 92626 **LUST**
CPS-SLIC
Site 26 of 30 in cluster A **HIST UST**
CA FID UST
Actual: 31 ft. **Orange Co. Industrial Site**
ICIS
US AIRS
FINDS
ECHO
Cortese
EMI
ENF
HIST CORTESE
NPDES
WDS
CIWQS
CERS

RCRA-SQG:
Date form received by agency: 10/12/2000
Facility name: LOS ANGELES TIMES COMMUNICATIONS L L C
Site name: LOS ANGELES TIMES ORANGE COUNTY FACILITY
Facility address: 1375 SUNFLOWER
COSTA MESA, CA 92626
EPA ID: CAD043644236
Contact: MARY ELLEN VOJTEK
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 213-237-5014
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	L A TIMES COMMUNICATIONS LLC
Owner/operator address:	202 W 1ST ST LOS ANGELES, CA 90012
Owner/operator country:	Not reported
Owner/operator telephone:	212-237-5014
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	08/15/2000
Site name:	LOS ANGELES TIMES COMMUNICATIONS L L C
Classification:	Small Quantity Generator
Date form received by agency:	08/15/2000
Site name:	LOS ANGELES TIMES COMMUNICATIONS L L C
Classification:	Large Quantity Generator
Date form received by agency:	09/01/1996
Site name:	LOS ANGELES TIMES COMMUNICATIONS L L C
Classification:	Large Quantity Generator
Date form received by agency:	04/13/1990
Site name:	LOS ANGELES TIMES
Classification:	Large Quantity Generator

Hazardous Waste Summary:

. Waste code:	D001
. Waste name:	IGNITABLE WASTE

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D011
. Waste name: SILVER

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 02/04/1993
Date achieved compliance: 01/11/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 06/16/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/18/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/25/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 04/01/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 01/11/1994

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 02/04/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/11/1994
Evaluation lead agency: State Contractor/Grantee

ENVIROSTOR:
Name: LOS ANGELES TIMES - COSTA MESA
Address: 1375 SUNFLOWER AVENUE
City,State,Zip: COSTA MESA, CA 92626
Facility ID: 71003669
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 74
Senate: 37
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.69555
Longitude: -117.9158
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD043644236
Alias Type: EPA Identification Number
Alias Name: 110001152984
Alias Type: EPA (FRS #)
Alias Name: 71003669
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: LOS ANGELES TIMES-SOUTH TANKS
Address: 1375 SUNFLOWER
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605999595
Global Id: T0605999595
Latitude: 33.692277
Longitude: -117.916434
Status: Completed - Case Closed
Status Date: 02/11/2013
Case Worker: DB
RB Case Number: SL8R156
Local Agency: ORANGE COUNTY LOP
File Location: Local Agency
Local Case Number: 91UT064
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

LUST:
Global Id: T0605999595
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: carl.bernhardt@waterboards.ca.gov
Phone Number: 9517824495

Global Id: T0605999595
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

LUST:
Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 07/15/2009
Action: Staff Letter

Global Id: T0605999595

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Action Type: ENFORCEMENT
Date: 04/28/2010
Action: Staff Letter

Global Id: T0605999595
Action Type: Other
Date: 09/26/1990
Action: Leak Discovery

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 12/22/2010
Action: Staff Letter

Global Id: T0605999595
Action Type: REMEDIATION
Date: 01/01/1995
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: REMEDIATION
Date: 12/15/2005
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: REMEDIATION
Date: 02/01/2001
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: REMEDIATION
Date: 12/17/2001
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 02/27/1991
Action: Notice of Responsibility

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 04/18/2003
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 09/22/2003
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 03/30/2005
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 06/21/2007

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 03/15/2006
Action: Staff Letter

Global Id: T0605999595
Action Type: Other
Date: 05/10/1991
Action: Leak Reported

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 04/17/2012
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 02/11/2013
Action: Closure/No Further Action Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 08/10/2012
Action: Notification - Preclosure

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 08/10/2012
Action: Notification - Preclosure

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 08/10/2012
Action: Notification - Preclosure

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 03/26/2012
Action: Petition Submitted for Review

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 09/17/2012
Action: Staff Letter

LUST:
Global Id: T0605999595
Status: Open - Case Begin Date
Status Date: 09/26/1990

Global Id: T0605999595
Status: Open - Verification Monitoring
Status Date: 02/28/2002

Global Id: T0605999595

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Status: Open - Eligible for Closure
Status Date: 01/08/2013

Global Id: T0605999595
Status: Completed - Case Closed
Status Date: 02/11/2013

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901160
Global Id: T0605901160
Latitude: 33.693822
Longitude: -117.916868
Status: Open - Verification Monitoring
Status Date: 05/10/2018
Case Worker: JW
RB Case Number: 083001520T
Local Agency: ORANGE COUNTY LOP
File Location: Local Agency
Local Case Number: 92UT073
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Diesel, Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

LUST:
Global Id: T0605901160
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: carl.bernhardt@waterboards.ca.gov
Phone Number: 9517824495

Global Id: T0605901160
Contact Type: Local Agency Caseworker
Contact Name: JULIE WOZENCRAFT
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: jwozencraft@ochca.com
Phone Number: 7144336252

LUST:
Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 07/13/2009
Action: Staff Letter

Global Id: T0605901160

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Action Type: ENFORCEMENT
Date: 06/30/2017
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 01/08/2018
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/31/2009
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 08/28/2015
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/19/2015
Action: File review

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 08/12/2010
Action: File review

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 04/07/2011
Action: File review

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/01/2011
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/16/2010
Action: File review

Global Id: T0605901160
Action Type: Other
Date: 05/22/1992
Action: Leak Discovery

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 07/15/2011
Action: Staff Letter

Global Id: T0605901160
Action Type: RESPONSE
Date: 10/15/2013

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Action: Other Workplan - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 03/14/2014
Action: Other Workplan - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 08/08/2017
Action: Other Workplan - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 05/10/2017
Action: Site Investigation Workplan - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 11/09/2017
Action: Request for Closure - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 06/19/2018
Action: Request for Closure - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 06/19/2018
Action: Request for Closure - Regulator Responded

Global Id: T0605901160
Action Type: REMEDIATION
Date: 02/23/1998
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901160
Action Type: REMEDIATION
Date: 02/01/2003
Action: Free Product Removal

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/02/1992
Action: Notice of Responsibility

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 07/25/2003
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/20/2007
Action: Staff Letter

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/21/2007
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 09/26/2005
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/30/2005
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/27/2006
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/18/2007
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/20/2011
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 09/18/2012
Action: Staff Letter

Global Id: T0605901160
Action Type: Other
Date: 05/22/1992
Action: Leak Reported

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/15/2006
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 04/29/2008
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 11/04/2013
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Date: 07/31/2013
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 08/10/2018
Action: Email Correspondence

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/06/2017
Action: Notice of Responsibility

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 10/01/2008
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/22/2008
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 11/02/2012
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 08/15/2017
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 05/14/2018
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 05/11/2018
Action: Staff Letter

LUST:
Global Id: T0605901160
Status: Open - Case Begin Date
Status Date: 05/22/1992

Global Id: T0605901160
Status: Open - Remediation
Status Date: 02/23/1998

Global Id: T0605901160
Status: Open - Verification Monitoring
Status Date: 05/10/2018

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Name:	L A TIMES
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605979014
Global Id:	T0605979014
Latitude:	33.694511
Longitude:	-117.916361
Status:	Completed - Case Closed
Status Date:	09/26/1990
Case Worker:	DB
RB Case Number:	Not reported
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	88UT115
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0605979014
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	carl.bernhardt@waterboards.ca.gov
Phone Number:	9517824495

Global Id:	T0605979014
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

LUST:

Global Id:	T0605979014
Action Type:	Other
Date:	05/21/1988
Action:	Leak Discovery

Global Id:	T0605979014
Action Type:	Other
Date:	05/21/1988
Action:	Leak Reported

LUST:

Global Id:	T0605979014
Status:	Open - Case Begin Date
Status Date:	05/21/1988

Global Id:	T0605979014
Status:	Completed - Case Closed

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Status Date: 09/26/1990

ORANGE CO. LUST:

Name:	L A TIMES
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	88UT115
Released Substance:	Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed:	09/26/1990
Record ID:	RO0001604

Name:	LOS ANGELES TIMES-NORTH TANKS
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	92UT073
Released Substance:	Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4; Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	Not reported
Record ID:	RO0002698

Name:	LOS ANGELES TIMES-SOUTH TANKS
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	91UT064
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	02/11/2013
Record ID:	RO0002469

LUST REG 8:

Name:	LOS ANGELES TIMES-NORTH TANKS
Address:	1375 SUNFLOWER
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083001520T
Local Case Num:	92UT073
Case Type:	Other ground water affected
Substance:	12034,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605901160
How Stopped Date:	9/9/9999
Enter Date:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	5/22/1992
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	2/23/1998
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	ND
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6955108
Longitude:	-117.9137948
MTBE Date:	3/12/2002
Max MTBE GW:	3100
MTBE Concentration:	0
Max MTBE Soil:	0
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	CAB
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Name:	L A TIMES
Address:	1375 SUNFLOWER
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	88UT115
Case Type:	Soil only
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Global ID:	T0605979014
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	5/21/1988
Enforcement Date:	Not reported
Close Date:	9/26/1990
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Name:	LOS ANGELES TIMES-SOUTH TANKS
Address:	1375 SUNFLOWER
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Post remedial action monitoring
Case Number:	SL8R156
Local Case Num:	91UT064
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	SA

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605999595
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	9/26/1990
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	2/28/2002
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

SLIC REG 8:

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVENUE
City:	COSTA MESA
Type:	Surface Water
Facility Status:	Closed
Staff:	XXX
Substance:	CHROMIUM
Lead Agency:	Local Agency
Location Code:	CM-9
Thomas Bros Code:	859-A3

HIST UST:

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 92626
File Number:	0002EF3F
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EF3F.pdf
Region:	STATE
Facility ID:	00000019406
Facility Type:	Other
Other Type:	NEWSPAPER
Contact Name:	Not reported
Telephone:	7149572000
Owner Name:	TIMES MIRROR CORPORATION
Owner Address:	TIMES MIRROW SQUARE
Owner City,St,Zip:	LOS ANGELES, CA 90053
Total Tanks:	0010
Tank Num:	001
Container Num:	1
Year Installed:	1980
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	1980
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	4
Year Installed:	1980
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	004
Container Num:	5
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	005
Container Num:	6
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 006
Container Num: 7
Year Installed: 1980
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 007
Container Num: 8
Year Installed: 1980
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 008
Container Num: 9
Year Installed: 1980
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 009
Container Num: 10
Year Installed: 1978
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 010
Container Num: 11
Year Installed: Not reported
Tank Capacity: 00006000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 30001018
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Facility Phone: 7149665645
Mail To: Not reported
Mailing Address: LOS ANGELES TIMES-OR
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Orange Co. Industrial Site:
Name: LOS ANGELES TIMES
Address: 1375 SUNFLOWER AVE
City,State,Zip: COSTA MESA, CA 92626
Case ID: 91IC005
Record ID: RO0000337
Current Status: CLOSED 5/15/1991
Closure Type: Transferred to OCLOP Program
Released Chemical: INK/SOLVENT

ICIS:
Enforcement Action ID: CASCAA0000060590001900072
FRS ID: 110001152984
Action Name: LOS ANGELES TIMES COMMUNICATIONS LLC 060590001900072
Facility Name: LOS ANGELES TIMES COMMUNICATIONS LLC
Facility Address: 1375 SUNFLOWER AVE
COSTA MESA, CA 92626
Enforcement Action Type: Administrative Order
Facility County: ORANGE
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 2711
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.694388
Longitude in Decimal Degrees: -117.916098
Permit Type Desc: Not reported
Program System Acronym: CASCA0000605900019
Facility NAICS Code: 511110
Tribal Land Code: Not reported

Enforcement Action ID: CASCAA0000060590001900071
FRS ID: 110001152984
Action Name: LOS ANGELES TIMES COMMUNICATIONS LLC 060590001900071
Facility Name: LOS ANGELES TIMES COMMUNICATIONS LLC
Facility Address: 1375 SUNFLOWER AVE
COSTA MESA, CA 92626
Enforcement Action Type: Notice of Violation
Facility County: ORANGE
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2711

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	33.694388
Longitude in Decimal Degrees:	-117.916098
Permit Type Desc:	Not reported
Program System Acronym:	CASCA0000605900019
Facility NAICS Code:	511110
Tribal Land Code:	Not reported

US AIRS (AFS):

Envid:	1000102036
Region Code:	09
County Code:	CA059
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
D and B Number:	Not reported
Facility Site Name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Primary SIC Code:	2711
NAICS Code:	511110
Default Air Classification Code:	MAJ
Facility Type of Ownership Code:	POF
Air CMS Category Code:	TVM
HPV Status:	Not reported

US AIRS (AFS):

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	Not reported
Activity Status Date:	2014-07-30 00:00:00
Activity Group:	Case File
Activity Type:	Case File
Activity Status:	Resolved

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2015-08-04 00:00:00
Activity Status Date:	2015-08-28 16:47:21
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2015-08-07 00:00:00
Activity Status Date:	2015-08-28 16:49:11

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2016-08-30 00:00:00
Activity Status Date:	2016-09-07 10:57:29
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2016-08-31 00:00:00
Activity Status Date:	2016-09-07 10:58:13
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1990-12-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1992-10-23 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1993-08-27 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1996-10-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1997-10-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1998-12-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2004-09-13 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-09-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-09-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-06-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-09-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-02-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-05-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-06-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-02-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-07-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-07-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-02-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-07-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Date: 2009-02-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-05-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-06-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2010-09-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2010-09-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2011-02-10 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2011-08-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2011-08-30 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-02-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-08-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-08-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-02-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-08-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-08-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Date:	2014-05-02 00:00:00
Activity Status Date:	2014-05-02 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Formal
Activity Status:	Final Order Issued

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-06-27 00:00:00
Activity Status Date:	2013-06-27 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	Not reported
Activity Status Date:	2014-07-30 00:00:00
Activity Group:	Case File
Activity Type:	Case File
Activity Status:	Resolved

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2015-02-20 00:00:00
Activity Status Date:	2015-08-28 16:48:26
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2015-08-04 00:00:00
Activity Status Date:	2015-08-28 16:47:21
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2015-08-07 00:00:00
Activity Status Date:	2015-08-28 16:49:11
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2016-08-30 00:00:00
Activity Status Date:	2016-09-07 10:57:29
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2016-08-31 00:00:00
Activity Status Date:	2016-09-07 10:58:13
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	1998-12-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2000-08-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2001-01-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-09-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-12-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-02-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-10-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-09-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-09-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Date:	2004-09-30 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-02-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-03-01 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-06-01 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-09-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-02-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-05-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-06-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-02-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-07-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-07-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-02-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-07-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-02-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-05-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-06-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Date:	2010-09-28 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2010-09-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-02-10 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-08-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-08-30 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-02-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-08-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-08-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-08-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-08-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-08-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-02-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-08-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-08-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASCA0000605900019
Facility Registry ID: 110001152984
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-02-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-05-02 00:00:00
Activity Status Date:	2014-05-02 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Formal
Activity Status:	Final Order Issued

Region Code:	09
Programmatic ID:	AIR CASCA0000605900019
Facility Registry ID:	110001152984
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-06-27 00:00:00
Activity Status Date:	2013-06-27 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

FINDS:

Registry ID: 110001152984

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

RISK AND TECHNOLOGY REVIEW

HAZARDOUS AIR POLLUTANT MAJOR

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

AIR MAJOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000102036
Registry ID:	110001152984
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001152984

CORTESE:

Name:	LOS ANGELES TIMES-NORTH TANKS
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605901160
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - VERIFICATION MONITORING
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

EMI:

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1987
County Code:	30

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	37
Reactive Organic Gases Tons/Yr:	37
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	76
Reactive Organic Gases Tons/Yr:	76
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	19
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AVE

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

City,State,Zip:	COSTA MESA, CA 92626
Year:	1996
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	16
Reactive Organic Gases Tons/Yr:	12
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1997
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1998
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1999
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	TIMES MIRROR CO.,LOS ANGELES T
Address:	1375 SUNFLOWER AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	2000
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

ENF:

Name:	ORANGE COUNTY FACILITY
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA
Region:	8
Facility Id:	246123
Agency Name:	Los Angeles Times Communications LLC
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	2711
SIC Desc 1:	Newspapers: Publishing, or Publishing and Printing
SIC Code 2:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	8 302600N01
Reg Measure Id:	158762
Reg Measure Type:	Unregulated
Region:	8
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	224832
Region:	8
Order / Resolution Number:	89-031
Enforcement Action Type:	Admin Civil Liability
Effective Date:	02/24/1989
Adoption/Issuance Date:	Not reported
Achieve Date:	1989-03-06

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 302600N01
Description:	SPILL OF COOLING WATER WITH CHROMATE SOLUTION.
Program:	UNREGS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	ORANGE COUNTY FACILITY
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA
Region:	8
Facility Id:	246123
Agency Name:	Los Angeles Times Communications LLC
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	2711
SIC Desc 1:	Newspapers: Publishing, or Publishing and Printing
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	8 302600N01

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Reg Measure Id:	158762
Reg Measure Type:	Unregulated
Region:	8
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	223730
Region:	8
Order / Resolution Number:	90-039
Enforcement Action Type:	Admin Civil Liability
Effective Date:	02/05/1990
Adoption/Issuance Date:	Not reported
Achieve Date:	1990-02-21
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 302600N01
Description:	13383 - THREE SEPERATE DISCHARGES: 11/22/89 - 12/26/89, 11/27/89, AND 1/22/90
Program:	UNREGS
Latest Milestone Completion Date:	1990-02-21
# Of Programs1:	1
Total Assessment Amount:	30000
Initial Assessed Amount:	0
Liability $ Amount:	30000
Project $ Amount:	0
Liability $ Paid:	30000
Project $ Completed:	0
Total $ Paid/Completed Amount:	30000

HIST CORTESE:

edr_fname:	LOS ANGELES TIMES
edr_fadd1:	1375
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Reg By:	LTNKA
Reg Id:	083001520T

NPDES:

Name:	GW CLEANUP-C.M.,SUNFLOWER
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Active
NPDES Number:	CAG918001
Region:	8
Agency Number:	26204
Regulatory Measure ID:	206063
Place ID:	228229
Order Number:	R8-2012-0027
WDID:	8 302818001
Regulatory Measure Type:	Enrollee
Program Type:	NPDNONMUNIPRCS
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	12/31/1996
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	07/01/2017
Discharge Address:	2000 East 8th Street
Discharge Name:	Los Angeles Times Communications LLC
Discharge City:	Los Angeles
Discharge State:	CA
Discharge Zip:	90021
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAG918001
Status:	Active
Agency Number:	26204
Region:	8
Regulatory Measure ID:	206063
Order Number:	R8-2012-0027
Regulatory Measure Type:	Enrollee
Place ID:	228229
WDID:	8 302818001
Program Type:	NPDNONMUNIPRCS
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	12/31/1996
Expiration Date Of Regulatory Measure:	07/01/2017
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Los Angeles Times Communications LLC
Discharge Address:	2000 East 8th Street
Discharge City:	Los Angeles
Discharge State:	CA
Discharge Zip:	90021
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	LA PRESS
Address:	1375 SUNFLOWER AVENUE

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 30C383742
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	06/20/2018
Operator Name:	Steel Wave CDS LLC
Operator Address:	4000 East Third Ave Ste 500
Operator City:	Foster City
Operator State:	California
Operator Zip:	94404

Name:	LA PRESS
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Active
NPDES Number:	CAS000002
Region:	8
Agency Number:	0
Regulatory Measure ID:	498875
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	8 30C383742
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/20/2018
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	4000 East Third Ave Ste 500
Discharge Name:	Steel Wave CDS LLC
Discharge City:	Foster City
Discharge State:	California
Discharge Zip:	94404
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Name:	TREH/KEARNY COSTA MESA, LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Terminated
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	465690
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 30NEC001499
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/10/2015
Termination Date Of Regulatory Measure:	12/04/2017
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	12016 Telegraph Road
Discharge Name:	TREH/Kearny Costa Mesa, LLC
Discharge City:	Santa Fe Springs
Discharge State:	California
Discharge Zip:	90670
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	465690
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30NEC001499
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	11/03/2015
Processed Date:	11/10/2015
Status:	Active
Status Date:	11/10/2015
Place Size:	26
Place Size Unit:	Acres
Contact:	Anne Price
Contact Title:	Director of Property Management

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Contact Phone:	562-677-8581
Contact Phone Ext:	Not reported
Contact Email:	aprice@kearny.com
Operator Name:	TREH/Kearny Costa Mesa, LLC
Operator Address:	12016 Telegraph Road
Operator City:	Santa Fe Springs
Operator State:	California
Operator Zip:	90670
Operator Contact:	Anne Price
Operator Contact Title:	Director of Property Management
Operator Contact Phone:	562-677-8581
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	aprice@kearny.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Anne Price
Certifier Title:	Director of Property Management
Certification Date:	22-SEP-16
Primary Sic:	9999-Nonclassifiable Establishments
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Terminated
Agency Number:	0
Region:	8
Regulatory Measure ID:	465690
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

WDID:	8 30NEC001499
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/10/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	12/04/2017
Discharge Name:	TREH/Kearny Costa Mesa, LLC
Discharge Address:	12016 Telegraph Road
Discharge City:	Santa Fe Springs
Discharge State:	California
Discharge Zip:	90670
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	TREH/KEARNY COSTA MESA LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 30NEC001499
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	12/18/2017
Operator Name:	TREH/Kearny Costa Mesa LLC
Operator Address:	12016 Telegraph Road
Operator City:	Santa Fe Springs
Operator State:	California
Operator Zip:	90670

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	465690
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30NEC001499
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	11/03/2015
Processed Date:	11/10/2015
Status:	Active
Status Date:	11/10/2015
Place Size:	26
Place Size Unit:	Acres
Contact:	Anne Price
Contact Title:	Director of Property Management
Contact Phone:	562-677-8581
Contact Phone Ext:	Not reported
Contact Email:	aprice@kearny.com
Operator Name:	TREH/Kearny Costa Mesa, LLC
Operator Address:	12016 Telegraph Road
Operator City:	Santa Fe Springs
Operator State:	California
Operator Zip:	90670
Operator Contact:	Anne Price
Operator Contact Title:	Director of Property Management
Operator Contact Phone:	562-677-8581
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	aprice@kearny.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Anne Price
Certifier Title:	Director of Property Management
Certification Date:	22-SEP-16

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Primary Sic:	9999-Nonclassifiable Establishments
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Terminated
Agency Number:	0
Region:	8
Regulatory Measure ID:	465690
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 30NEC001499
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/10/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	12/04/2017
Discharge Name:	TREH/Kearny Costa Mesa, LLC
Discharge Address:	12016 Telegraph Road
Discharge City:	Santa Fe Springs
Discharge State:	California
Discharge Zip:	90670
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 30I016012
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	10/08/2015
Operator Name:	Los Angeles Times Communications LLC
Operator Address:	2000 E 8th St
Operator City:	Los Angeles
Operator State:	California
Operator Zip:	90021

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Terminated
Agency Number:	0

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Region:	8
Regulatory Measure ID:	209028
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 30I016012
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	08/14/2000
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/04/2015
Discharge Name:	Los Angeles Times Communications LLC
Discharge Address:	2000 E 8th St
Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90021
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	209028
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30I016012
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/04/2015
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	08/14/2000
Status:	Terminated
Status Date:	10/08/2015
Place Size:	20
Place Size Unit:	Acres
Contact:	Racine Watts
Contact Title:	Not reported
Contact Phone:	213-237-5680
Contact Phone Ext:	Not reported
Contact Email:	racine.watts@latimes.com
Operator Name:	Los Angeles Times Communications LLC
Operator Address:	2000 E 8th St
Operator City:	Los Angeles
Operator State:	California
Operator Zip:	90021
Operator Contact:	Racine Watts
Operator Contact Title:	Dir EHS
Operator Contact Phone:	213-237-5680
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	racine.watts@latimes.com
Operator Type:	Private Business

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	714-966-5645
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Pacific Ocean
Certifier:	Racine Watts
Certifier Title:	Director Environmental Health Safety
Certification Date:	26-AUG-15
Primary Sic:	2711-Newspapers: Publishing, or Publishing and Printing
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

WDS:

Name:	LOS ANGELES TIMES COSTA MESA
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Facility ID:	Santa Ana River 30I016012
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	Not reported
Facility Contact:	Not reported
Agency Name:	LOS ANGELES TIMES
Agency Address:	202 W. 1ST STREET
Agency City,St,Zip:	LOS ANGELES 90012

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Agency Contact:	MARY ELLEN VOJTEK
Agency Telephone:	2132375014
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Name:	GW CLEANUP-C.M.SUNFLOWER
Address:	1375 SUNFLOWER AVE
City:	COSTA MESA
Facility ID:	Santa Ana River 302818001
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG918001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	2132375014
Facility Contact:	MARY ELLEN VOJTEK
Agency Name:	LOS ANGELES TIMES
Agency Address:	202 W. 1ST STREET
Agency City,St,Zip:	LOS ANGELES 90012
Agency Contact:	MARY ELLEN VOJTEK
Agency Telephone:	2132375014
Agency Type:	Private
SIC Code:	4959
SIC Code 2:	Not reported
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Primary Waste:	CNWTRS
Waste Type2:	Not reported
Waste2:	Contaminated Ground Water
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Complexity:	Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.

CIWQS:

Name:	LA PRESS
Address:	1375 SUNFLOWER AVENUE
City,State,Zip:	COSTA MESA, CA 92626
Agency:	Steel Wave CDS LLC
Agency Address:	4000 East Third Ave Ste 500, Foster City, CA 94404
Place/Project Type:	Construction - Industrial, Reconstruction
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 30C383742
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	06/20/2018
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.69388
Longitude:	-117.91613

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Agency:	Los Angeles Times
Agency Address:	202 W 1st St, Los Angeles, CA 90012
Place/Project Type:	Industrial - Newspapers: Publishing, or Publishing and Printing

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

SIC/NAICS:	2711
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 30I006492
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	04/24/1992
Termination Date:	11/20/2000
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.69562
Longitude:	-117.91542

Name:	GW CLEANUP-C.M.,SUNFLOWER
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA 92626
Agency:	Los Angeles Times Communications LLC
Agency Address:	2000 East 8th Street, Los Angeles, CA 90021
Place/Project Type:	Service/Commercial Site, NEC
SIC/NAICS:	4959
Region:	8
Program:	NPDNONMUNIPRCS
Regulatory Measure Status:	Active
Regulatory Measure Type:	Enrollee
Order Number:	R8-2012-0027
WDID:	8 302818001
NPDES Number:	CAG918001
Adoption Date:	Not reported
Effective Date:	12/31/1996
Termination Date:	Not reported
Expiration/Review Date:	07/01/2017
Design Flow:	0.0432
Major/Minor:	Minor
Complexity:	A
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.695608
Longitude:	-117.915442

Name:	LOS ANGELES TIMES
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Agency:	Los Angeles Times Communications LLC
Agency Address:	2000 E 8th St, Los Angeles, CA 90021
Place/Project Type:	Industrial - Newspapers: Publishing, or Publishing and Printing
SIC/NAICS:	2711
Region:	8
Program:	INDSTW

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 30I016012
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	08/14/2000
Termination Date:	09/04/2015
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	2
Violations within 5 years:	2
Latitude:	33.69562
Longitude:	-117.91542

Name:	TREH/KEARNY COSTA MESA, LLC
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Agency:	TREH/Kearny Costa Mesa, LLC
Agency Address:	12016 Telegraph Road Suite 205, Santa Fe Springs, CA 90670
Place/Project Type:	Industrial - Nonclassifiable Establishments
SIC/NAICS:	9999
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 30NEC001499
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	11/10/2015
Termination Date:	12/04/2017
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.693837
Longitude:	-117.916153

CERS:

Name:	GW CLEANUP-C.M.,SUNFLOWER
Address:	1375 SUNFLOWER
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	350818
CERS ID:	228229
CERS Description:	NPDES Wastewater and Stormwater

Evaluation:

Eval General Type:	Compliance Sampling Inspection
Eval Date:	02-14-2002
Violations Found:	No

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Eval Type:	RWQCB Type A compliance inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	NPDNONMUNI
Eval Source:	CIWQS

Eval General Type:	Compliance Sampling Inspection
Eval Date:	03-27-2003
Violations Found:	No
Eval Type:	RWQCB Type A compliance inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	NPDNONMUNI
Eval Source:	CIWQS

Eval General Type:	Other/Unknown
Eval Date:	04-01-1998
Violations Found:	No
Eval Type:	Miscellaneous Inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	NPDNONMUNI
Eval Source:	CIWQS

Eval General Type:	Compliance Sampling Inspection
Eval Date:	04-21-1999
Violations Found:	No
Eval Type:	RWQCB Type A compliance inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	NPDNONMUNI
Eval Source:	CIWQS

Eval General Type:	Other/Unknown
Eval Date:	06-05-1996
Violations Found:	No
Eval Type:	Miscellaneous Inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	NPDNONMUNI
Eval Source:	CIWQS

Eval General Type:	Other/Unknown
Eval Date:	06-10-1997
Violations Found:	No
Eval Type:	Miscellaneous Inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	NPDNONMUNI
Eval Source:	CIWQS

Eval General Type:	Compliance Sampling Inspection
Eval Date:	06-25-2001
Violations Found:	No
Eval Type:	RWQCB Type A compliance inspection
Eval Notes:	Not reported
Eval Division:	Water Boards

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Eval Program: NPDNONMUNI
Eval Source: CIWQS

Eval General Type: Compliance Sampling Inspection
Eval Date: 06-27-2000
Violations Found: No
Eval Type: RWQCB Type A compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: NPDNONMUNI
Eval Source: CIWQS

Name: L A TIMES
Address: 1375 SUNFLOWER
City,State,Zip: COSTA MESA, CA 92626
Site ID: 221378
CERS ID: T0605979014
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824495

Name: LOS ANGELES TIMES-SOUTH TANKS
Address: 1375 SUNFLOWER
City,State,Zip: COSTA MESA, CA 92626
Site ID: 241541
CERS ID: T0605999595
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Affiliation Phone: 9517824495

Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Name: LOS ANGELES TIMES-NORTH TANKS
Address: 1375 SUNFLOWER
City,State,Zip: COSTA MESA, CA 92626
Site ID: 242789
CERS ID: T0605901160
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824495

Affiliation Type Desc: Local Agency Caseworker
Entity Name: JULIE WOZENCRAFT - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 EAST DYER ROAD SUITE 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336252

Name: LA PRESS
Address: 1375 SUNFLOWER AVENUE
City,State,Zip: COSTA MESA, CA 92626
Site ID: 535265
CERS ID: 864994
CERS Description: Construction Storm Water

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Steel Wave CDS LLC
Entity Title: Operator
Affiliation Address: 4000 East Third Ave Ste 500
Affiliation City: Foster City
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94404

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1000102036**

Affiliation Phone: Not reported

A27
Target
Property

GW CLEANUP-C.M.NASUNFLOWER **FINDS** **1023264416**
1375 SUNFLOWER **N/A**
COSTA MESA, CA 92626

Site 27 of 30 in cluster A

Actual:
31 ft.

FINDS:

Registry ID: 110065539046

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A28
Target
Property

CA-ORANGE COUNTY PLANT **UST** **U004263040**
1375 SUNFLOWER AVE **N/A**
COSTA MESA, CA 92626

Site 28 of 30 in cluster A

Actual:
31 ft.

UST:

Name:	CA-ORANGE COUNTY PLANT
Address:	1375 SUNFLOWER AVE
City,State,Zip:	COSTA MESA, CA 92626
Facility ID:	Not reported
Permitting Agency:	Orange County Environmental Health
Latitude:	33.69455
Longitude:	-117.91644

A29
< 1/8
1 ft.

L. A. TIMES COSTA MESA **CERS** **S123526764**
UNKNOWN **N/A**
COSTA MESA, CA 92626

Site 29 of 30 in cluster A

Relative:
Higher

Actual:
31 ft.

CERS:

Name:	L. A. TIMES COSTA MESA
Address:	UNKNOWN
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	476297
CERS ID:	110041429095
CERS Description:	US EPA Air Emission Inventory System (EIS)

A30 **L. A. TIMES COSTA MESA** **FINDS** **1014677051**
UNKNOWN **N/A**
< 1/8 **COSTA MESA, CA 92626**
1 ft.

Site 30 of 30 in cluster A

Relative: **Higher**

Actual: **31 ft.**

FINDS:

Registry ID: 110041429095

Environmental Interest/Information System
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B31 **IKEA US WEST INC #167** **RCRA NonGen / NLR** **1024810560**
SSE **1475 S COAST DR** **CAL000290414**
< 1/8 **COSTA MESA, CA 92626**
0.018 mi.
97 ft.

Site 1 of 2 in cluster B

Relative: **Lower**

Actual: **22 ft.**

RCRA NonGen / NLR:

Date form received by agency:	01/21/2005
Facility name:	IKEA US WEST INC #167
Facility address:	1475 S COAST DR COSTA MESA, CA 92626
EPA ID:	CAL000290414
Contact:	SHIRLEY SCOTT
Contact address:	1475 SOUTH COAST DR COSTA MESA, CA 92626
Contact country:	Not reported
Contact telephone:	714-751-7167
Contact email:	SHIRLEY.SCOTT@IKEA.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	IKEA US WEST INC #167
Owner/operator address:	1475 S COAST DR COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	714-751-7167
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	SHIRLEY SCOTT
Owner/operator address:	1475 SOUTH COAST DR COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	714-751-7167
Owner/operator email:	Not reported

IKEA US WEST INC #167 (Continued) **1024810560**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

B32 **IKEA US WEST INC #167** **CERS HAZ WASTE** **S113135638**
SSE **1475 S COAST DR** **HAZNET** **N/A**
< 1/8 **COSTA MESA, CA 92626** **CERS**
0.018 mi.
97 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
22 ft.

CERS HAZ WASTE:
Name: IKEA
Address: 1475 S COAST DR
City,State,Zip: COSTA MESA, CA 92626
Site ID: 123931
CERS ID: 10456105
CERS Description: Hazardous Waste Generator

Name: IKEA
Address: 1475 S COAST DR
City,State,Zip: COSTA MESA, CA 92626
Site ID: 123931
CERS ID: 10456105
CERS Description: Household Hazardous Waste Collection

HAZNET:
Name: IKEA US WEST INC #167
Address: 1475 S COAST DR
City,State,Zip: COSTA MESA, CA 92626
Year: 2017
GEPAID: CAL000290414
Contact: SHIRLEY SCOTT
Telephone: 7147517167
Mailing Name: Not reported
Mailing Address: 1475 S COAST DR
Mailing City,St,Zip: COSTA MESA, CA 926260000

IKEA US WEST INC #167 (Continued) **S113135638**

Gen County:	Orange
TSD EPA ID:	ARD069748192
TSD County:	99
Tons:	0.025
CA Waste Code:	343-Unspecified organic liquid mixture
Method:	H040-Incineration--Thermal Destruction Other Than Use As A Fuel
Facility County:	Orange

Name:	IKEA US WEST INC #167
Address:	1475 S COAST DR
City,State,Zip:	COSTA MESA, CA 92626
Year:	2017
GEPAID:	CAL000290414
Contact:	SHIRLEY SCOTT
Telephone:	7147517167
Mailing Name:	Not reported
Mailing Address:	1475 S COAST DR
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	ARD069748192
TSD County:	99
Tons:	0.4325
CA Waste Code:	352-Other organic solids
Method:	H040-Incineration--Thermal Destruction Other Than Use As A Fuel
Facility County:	Orange

Name:	IKEA US WEST INC #167
Address:	1475 S COAST DR
City,State,Zip:	COSTA MESA, CA 92626
Year:	2017
GEPAID:	CAL000290414
Contact:	SHIRLEY SCOTT
Telephone:	7147517167
Mailing Name:	Not reported
Mailing Address:	1475 S COAST DR
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	ARD069748192
TSD County:	99
Tons:	0.75
CA Waste Code:	791-Liquids with pH <= 2
Method:	H040-Incineration--Thermal Destruction Other Than Use As A Fuel
Facility County:	Orange

Name:	IKEA US WEST INC #167
Address:	1475 S COAST DR
City,State,Zip:	COSTA MESA, CA 92626
Year:	2017
GEPAID:	CAL000290414
Contact:	SHIRLEY SCOTT
Telephone:	7147517167
Mailing Name:	Not reported
Mailing Address:	1475 S COAST DR
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAD980675276
TSD County:	Kern

IKEA US WEST INC #167 (Continued) **S113135638**

Tons: 0.2
CA Waste Code: 291-Latex waste
Method: H132-Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County: Orange

Name: IKEA US WEST INC #167
Address: 1475 S COAST DR
City,State,Zip: COSTA MESA, CA 92626
Year: 2017
GEPAID: CAL000290414
Contact: SHIRLEY SCOTT
Telephone: 7147517167
Mailing Name: Not reported
Mailing Address: 1475 S COAST DR
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD980675276
TSD County: Kern
Tons: 0.2
CA Waste Code: 331-Off-specification, aged or surplus organics
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Orange

Click this hyperlink while viewing on your computer to access
7 additional CA_HAZNET: record(s) in the EDR Site Report.

CERS:
Name: IKEA
Address: 1475 S COAST DR
City,State,Zip: COSTA MESA, CA 92626
Site ID: 123931
CERS ID: 10456105
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 123931
Site Name: IKEA
Violation Date: 01-17-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Business has failed to adequately submit, establish and implement a business plan when storing and or handling a hazardous material at or above reportable quantities. Please contact me if you have any questions or need assistance, I am here to help. Thank you in advance, Michelle Rudaitis CMFD 714 327 7402 michelle.rudaitis@costamesaca.gov
Violation Division: Costa Mesa Fire Department
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-17-2019

IKEA US WEST INC #167 (Continued) **S113135638**

Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Facility needs to submit current submittals.
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000

Affiliation Type Desc:	Document Preparer
Entity Name:	Winnie Choi
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	Winnie Choi
Entity Title:	Not reported
Affiliation Address:	1475 S Coast Dr
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626
Affiliation Phone:	Not reported

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1475 S Coast Dr
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	IKEA U.S. West, Inc.
Entity Title:	Not reported
Affiliation Address:	420 Alan Wood Road
Affiliation City:	Conshohocken
Affiliation State:	PA
Affiliation Country:	United States
Affiliation Zip:	19428
Affiliation Phone:	(610) 834-0180

IKEA US WEST INC #167 (Continued) **S113135638**

Affiliation Type Desc:	Parent Corporation
Entity Name:	IKEA
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Winnie Choi
Entity Title:	Operations Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Gus Tinajero
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 751-7167

---

33 WSW < 1/8 0.020 mi. 104 ft. **MESA WATER, WELL #7**
3325 HARBOR BLVD
COSTA MESA, CA 92626

CERS HAZ WASTE **S123500905**
CERS **N/A**

Relative: Lower
Actual: 24 ft.

CERS HAZ WASTE:

Name:	MESA WATER, WELL #7
Address:	3325 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	134374
CERS ID:	10475452
CERS Description:	Hazardous Chemical Management

CERS:

Name:	MESA WATER, WELL #7
Address:	3325 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	134374
CERS ID:	10475452
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-07-2019
Violations Found:	No
Eval Type:	Routine done by local agency

MESA WATER, WELL #7 (Continued) **S123500905**

Eval Notes:	Not reported
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-20-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	RS - 19% Aqueous Ammonia - 4,000 gallon tank @ 85% full = 5,015 pounds No ammonia sensors - use a float sensor to indicate if a leak has occurred. Facility also uses SCADA system to determine abnormalities in the system. Qualifid Personnel - Kaying Le/Jessical Penhall RMP certification-10/2015 and revised 7/2017 for the well sites: Well sites will use 10/2015 date as there will be (1) RMP for all facilities. Seismic Evaluation-8/9/2016 H.R.-8/8/2017 Compliance Audit - due 10/2018 SOPs- must be certified annually. Worst case Scenario/Alternate completed: Off-site consequence.
Eval Division:	Orange County Environmental Health
Eval Program:	CalARP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-21-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	ADDED PE 6396
Eval Division:	Orange County Environmental Health
Eval Program:	CalARP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-22-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-30-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On Site for a routine CalARP inspection. Met with Safety ManagerJessica Penhall of BSI Group and Water Quality and Compliance Supervisor Kaying Lee of Mesa Water District. Also present was Water operations supervisor Dustin Burnside. Consent was granted to enter and inspect Mesa Water District facilities. Mesa Water District facilities all utilize 19% Ammonium hydroxide to disinfect groundwater. Stationary Source (SS) and regulated substance (RS) quantities are as follows: 1. Mesa Water Reliability Facility (MWRF) - 2,000 gallon tank filled to 85% = 2,507 pounds. 2. Mesa Water Wells #1, 3, 5, 7, and 9 - 4,000 gallon tank filled to 85% = 5,015 pounds at each well site. All SS's will be regulated under program level 2 regulations. This facility has developed one RMP for all stationary sources. The Program Level 2 RMP has been reviewed. The following were

MESA WATER, WELL #7 (Continued) **S123500905**

	observed: -- RMP Certification: The RMP was originally certified in October 2015. Several areas in the [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	CalARP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-04-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	2018 CERS OW/BA - listed as CalARP but has BLEACH - sent for validation
Eval Division:	Orange County Environmental Health
Eval Program:	CalARP
Eval Source:	CERS

Coordinates:

Site ID:	134374
Facility Name:	Mesa Water, Well #7
Env Int Type Code:	HMBP
Program ID:	10475452
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.693190
Longitude:	-117.919620

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000
Affiliation Type Desc:	Environmental Contact
Entity Name:	Kaying Lee
Entity Title:	Not reported
Affiliation Address:	1965 Placentia Avenue
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92627
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1965 Placentia Avenue
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92627
Affiliation Phone:	Not reported

MESA WATER, WELL #7 (Continued) **S123500905**

Affiliation Type Desc:	Identification Signer
Entity Name:	Kaying Lee
Entity Title:	Water Quality and Compliance Supervisor
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Parent Corporation
Entity Name:	Mesa Water District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Mesa Water District
Entity Title:	Not reported
Affiliation Address:	1965 Placentia Avenue
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92627
Affiliation Phone:	(949) 631-1200

Affiliation Type Desc:	Document Preparer
Entity Name:	Jessica Smith Penhall
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Mesa Water District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(949) 631-1200

34 North < 1/8 0.103 mi. 542 ft. | **CODAN US CORPORATION**
3511 W SUNFLOWER AVE
SANTA ANA, CA 92704 | **RCRA NonGen / NLR** | **1024793597**
CAL000140322

Relative: Higher

Actual: 32 ft.

RCRA NonGen / NLR:

Date form received by agency:	05/11/1998
Facility name:	CODAN US CORPORATION
Facility address:	3511 W SUNFLOWER AVE SANTA ANA, CA 92704-0000
EPA ID:	CAL000140322
Contact:	RUTH ROBERTSON,
Contact address:	3511 W SUNFLOWER AVE SANTA ANA, CA 92704
Contact country:	Not reported
Contact telephone:	714-545-2111
Contact email:	RR@CODANUS.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CODAN HOLDING
Owner/operator address:	STIG HUSTED ANDERSEN STRASSE 11 LENSAHN HOLSTEIN, CA 23738
Owner/operator country:	Not reported
Owner/operator telephone:	714-545-2111
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	RUTH ROBERTSON,
Owner/operator address:	3511 W SUNFLOWER AVE SANTA ANA, CA 92704
Owner/operator country:	Not reported
Owner/operator telephone:	714-545-2111
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

CODAN US CORPORATION (Continued) **1024793597**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

C35 WSW < 1/8 0.106 mi. 558 ft. **COSTA MESA COMMERCE PARK** **RCRA-SQG** **1007569217**
3303 S HARBOR BLVD **CAR000157313**
COSTA MESA, CA 92626

Site 1 of 3 in cluster C

Relative: Lower

Actual: 21 ft.

RCRA-SQG:

Date form received by agency:	10/05/2004
Facility name:	COSTA MESA COMMERCE PARK
Facility address:	3303 S HARBOR BLVD STE F 8 COSTA MESA, CA 92626
EPA ID:	CAR000157313
Contact:	DELLA GABELSBERG
Contact address:	3303 S HARBOR BLVD STE F 8 COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	714-979-9997
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	RREEF AMERICA RREEF MGMT
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	07/01/2003
Owner/Op end date:	Not reported

Owner/operator name:	RREEF AMERICA
Owner/operator address:	3303 S HARBOR BLVD STE F 8 COSTA MESA, CA 92626
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported

COSTA MESA COMMERCE PARK (Continued) **1007569217**

Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/01/2003
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

C36 **ALLURA PRINTING INC** **RCRA NonGen / NLR** **1024833995**
WSW **3303 HARBOR BLVD STE G7** **CAL000373896**
< 1/8 **COSTA MESA, CA 92626**
0.106 mi.
558 ft. **Site 2 of 3 in cluster C**

Relative:
Lower

Actual:
21 ft.

RCRA NonGen / NLR:
Date form received by agency: 04/24/2012
Facility name: ALLURA PRINTING INC
Facility address: 3303 HARBOR BLVD STE G7
COSTA MESA, CA 92626
EPA ID: CAL000373896
Contact: RENE GAGNON
Contact address: 3303 HARBOR BLVD STE G7
COSTA MESA, CA 92626
Contact country: Not reported
Contact telephone: 714-433-0200
Contact email: RENE.GAGNON@ALLURAPRINTING.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: ALLURA PRINTING INC

ALLURA PRINTING INC (Continued) **1024833995**

Owner/operator address:	3303 HARBOR BLVD STE G7 COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	714-433-0200
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	RENE GAGNON
Owner/operator address:	3303 HARBOR BLVD STE G7 COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	714-433-0200
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

C37 **PERFECT PRINTING** **RCRA-SQG** **1000857894**
WSW **3303 HARBOR BLVD** **FINDS** **CAD983673468**
< 1/8 **COSTA MESA, CA 92626** **ECHO**
0.106 mi.
558 ft. **Site 3 of 3 in cluster C**

Relative:
Lower

Actual:
21 ft.

RCRA-SQG:

Date form received by agency:	08/27/1993
Facility name:	PERFECT PRINTING
Facility address:	3303 HARBOR BLVD STE B2 COSTA MESA, CA 92626
EPA ID:	CAD983673468
Mailing address:	HARBOR BLVD

PERFECT PRINTING (Continued) **1000857894**

STE B2
COSTA MESA, CA 92626
Contact: HIEN DINH
Contact address: 3303 HARBOR BLVD STE B2
COSTA MESA, CA 92626
Contact country: US
Contact telephone: 714-434-2696
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: HIEN DINH
Owner/operator address: 3303 HARBOR BLVD STE B2
COSTA MESA, CA 92626
Owner/operator country: Not reported
Owner/operator telephone: 714-434-2696
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002903010

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

PERFECT PRINTING (Continued) **1000857894**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000857894
Registry ID:	110002903010
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002903010

38
West
< 1/8
0.107 mi.
564 ft.

3333 HARBOR BOULEVARD
COSTA MESA, CA 92626

RCRA-LQG **1007199597**
CAD981683626

Relative:
Lower

Actual:
29 ft.

RCRA-LQG:

Date form received by agency:	03/30/1994
Facility name:	Not reported
Facility address:	3333 HARBOR BOULEVARD COSTA MESA, CA 92626-0000
EPA ID:	CAD981683626
Contact:	VIRGIL WENTZ
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	714-546-8030
Telephone ext.:	6333
Contact email:	Not reported
EPA Region:	Not reported
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

(Continued) **1007199597**

Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

D39 **MINSTAR (AMF-VOIT)** **LUST** **S101300011**
NW **3801 HARBOR** **HIST CORTESE** **N/A**
< 1/8 **SANTA ANA, CA 92704**
0.108 mi.
572 ft. **Site 1 of 3 in cluster D**

Relative:
Higher

Actual:
32 ft.

LUST REG 8:

Name:	MINSTAR (AMF-VOIT)
Address:	3801 HARBOR BLVD
City:	SANTA ANA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000587T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Solvents
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	SUNFLOWER
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0605900473
How Stopped Date:	Not reported
Enter Date:	8/6/1987
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	4/1/1984
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	6/21/1995
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	8/6/1987
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	12/14/1987
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	8/6/1987
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.69894079
Longitude:	-117.9194035
MTBE Date:	Not reported

MINSTAR (AMF-VOIT) (Continued) **S101300011**

Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	03-26-91 RESULTS OF LATEST INVESTIGATION DUE BY APRIL 18, 1991. Not reported CONSULTANT IS RITA LAVELLE, NUTECH (800) 722-8896.

HIST CORTESE:

edr_fname:	MINSTAR (AMF-VOIT)
edr_fadd1:	3801 HARBOR
City,State,Zip:	SANTA ANA, CA 92704
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000587T

D40 **A M F VOIT INC** **SEMS-ARCHIVE** **1000135646**
NW **3801 S HARBOR BLVD** **CORRACTS** **CAD008369753**
< 1/8 **SANTA ANA, CA 92704** **RCRA-TSDF**
0.108 mi. **RCRA NonGen / NLR**
572 ft. **Site 2 of 3 in cluster D** **FINDS**
ECHO

Relative:
Higher

Actual:
32 ft.

SEMS Archive:

Site ID:	0900367
EPA ID:	CAD008369753
Cong District:	38
FIPS Code:	06059
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Deferred to RCRA (Subtitle C)

SEMS Archive Detail:

Region:	09
Site ID:	0900367
EPA ID:	CAD008369753
Site Name:	AMF VOIT INC
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1996-01-23 05:00:00
Qual:	Not reported

A M F VOIT INC (Continued) **1000135646**

Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0900367
EPA ID: CAD008369753
Site Name: AMF VOIT INC
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1991-03-08 05:00:00
Qual: D
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900367
EPA ID: CAD008369753
Site Name: AMF VOIT INC
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1990-08-24 04:00:00
Finish Date: 1990-08-24 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

CORRACTS:
EPA ID: CAD008369753
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910204
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): 326211 33992
Tire Manufacturing (except Retreading)
Sporting and Athletic Goods Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 08/03/1992
Facility name: A M F VOIT INC
Facility address: 3801 S HARBOR BLVD
SANTA ANA, CA 92704
EPA ID: CAD008369753
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US

A M F VOIT INC (Continued) **1000135646**

Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: CHASE MANHATTAN BANK TRUSTEE
Owner/operator address: 1 CHASE MANHATTAN PLAZA
NEW YORK CITY, NY 10015
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: AMF VOIT, INC
Owner/operator address: 3801 S HARBOR BLVD
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: 714-546-4220
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/18/1980

A M F VOIT INC (Continued) **1000135646**

Site name: A M F VOIT INC
Classification: Not a generator, verified

Corrective Action Summary:
Event date: 02/04/1991
Event: LEAD AGENCY DETERMINATION

Event date: 02/04/1991
Event: PA OR CERCLA INSPECTION

Event date: 02/04/1991
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 02/04/1991
Event: NCAPS RANKING/PRIORITY

Event date: Not reported
Event: REEVALUATE IN FY

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/10/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/08/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/30/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/16/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/29/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

RCRA NonGen / NLR:
Date form received by agency: 08/03/1992
Facility name: A M F VOIT INC
Facility address: 3801 S HARBOR BLVD
SANTA ANA, CA 92704

A M F VOIT INC (Continued) **1000135646**

EPA ID:	CAD008369753
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHASE MANHATTAN BANK TRUSTEE
Owner/operator address:	1 CHASE MANHATTAN PLAZA NEW YORK CITY, NY 10015
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	AMF VOIT, INC
Owner/operator address:	3801 S HARBOR BLVD CITY NOT REPORTED, CA 99999
Owner/operator country:	Not reported
Owner/operator telephone:	714-546-4220
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

A M F VOIT INC (Continued) **1000135646**

Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/18/1980
Site name: A M F VOIT INC
Classification: Not a generator, verified

Corrective Action Summary:
Event date: 02/04/1991
Event: LEAD AGENCY DETERMINATION

Event date: 02/04/1991
Event: PA OR CERCLA INSPECTION

Event date: 02/04/1991
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 02/04/1991
Event: NCAPS RANKING/PRIORITY

Event date: Not reported
Event: REEVALUATE IN FY

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/10/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/08/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/30/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/16/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/29/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

A M F VOIT INC (Continued) **1000135646**

FINDS:

Registry ID: 110002633446

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000135646
Registry ID:	110002633446
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002633446

D41 **AMF VOIT INC** **ENVIROSTOR** **S109284193**
NW **3801 S HARBOR BLVD** **LUST** **N/A**
< 1/8 **SANTA ANA, CA 92704** **HWP**
0.108 mi. **CERS**
572 ft. **Site 3 of 3 in cluster D**

Relative: Higher

Actual: 32 ft.

ENVIROSTOR:

Name:	AMF VOIT INC
Address:	3801 S HARBOR BLVD
City,State,Zip:	SANTA ANA, CA 927040000
Facility ID:	80001572
Status:	Refer: RWQCB
Status Date:	01/01/2008
Site Code:	Not reported
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	0
NPL:	NO
Regulatory Agencies:	RWQCB
Lead Agency:	WQC
Program Manager:	Not reported
Supervisor:	* Unknown
Division Branch:	Cleanup Cypress
Assembly:	74
Senate:	37
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.69600
Longitude:	-117.9190
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED

AMF VOIT INC (Continued) **S109284193**

Alias Name: CAD008369753
Alias Type: EPA Identification Number
Alias Name: 110002633446
Alias Type: EPA (FRS #)
Alias Name: 80001572
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 02/04/1991
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Name: MINSTAR (AMF-VOIT)
Address: 3801 S HARBOR BLVD
City,State,Zip: SANTA ANA, CA 92704
Lead Agency: SANTA ANA RWQCB (REGION 8)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900473
Global Id: T0605900473
Latitude: 33.698940793
Longitude: -117.9194035
Status: Completed - Case Closed
Status Date: 06/21/1995
Case Worker: CAB
RB Case Number: 083000587T
Local Agency: SANTA ANA, CITY OF
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: * Solvents
Site History: Not reported

LUST:
Global Id: T0605900473
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: carl.bernhardt@waterboards.ca.gov
Phone Number: 9517824495

Global Id: T0605900473
Contact Type: Local Agency Caseworker
Contact Name: CHRISTOPHER CIRAULO

AMF VOIT INC (Continued) **S109284193**

Organization Name: SANTA ANA, CITY OF
Address: 1439 S. BROADWAY
City: SANTA ANA
Email: cciraulo@santa-ana.org
Phone Number: Not reported

LUST:
Global Id: T0605900473
Action Type: Other
Date: 07/12/1987
Action: Leak Reported

LUST:
Global Id: T0605900473
Status: Open - Case Begin Date
Status Date: 04/01/1984

Global Id: T0605900473
Status: Open - Site Assessment
Status Date: 04/01/1984

Global Id: T0605900473
Status: Open - Site Assessment
Status Date: 08/06/1987

Global Id: T0605900473
Status: Open - Remediation
Status Date: 12/14/1987

Global Id: T0605900473
Status: Completed - Case Closed
Status Date: 06/21/1995

HWP:
Name: AMF VOIT INC
Address: 3801 S HARBOR BLVD
City,State,Zip: SANTA ANA, CA 927040000
EPA Id: CAD008369753
Cleanup Status: CLOSED
Latitude: 33.69600
Longitude: -117.9190
Facility Type: Historical - Non-Operating
Facility Size: Not reported
Team: Not reported
Supervisor: Not reported
Site Code: Not reported
Assembly District: 74
Senate District: 37
Public Information Officer: Not reported
Public Information Officer: Not reported

Activities:
EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1

AMF VOIT INC (Continued) **S109284193**

Event Description: New Operating Permit - APPLICATION PART A RECEIVED
Actual Date: 11/12/1980

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: New Operating Permit - CALL-IN LETTER ISSUED
Actual Date: 11/29/1982

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: New Operating Permit - APPLICATION PART B RECEIVED
Actual Date: 04/08/1983

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED
Actual Date: 04/08/1983

Closure:
EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: Closure Final - RECEIVE CLOSURE CERTIFICATION
Actual Date: 06/05/1985

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: Closure Final - ISSUE CLOSURE VERIFICATION
Actual Date: 06/05/1985

Alias:
EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Alias Type: FRS
Alias: 110002633446

CERS:
Name: AMF VOIT INC
Address: 3801 S HARBOR BLVD
City,State,Zip: SANTA ANA, CA 927040000
Site ID: 228085
CERS ID: 80001572
CERS Description: Corrective Action

Affiliation:
Affiliation Type Desc: Facility Owner
Entity Name: CHASE MANHATTAN BANK TRUSTEE
Entity Title: Not reported
Affiliation Address: 1 CHASE MANHATTAN PLAZA
Affiliation City: NEW YORK CITY
Affiliation State: NY

AMF VOIT INC (Continued) **S109284193**

Affiliation Country:	Not reported
Affiliation Zip:	100150000
Affiliation Phone:	0000000000
Affiliation Type Desc:	Facility Contact
Entity Name:	UNDELIVERABLE 1996 FEES FORM
Entity Title:	Not reported
Affiliation Address:	3801 S HARBOR BLVD
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	927040000
Affiliation Phone:	7145464220
Affiliation Type Desc:	Supervisor
Entity Name:	* Unknown
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Name:	AMF VOIT INC
Address:	3801 S HARBOR BLVD
City,State,Zip:	SANTA ANA, CA 927040000
Site ID:	228085
CERS ID:	CAD008369753
CERS Description:	Hazardous Waste

Affiliation:

Affiliation Type Desc:	Facility Owner
Entity Name:	CHASE MANHATTAN BANK TRUSTEE
Entity Title:	Not reported
Affiliation Address:	1 CHASE MANHATTAN PLAZA
Affiliation City:	NEW YORK CITY
Affiliation State:	NY
Affiliation Country:	Not reported
Affiliation Zip:	100150000
Affiliation Phone:	0000000000
Affiliation Type Desc:	Facility Contact
Entity Name:	UNDELIVERABLE 1996 FEES FORM
Entity Title:	Not reported
Affiliation Address:	3801 S HARBOR BLVD
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	927040000
Affiliation Phone:	7145464220
Affiliation Type Desc:	Supervisor
Entity Name:	* Unknown
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

AMF VOIT INC (Continued) **S109284193**

Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: MINSTAR (AMF-VOIT)
Address: 3801 S HARBOR BLVD
City,State,Zip: SANTA ANA, CA 92704
Site ID: 245440
CERS ID: T0605900473
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824495

Affiliation Type Desc: Local Agency Caseworker
Entity Name: CHRISTOPHER CIRAULO - SANTA ANA, CITY OF
Entity Title: Not reported
Affiliation Address: 1439 S. BROADWAY
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

E42 **DRYCLEAN USA** **EDR Hist Cleaner** **1019977216**
NW **3701 S HARBOR BLVD STE E** **N/A**
< 1/8 **SANTA ANA, CA 92704**
0.123 mi.
651 ft. **Site 1 of 3 in cluster E**

Relative: EDR Hist Cleaner
Higher

Actual:
33 ft.

Year:	Name:	Type:
1994	DRYCLEAN USA	Drycleaning Plants, Except Rugs
1995	DRYCLEAN USA	Drycleaning Plants, Except Rugs

E43 NW < 1/8 0.123 mi. 651 ft. | **DRY CLEAN USA**
3701 S HARBOR BLVD E
SANTA ANA, CA 92704 | **RCRA-SQG FINDS ECHO** | **1000594830 CAD983587148**

Site 2 of 3 in cluster E

Relative: Higher

Actual: 33 ft.

RCRA-SQG:

Date form received by agency:	06/27/1991
Facility name:	DRY CLEAN USA
Facility address:	3701 S HARBOR BLVD E SANTA ANA, CA 92704
EPA ID:	CAD983587148
Mailing address:	S HARBOR BLVD E SANTA ANA, CA 92704
Contact:	RON CAMBARE
Contact address:	3701 S HARBOR BLVD E SANTA ANA, CA 92704
Contact country:	US
Contact telephone:	714-846-3761
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	RON VANGIE CAMBARE ENTERPRISE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

DRY CLEAN USA (Continued) **1000594830**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110002847625

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000594830
Registry ID:	110002847625
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002847625

E44
NW
< 1/8
0.123 mi.
651 ft.

DRY CLEAN U.S.A. **DRYCLEANERS** **S121699630**
3701 S HARBOR BLVD UNIT E **N/A**
SANTA ANA, CA 92704

Site 3 of 3 in cluster E

Relative:
Higher

Actual:
33 ft.

DRYCLEAN SOUTH COAST:

Name:	DRY CLEAN U.S.A.
Address:	3701 S HARBOR BLVD UNIT E
City,State,Zip:	SANTA ANA, CA 92704
Facility ID:	80141
Application Number:	233240
Permit Number:	D31652
Status:	O
Representative Name:	TOM ABBETT
Representative Telephone:	714 4761995
Permit Status:	INACTIVE
BCAT Number:	000234
BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
CCAT Number:	04
CCAT Description:	VAPOR RECOVERY UNIT COMPRESS & CONDENSE

DRY CLEAN U.S.A. (Continued) **S121699630**

UTM East: 415.64001465
UTM North: 3727.9499512

F45
North
1/8-1/4
0.170 mi.
896 ft.

LOGIC PAKAGING INC
3530 W LAKE CENTER DR
SANTA ANA, CA 92704

CERS HAZ WASTE **S113157148**
HAZNET **N/A**
CERS

Site 1 of 2 in cluster F

Relative:
Higher

Actual:
33 ft.

CERS HAZ WASTE:
Name: LOGIC PAKAGING, LLC
Address: 3530 W LAKE CENTER DR
City,State,Zip: SANTA ANA, CA 92704
Site ID: 444708
CERS ID: 10579093
CERS Description: Hazardous Waste Generator

HAZNET:
Name: LOGIC PAKAGING INC
Address: 3530 W LAKE CENTER DR
City,State,Zip: SANTA ANA, CA 927046990
Year: 2017
GEPAID: CAL000346623
Contact: GARY SAIDEL
Telephone: 7145572915
Mailing Name: Not reported
Mailing Address: 3530 W LAKE CTR DR
Mailing City,St,Zip: SANTA ANA, CA 927046990
Gen County: Orange
TSD EPA ID: NVT330010000
TSD County: 99
Tons: 0.19
CA Waste Code: 221-Waste oil and mixed oil
Method: H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Orange

Name: LOGIC PAKAGING INC
Address: 3530 W LAKE CENTER DR
City,State,Zip: SANTA ANA, CA 927046990
Year: 2017
GEPAID: CAL000346623
Contact: GARY SAIDEL
Telephone: 7145572915
Mailing Name: Not reported
Mailing Address: 3530 W LAKE CTR DR
Mailing City,St,Zip: SANTA ANA, CA 927046990
Gen County: Orange
TSD EPA ID: NVT330010000
TSD County: 99
Tons: 0.588
CA Waste Code: 135-Unspecified aqueous solution
Method: H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Orange

Name: LOGIC PAKAGING INC

LOGIC PAKAGING INC (Continued) **S113157148**

Address:	3530 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 927046990
Year:	2017
GEPAID:	CAL000346623
Contact:	GARY SAIDEL
Telephone:	7145572915
Mailing Name:	Not reported
Mailing Address:	3530 W LAKE CTR DR
Mailing City,St,Zip:	SANTA ANA, CA 927046990
Gen County:	Orange
TSD EPA ID:	AZR000501510
TSD County:	99
Tons:	0.231
CA Waste Code:	135-Unspecified aqueous solution
Method:	H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Orange

Name:	LOGIC PAKAGING INC
Address:	3530 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 927046990
Year:	2015
GEPAID:	CAL000346623
Contact:	GARY SAIDEL
Telephone:	7145572915
Mailing Name:	Not reported
Mailing Address:	3530 W LAKE CTR DR
Mailing City,St,Zip:	SANTA ANA, CA 927046990
Gen County:	Orange
TSD EPA ID:	AZR000501510
TSD County:	99
Tons:	0.231
CA Waste Code:	135-Unspecified aqueous solution
Method:	H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Orange

Name:	LOGIC PAKAGING INC
Address:	3530 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 927046990
Year:	2015
GEPAID:	CAL000346623
Contact:	GARY SAIDEL
Telephone:	7145572915
Mailing Name:	Not reported
Mailing Address:	3530 W LAKE CTR DR
Mailing City,St,Zip:	SANTA ANA, CA 927046990
Gen County:	Orange
TSD EPA ID:	CAD099452708
TSD County:	Los Angeles
Tons:	0.209
CA Waste Code:	221-Waste oil and mixed oil
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Orange

LOGIC PAKAGING INC (Continued) **S113157148**

Click this hyperlink while viewing on your computer to access
5 additional CA_HAZNET: record(s) in the EDR Site Report.

CERS:

Name:	LOGIC PAKAGING, LLC
Address:	3530 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	444708
CERS ID:	10579093
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Other/Unknown
Eval Date:	06-17-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed HMBEP submittal on E-submit. Package was declined and an email sent to the facility contact. The following corrections are needed: CHEMCIAL INVENTORY During an inspection conducted at your facility on 9/24/15, it was observed that you also have the following chemicals stored at reportable quantities: Starkote, ink (new), propane, and adhesive Add these chemicals to your disclosure. Waste Ink ? complete the Hazardous Components chart using the hazardous elements of the ink. You must include the CAS#s and %WT. Complete the State Waste code field. Days on Site = 365. Max Daily Amount = 55 gallons. Mark all Federal Hazard Categories that apply. Average Daily Amount should be closer to what is on site on a typical day. EMERGENCY PLAN Section a - describe the hazards associated with the chemicals stored on site that were identified by your inspector as qualifying for disclosure Section b - complete this section Section c - complete this section Section d [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-12-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP submittal is being conditionally approved in order to facilitate transfer of data to California Electronic Reporting System (CERS) database. The facility will need to make the following revisions in CERS following notification of data transfer: CHEMCIAL INVENTORY During an inspection conducted at your facility on 9/24/15, it was observed that you also have the following chemicals stored at reportable quantities: Starkote, ink (new), propane, and adhesive Add these chemicals to your disclosure. Waste Ink complete the Hazardous Components chart using the hazardous elements of the ink. You must include the CAS#s and %WT. Complete the State Waste code field. Days on Site = 365. Max Daily Amount = 55 gallons. Mark all Federal Hazard Categories that apply. Average Daily Amount should be closer to what is on site on a typical day. EMERGENCY PLAN Section a - describe the hazards associated with the chemicals stored on site that were identified by your inspector [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

LOGIC PAKAGING INC (Continued) **S113157148**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-24-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: FA0060399 Logic Packaging, 3530 W Lake Center Dr, Santa Ana 92704 INSPECTOR COMMENTS On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Lee Robinson. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Starkote - Ink, various colors - Propane - Adhesive - Waste ink REQUIREMENT FOR ELECTRONIC SUBMITTAL OF HMBEP DOCUMENTS: This report serves as notice that the facility must submit the following documents electronically within 30 days of this report: - Business Emergency Plan - Hazardous Materials Inventory - Site Map The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-24-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous waste inspection. Consent to enter and inspect was given by Lee Robinson. Observed the facility and inspected hazardous waste storage. The container is stored closed and properly labeled. No evidence of hazardous waste spillage or runoff was observed. Manifests are available for review. Emergency plan was updated during the inspection.
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous materials and business emergency plan inspection. Consent to enter and inspect was given by Randall Crockett, President. Observed the facility and inspected hazardous materials storage. Hazardous Materials observed in disclosable quantities: - Coatings - Propane - Adhesive - Waste Ink No HMBEP has been submitted for this facility. Offered assistance with CERS submission on site but assistance was declined. Please submit all HMBEP information within 30 days. The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds (200cuft compressed gas, 55 gal liquid, 500 lbs solid). If there is a change in the type or amount of chemicals that are maintained on site, please electronically submit revised documents within 30 days of the change.
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

LOGIC PAKAGING INC (Continued) **S113157148**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-22-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine hazardous waste inspection. Consent to inspect and take any necessary photos was given by Randall Crockett, President. Walked throughout the facility. Observed hazardous waste storage areas. Containers are properly managed and labeled. Manifests were available and reviewed. Employees are reported to be trained. Verified Ownership. Verified number of employees. No hazardous waste or universal waste observed in the dumpster/enclosure area.
Eval Division:	Orange County Environmental Health
Eval Program:	HW
Eval Source:	CERS

Coordinates:

Site ID:	444708
Facility Name:	LOGIC PAKAGING, LLC
Env Int Type Code:	HMBP
Program ID:	10579093
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.698010
Longitude:	-117.916850

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000

Affiliation Type Desc:	Legal Owner
Entity Name:	Randall Crockett
Entity Title:	Not reported
Affiliation Address:	3530 W LAKE CENTER DR
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 557-2915

Affiliation Type Desc:	Parent Corporation
Entity Name:	LOGIC PACKAGING LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

LOGIC PAKAGING INC (Continued) **S113157148**

Affiliation Type Desc:	Document Preparer
Entity Name:	Russell Biszantz
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	Russell Biszantz
Entity Title:	Not reported
Affiliation Address:	3530 W LAKE CENTER DR
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Russell Biszantz
Entity Title:	Accountant
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Randall Crockett
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 557-2915

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3530 W LAKE CENTER DR
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported

F46 North 1/8-1/4 0.170 mi. 897 ft. | **SOUTH COAST CIRCUITS**
3524 W LAKE CENTER DR UNIT A
SANTA ANA, CA 92704

CERS HAZ WASTE | **S123518522**
CERS | **N/A**

Site 2 of 2 in cluster F

Relative: Higher

Actual: 32 ft.

CERS HAZ WASTE:

Name:	SOUTH COAST CIRCUITS
Address:	3524 W LAKE CENTER DR UNIT A
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	418401
CERS ID:	10543600
CERS Description:	Hazardous Waste Generator

Name:	SOUTH COAST CIRCUITS
Address:	3524 W LAKE CENTER DR UNIT A
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	418401
CERS ID:	10543600
CERS Description:	Hazardous Waste Onsite Treatment

CERS:

Name:	SOUTH COAST CIRCUITS
Address:	3524 W LAKE CENTER DR UNIT A
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	418401
CERS ID:	10543600
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	418401
Site Name:	SOUTH COAST CIRCUITS
Violation Date:	12-11-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 01/22/2015. The electronic submittal in the eSubmit Portal has been declined. Please make the required corrections/amendments within 30 days.
Violation Division:	Orange County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	418401
Site Name:	SOUTH COAST CIRCUITS
Violation Date:	12-11-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 01/22/2015. The electronic submittal in the eSubmit Portal has been declined. Please make the required corrections/amendments within 30 days.
Violation Division:	Orange County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

SOUTH COAST CIRCUITS (Continued) **S123518522**

Evaluation:

Eval General Type:	Other/Unknown
Eval Date:	01-12-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Chemical disclosure and site map declined in portal. Comments Chemical Inventory Cobra Bond Line: the CAS code for the oxidizer component is for hydrogen peroxide. Please modify the disclosure so that the component and CAS match. The sulfuric acid component is an EHS. Please check this box under the component field. Spent Cobra Bond: The sulfuric acid component is an EHS. Please check this box under the component field. EH-120: please add the hyphen to the CAS code for ferric chloride (7705-08-0). Waste oil: fire code hazard class is combustible III-B. Emergency Plan: please include the frequency of the employee training. At a minimum, hazardous materials and business emergency plan training must be conducted annually. Site diagram: please verify the orientation of the north arrow. Please label the hazardous materials handling area(s).
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-22-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed and approved HazMat disclosure in eSubmit Portal. Associated violations have been corrected.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-27-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Declined FOR ALL CHEMICALS: - Remove obsolete Federal Hazard categories. Select from the new 24 options where applicable - Select a Fire Code Hazard Classification CONTINGENCY PLAN: - OCHCA phone number is (714) 433-6000 - Provide OCFA information - Provide CAL OES Phone number - Provide Regional Water Quality Control Board number
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-25-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Submission Reviewed and Declined. Please upload a site map. Also upload a Contingency plan in the Contingency Plan section.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-07-2017

SOUTH COAST CIRCUITS (Continued) **S123518522**

Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Submission reviewed and accepted
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	11-15-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Read/review HMBEP in E-submit. Rejected. 8 of the 11 chemicals appear to be below reportable quantities (<55 gallons). Please evaluate your site. If they are in fact < 55 gallons, then delete them from the haz mat inventory. If they in fact exceed the reportable quantities, then adjust your volumes. Please correct and re submit via E-submit for re evaluation.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	12-11-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-11-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Nhan Tran. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that exceed the required disclosure quantities: Process Line - Alkaline cleaner, rinses (cobrabond line) - Predip tank (cobrabond line) - Cobrabond, drag out, rinses (cobrabond line) New Product and Waste - Sodium hydroxide solution WWT-30 - Sodium hydroxide - EH-120, sulfuric acid solution - Filter cake waste - Spent cobrabond waste - Waste oil The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change. The facility has submitted the chemical disclosure, [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency

SOUTH COAST CIRCUITS (Continued) **S123518522**

Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-15-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Declined HazMat submittal in eSubmit portal. Business Activities The EPA Identification number is incorrect. Number CAR000018010 has been assigned to the facility. The facility is a hazardous waste generator and generates RCRA waste in excess of 1,000 in a month. Please check the boxes for hazardous waste generation and federal RCRA hazardous waste. Chemical Inventory During the onsite inspection on 12/11/14, the following materials were observed in amounts that require disclosure: Process Line - Post acid cleaner rinse (silver line) - Post micro etch rinse (silver line) - Post silver solution rinse (silver line - Nickel plate solution and rinse (nickel line) - Gold plate solution (nickel line) - Cupric etcher, dragout, rinse (cupric etcher line) - Resist strip and rinse (resist strip line) - Ammonia etch, dragout, rinse (ammonia line) - Tin stripper, rinse (ammonia line) New Product and Waste - Resist stripper- new - Cupric chloride [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-17-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: HazMat disclosure declined in eSubmit Portal. Chemical Inventory During the onsite inspection on 12/11/14, the following materials were observed in amounts that require disclosure: Process Line - Solvent, rinses (electroless line) - Permanganate, dragout, rinses (electroless line) - Neutralizer, rinses (electroless line) - Conditioner, rinses (electroless line) - Microetch, dragout, rinses (electroless line) - Predip (electroless line) - Catalyst, rinses (electroless line) - Accelerator, rinses (electroless line) - Electroless baths, dragout, rinses (electroless line) - Sulfuric acid, rinses (electroless line) - Anti oxide (electroless line) - Sodium persulfate, rinses, hot rinse (electroless line) - Acid copper, dragout, rinse (acid copper line) - Antioxide, rinses (acid copper line) - Tin bath, dragout, rinse (acid copper line) - Acid dip, rinses (acid copper line) - Acid cleaner, rinse (acid copper line) - Acid copper (acid copper line) - Rack [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Property Owner
Entity Name: Chuck Benson
Entity Title: Not reported
Affiliation Address: 3506 W Lake Center Dr. "A"
Affiliation City: Santa Ana

SOUTH COAST CIRCUITS (Continued) **S123518522**

Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 966-2108
Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000
Affiliation Type Desc:	Document Preparer
Entity Name:	NHAN TRAN
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	NHAN TRAN
Entity Title:	Not reported
Affiliation Address:	3506 W. LAKE CENTER DR. 'A'
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	SOUTH COAST CIRCUITS, INC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	DANIEL BENSON
Entity Title:	VICE PRESIDENT
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	CHARLES BENSON

SOUTH COAST CIRCUITS (Continued) **S123518522**

Entity Title:	Not reported
Affiliation Address:	3524 W LAKE CENTER UNIT A
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 966-2108
Affiliation Type Desc:	Operator
Entity Name:	CHARLES BENSON
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 966-2108
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3506 LAKE CENTER DR #A
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported
Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	NHAN TRAN
Entity Title:	Environmental Tech
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

47
NW
1/8-1/4
0.177 mi.
932 ft.

BABCOCK ELECTRO-MECHANICAL INC
3501 HARBOR BLVD
COSTA MESA, CA 92626

RCRA-SQG **1000178702**
FINDS **CAD087387759**
ECHO

Relative:
Higher

Actual:
32 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	BABCOCK ELECTRO-MECHANICAL INC
Facility address:	3501 HARBOR BLVD
	COSTA MESA, CA 92626
EPA ID:	CAD087387759
Mailing address:	3501 HARBOR BLVD.
	COSTA MESA, CA 92626
Contact:	Not reported
Contact address:	Not reported
	Not reported
Contact country:	US
Contact telephone:	Not reported

BABCOCK ELECTRO-MECHANICAL INC (Continued) **1000178702**

Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BABCOCK MECHANICAL,INC.
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/18/1980
Site name: BABCOCK ELECTRO-MECHANICAL INC

BABCOCK ELECTRO-MECHANICAL INC (Continued) **1000178702**

Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002662510

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000178702
Registry ID: 110002662510
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002662510

G48 NW 1/8-1/4 0.198 mi. 1046 ft. **SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT** **CERS HAZ WASTE** **S113146290**
3535 HARBOR BLVD STE 110 **HAZNET** **N/A**
COSTA MESA, CA 92626 **CERS**

Site 1 of 3 in cluster G

Relative: Higher
Actual: 33 ft.

CERS HAZ WASTE:
Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 92626
Site ID: 437878
CERS ID: 10762912
CERS Description: Hazardous Waste Generator

HAZNET:
Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 926261437
Year: 2013
GEPAID: CAL000316360
Contact: DARRIN GREENSTEIN
Telephone: 7147553224
Mailing Name: Not reported
Mailing Address: 3535 HARBOR BLVD STE 110
Mailing City,St,Zip: COSTA MESA, CA 926261437
Gen County: Orange
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Tons: 0.102
CA Waste Code: 343-Unspecified organic liquid mixture
Method: H135-Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)

SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT (Continued) **S113146290**

Facility County: Orange

Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 926261437
Year: 2012
GEPAID: CAL000316360
Contact: DARRIN GREENSTEIN
Telephone: 7147553224
Mailing Name: Not reported
Mailing Address: 3535 HARBOR BLVD STE 110
Mailing City,St,Zip: COSTA MESA, CA 926261437
Gen County: Orange
TSD EPA ID: CAD008488025
TSD County: Los Angeles
Tons: 0.02085
CA Waste Code: 551-Laboratory waste chemicals
Method: H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Orange

Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 926261437
Year: 2011
GEPAID: CAL000316360
Contact: DARRIN GREENSTEIN
Telephone: 7147553224
Mailing Name: Not reported
Mailing Address: 3535 HARBOR BLVD STE 110
Mailing City,St,Zip: COSTA MESA, CA 926261437
Gen County: Orange
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Tons: 0.1251
CA Waste Code: 213-Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Orange

Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 926261437
Year: 2010
GEPAID: CAL000316360
Contact: DARRIN GREENSTEIN
Telephone: 7147553224
Mailing Name: Not reported
Mailing Address: 3535 HARBOR BLVD STE 110
Mailing City,St,Zip: COSTA MESA, CA 926261437
Gen County: Orange
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Tons: 0.1
CA Waste Code: 611-Contaminated soil from site clean-up
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT (Continued) **S113146290**

Facility County: Orange

Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 926261437
Year: 2010
GEPAID: CAL000316360
Contact: DARRIN GREENSTEIN
Telephone: 7147553224
Mailing Name: Not reported
Mailing Address: 3535 HARBOR BLVD STE 110
Mailing City,St,Zip: COSTA MESA, CA 926261437
Gen County: Orange
TSD EPA ID: CAD008364432
TSD County: Los Angeles
Tons: 0.1251
CA Waste Code: 213-Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Method: H061-Fuel Blending Prior To Energy Recovery At Another Site
Facility County: Orange

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

CERS:
Name: SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Address: 3535 HARBOR BLVD STE 110
City,State,Zip: COSTA MESA, CA 92626
Site ID: 437878
CERS ID: 10762912
CERS Description: Chemical Storage Facilities

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title: Not reported
Affiliation Address: 1241 East Dyer RoadSuite 120
Affiliation City: Santa Ana
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92705-5611
Affiliation Phone: (714) 433-6000

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 3535 Harbor Blvd Ste 110
Affiliation City: Costa Mesa
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92626
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Darrin Greenstein
Entity Title: Not reported
Affiliation Address: 3535 Harbor Blvd Ste 110
Affiliation City: Costa Mesa

SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT (Continued) **S113146290**

Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Steve Weisberg
Entity Title:	Not reported
Affiliation Address:	3535 Harbor Blvd Ste 110
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92626
Affiliation Phone:	(714) 755-3203

Affiliation Type Desc:	Operator
Entity Name:	Southern California Coastal Water Research Project
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 755-3200

Affiliation Type Desc:	Parent Corporation
Entity Name:	Southern California Coastal Water Research Project
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Document Preparer
Entity Name:	Darrin Greenstein
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Darrin Greenstein
Entity Title:	Laboratory Coordinator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

G49 NW 1/8-1/4 0.198 mi. 1046 ft. | **SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT** | **RCRA NonGen / NLR** | **1024816098** | **CAL000316360**

3535 HARBOR BLVD STE 110
COSTA MESA, CA 92626

Site 2 of 3 in cluster G

Relative: Higher

Actual: 33 ft.

RCRA NonGen / NLR:

Date form received by agency:	02/13/2007
Facility name:	SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
Facility address:	3535 HARBOR BLVD STE 110 COSTA MESA, CA 92626-1437
EPA ID:	CAL000316360
Contact:	DARRIN GREENSTEIN
Contact address:	3535 HARBOR BLVD STE 110 COSTA MESA, CA 92626
Contact country:	Not reported
Contact telephone:	714-755-3224
Contact email:	DARRING@SCCWRP.ORG
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	SO CAL COASTAL WATER RESEARCH
Owner/operator address:	3535 HARBOR BLVD STE 110 COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	714-755-3200
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	DARRIN GREENSTEIN
Owner/operator address:	3535 HARBOR BLVD STE 110 COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	714-755-3224
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT (Continued) **1024816098**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

H50
North
1/8-1/4
0.205 mi.
1081 ft.

SOUTH COAST CIRCUITS INC **CERS HAZ WASTE** **S123518523**
3512 W LAKE CENTER DR **CERS** **N/A**
SANTA ANA, CA 92704

Site 1 of 5 in cluster H

Relative:
Higher

Actual:
33 ft.

CERS HAZ WASTE:

Name:	SOUTH COAST CIRCUITS INC
Address:	3512 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	418402
CERS ID:	10584580
CERS Description:	Hazardous Waste Onsite Treatment

Name:	SOUTH COAST CIRCUITS INC
Address:	3512 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	418402
CERS ID:	10584580
CERS Description:	Hazardous Waste Generator

CERS:

Name:	SOUTH COAST CIRCUITS INC
Address:	3512 W LAKE CENTER DR
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	418402
CERS ID:	10584580
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	418402
Site Name:	SOUTH COAST CIRCUITS INC
Violation Date:	12-12-2017
Citation:	HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Description:	Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name. A substantial change in the handler's operations that requires modification to any portion of the business plan.
Violation Notes:	Returned to compliance on 02/16/2018. Acid Tin and Gold are missing from submission. Please add the Acid Tin and the Gold to your CERS submission for this facility within 30 days.
Violation Division:	Orange County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

SOUTH COAST CIRCUITS INC (Continued) **S123518523**

Site ID: 418402
Site Name: SOUTH COAST CIRCUITS INC
Violation Date: 12-11-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 02/10/2015. The electronic submittal in the eSubmit Portal has been declined. Please make the required corrections/amendments within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 418402
Site Name: SOUTH COAST CIRCUITS INC
Violation Date: 12-11-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 02/10/2015. The electronic submittal in the eSubmit Portal has been declined. Please make the required corrections/amendments within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 01-14-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Hazmat documents declined in Portal. Comments Chemical Inventory - Acid Copper Dragout and Rinses: the sulfuric acid component is an EHS. Please check this box under the component field. - Activator Bath and Rinses: the sulfuric acid component is an EHS. Please check this box under the component field. The CAS code for potassium sulfate is 7778-80-5. - EH-120: please add the hyphen to the CAS code for ferric chloride (7705-08-0). - Electroless Copper 2060A appears to be a mixture (copper sulfate, formaldehyde, methanol). Please indicate the material is a mixture and list the hazardous components. Be aware that formaldehyde is an EHS. - Electroless Dragout and Rinses: the formaldehyde component is an EHS. - Filter Cake is a waste, and should not be disclosed as a mixture. List the chemical components that make it hazardous (types of metals, chemicals. Include CAS numbers) - Microetch and Rinses (Nickel and Electroless lines): the sulfuric acid component is an [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-15-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency

SOUTH COAST CIRCUITS INC (Continued) **S123518523**

Eval Notes:	Received call from Nhan Tran regarding the hazmat disclosure. He had questions regarding the review comments.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-23-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HazMat docs declined in eSubmit Portal Comments: Chemical Inventory - Activator Bath and Rinses: the CAS code for potassium sulfate is 7778-80-5 (13566-03-5 is for palladium sulfate). - Solvent and Rinses (electroless line): please add the CAS code for the cyclic amine compound (7732-18-5 is the CAS code for water, which does not need to be listed as a component). - Sulfuric Acid and rinses (electroless line): the sulfuric acid component is an EHS. Please check this box under the component field. Emergency Plan: please include the frequency of the employee training. At a minimum, hazardous materials and business emergency plan training must be conducted annually.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-27-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Declined Please submit 2018 Contingency Plan Section FOR ALL CHEMICALS: - Remove obsolete Federal Hazard categories. Select from the new 24 options where applicable - Select a Fire Code Hazard Classification
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-02-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Hazmat disclosure documents have been declined in the eSubmit Portal.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Hazmat disclosure documents have been accepted in the eSubmit Portal.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	05-25-2017
Violations Found:	No

SOUTH COAST CIRCUITS INC (Continued) **S123518523**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Submission Declined. Please upload a site map. Also upload a Contingency plan in the Contingency Plan section.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-07-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Submission reviewed and accepted
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Read/review HMBEP submission via E-submit. Rejected. 1) Most of the chemicals listed in the chemical inventory are reported < 55 gallons. You do not need to report any haz mat < 55 gallons. If these chemicals are < 55 gallons, have them removed from the chemical list. If they are in fact > 55 gallons, please correct the maximum volumes. 2) The potassium permanganate needs to be listed as an oxidizer in addition to explosive. 3) The Business Emergency Plan (BEP) is not completed. Please complete this section of the HMBEP. Re submit via E-submit for re evaluation.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	12-11-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-11-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Nhan Tran. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that exceed the required disclosure quantities: Process Line - Solvent, rinses (electroless line) - Permanganate, dragout, rinses (electroless line) - Neutralizer, rinses (electroless line) - Conditioner, rinses (electroless line) - Microetch, dragout, rinses (electroless line) - Predip (electroless line) - Catalyst, rinses (electroless line) - Accelerator, rinses (electroless line) - Electroless baths, dragout, rinses (electroless line) - Sulfuric acid, rinses (electroless line) -

SOUTH COAST CIRCUITS INC (Continued) **S123518523**

	Anti oxide (electroless line) - Sodium persulfate, rinses, hot rinse (electroless line) - Acid copper, dragout, rinse (acid copper line) - Antioxide, rinses (acid copper line) - Tin bath, dragout, rinse (acid copper [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-12-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Please add Acid Tin and Gold to the CERS submission.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Coordinates:

Site ID:	418402
Facility Name:	SOUTH COAST CIRCUITS INC
Env Int Type Code:	HMBP
Program ID:	10584580
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.698520
Longitude:	-117.915790

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000
Affiliation Type Desc:	Legal Owner
Entity Name:	SOUTH COAST CIRCUITS INC
Entity Title:	Not reported
Affiliation Address:	3506 W LAKE CENTER DR STE A
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 966-2108
Affiliation Type Desc:	Property Owner
Entity Name:	Chuck Benson
Entity Title:	Not reported
Affiliation Address:	3506 W LAKE CENTER DR A
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704

SOUTH COAST CIRCUITS INC (Continued) **S123518523**

Affiliation Phone:	(714) 966-2108
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3506 W LAKE CENTER DR STE A
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported
Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	NHAN TRAN
Entity Title:	Environmental Tech
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	CHARLES BENSON
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(717) 966-2108
Affiliation Type Desc:	Environmental Contact
Entity Name:	NHAN TRAN
Entity Title:	Not reported
Affiliation Address:	3506 W LAKE CENTER DR. "A"
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	DAN BENSON
Entity Title:	Vice President
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	NHAN TRAN
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

SOUTH COAST CIRCUITS INC (Continued) **S123518523**

Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	SOUTH COAST CIRCUITS, INC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

G51
NW
1/8-1/4
0.219 mi.
1158 ft.

AFFINITY MEDICAL TECHNOLOGIES LLC A MOLEX COMPANY **RCRA NonGen / NLR** **1024840172**
3545 HARBOR BLVD STE 150 **CAL000388684**
COSTA MESA, CA 92626

Site 3 of 3 in cluster G

Relative:
Higher

Actual:
33 ft.

RCRA NonGen / NLR:

Date form received by agency:	08/15/2013
Facility name:	AFFINITY MEDICAL TECHNOLOGIES LLC A MOLEX COMPANY
Facility address:	3545 HARBOR BLVD STE 150 COSTA MESA, CA 92626
EPA ID:	CAL000388684
Contact:	ROBERT BLACKWELL
Contact address:	3545 HARBOR BLVD COSTA MESA, CA 92626
Contact country:	Not reported
Contact telephone:	949-477-9495
Contact email:	ROBERT.BLACKWELL@MOLEX.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	MOLEX, LLC
Owner/operator address:	2222 WELLING COURT LISLE, IL 60523
Owner/operator country:	Not reported
Owner/operator telephone:	949-477-9495
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	ROBERT BLACKWELL
Owner/operator address:	3545 HARBOR BLVD COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	949-477-9495

AFFINITY MEDICAL TECHNOLOGIES LLC A MOLEX COMPANY (Continued) **1024840172**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

H52
North
1/8-1/4
0.224 mi.
1181 ft.

BRITTANY JOHNSON **RCRA NonGen / NLR** **1024765179**
3506 WEST LAKE CENTER DRIVE **CAC002985047**
SANTA ANA, CA 92704

Site 2 of 5 in cluster H

Relative:
Higher

Actual:
34 ft.

RCRA NonGen / NLR:
Date form received by agency: 10/16/2018
Facility name: BRITTANY JOHNSON
Facility address: 3506 WEST LAKE CENTER DRIVE
SUITE B
SANTA ANA, CA 92704
EPA ID: CAC002985047
Contact: WARRICK LEIGH
Contact address: 3506 WEST LAKE CENTER DRIVE SUITE B
SANTA ANA, CA 92704
Contact country: Not reported
Contact telephone: 949-480-0538
Contact email: WLEIGH@MICRONIXUSA.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: MANFRED SCHNEIDER
Owner/operator address: 3506 WEST LAKE CENTER DRIVE SUITE B
SANTA ANA, CA 92704
Owner/operator country: Not reported
Owner/operator telephone: 949-480-0538
Owner/operator email: Not reported
Owner/operator fax: Not reported

BRITTANY JOHNSON (Continued) **1024765179**

Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: WARRICK LEIGH
Owner/operator address: 3506 WEST LAKE CENTER DRIVE SUITE B
SANTA ANA, CA 92704
Owner/operator country: Not reported
Owner/operator telephone: 949-480-0538
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

H53 **SOUTH COAST CIRCUITS** **ENVIROSTOR** **S110494315**
North **3506 WEST LAKE CENTER DRIVE, SUITE A** **N/A**
1/8-1/4 **SANTA ANA, CA 92704**
0.224 mi.
1181 ft. **Site 3 of 5 in cluster H**

Relative:
Higher

Actual:
34 ft.

ENVIROSTOR:
Name: SOUTH COAST CIRCUITS
Address: 3506 WEST LAKE CENTER DRIVE, SUITE A
City,State,Zip: SANTA ANA, CA 92704
Facility ID: 71003634
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED

SOUTH COAST CIRCUITS (Continued) **S110494315**

Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	69
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.69879
Longitude:	-117.9166
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAR000018010
Alias Type:	EPA Identification Number
Alias Name:	110002916097
Alias Type:	EPA (FRS #)
Alias Name:	71003634
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

H54 **SOUTH COAST CIRCUITS** **CERS HAZ WASTE** **S121675267**
North **3506 W LAKE CENTER DR STE A** **CIWQS** **N/A**
1/8-1/4 **SANTA ANA, CA 92704** **CERS**
0.224 mi.
1181 ft. **Site 4 of 5 in cluster H**

Relative:
Higher

Actual:
34 ft.

CERS HAZ WASTE:

Name:	SOUTH COAST CIRCUITS
Address:	3506 W LAKE CENTER DR STE A
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	154892
CERS ID:	10153311
CERS Description:	Hazardous Waste Generator
Name:	SOUTH COAST CIRCUITS
Address:	3506 W LAKE CENTER DR STE A
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	154892

SOUTH COAST CIRCUITS (Continued) **S121675267**

CERS ID: 10153311
CERS Description: Hazardous Waste Onsite Treatment

CIWQS:
Name: SOUTH COAST CIRCUITS
Address: 3506 W LAKE CENTER DR STE A
City,State,Zip: SANTA ANA, CA 92704
Agency: Benson, Charles
Agency Address: 3506 W Lake Center Dr Ste A, Santa Ana, CA 92704
Place/Project Type: Industrial - Printed Circuit Boards
SIC/NAICS: 3672
Region: 8
Program: INDSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water industrial
Order Number: 2014-0057-DWQ
WDID: 8 30I018164
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 06/03/2003
Termination Date: 01/13/2004
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.69924
Longitude: -117.91669

CERS:
Name: SOUTH COAST CIRCUITS
Address: 3506 W LAKE CENTER DR STE A
City,State,Zip: SANTA ANA, CA 92704
Site ID: 154892
CERS ID: 10153311
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: HSC 6.67 Multiple Sections - California Health and Safety Code, Chapter 6.67, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 12/12/2014. Each generator must maintain the following documents and records at the facility: (a) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; (b) A written job description for each position mentioned above, to include the required skills, education, or other qualifications, and duties of facility personnel assigned to each position; (c) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position mentioned above; (d) Records that document that the required training or job experience has been given to, and completed by, facility personnel. Please develop a

SOUTH COAST CIRCUITS (Continued) **S121675267**

training plan that meets the requirements above. The plan will be reviewed during the reinspection.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Not reported
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 12-11-2014
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 12/11/2014. One 55-gallon drum of waste oil and one 55-gallon drum of filter cake were not stored closed. The containers were closed during the inspection. The violation was corrected during the inspection. No further corrective action is required.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 05-31-2017
Citation: 22 CCR 45 67450.13(a)(1) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.13(a)(1)
Violation Description: Failure to prepare a written estimate of the cost of closing each unit which includes the cost that would be incurred for closing a treatment unit when using the owner or operator or generator's own staff and/or personal equipment taking into account any salvage value that may be realized from the sale of wastes, facility structure or equipment, land or other facility assets. This estimate shall be submitted as an attachment to the Certification of Financial Assurance for Permit by Rule and Conditionally Authorized Operations/ Maintenance page(s) of the Unified Program Consolidated Form (x/99)).
Violation Notes: Returned to compliance on 09/11/2017. The 2017 Tiered Permit financial assurance documents submitted to CERS on 3/2/17 were reviewed and request for submittal of revised financial assurance form with correct closure cost (-$1,207,833.51) was made on 3/20/17. To date, revised document has not been submitted to CERS. Revised financial assurance form must be submitted to CERS by 6/16/17.
Violation Division: Orange County Environmental Health

SOUTH COAST CIRCUITS (Continued) **S121675267**

Violation Program: PBR
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 23 66273.31(a) - California Code of Regulations, Title 22, Chapter 23, Section(s) 66273.31(a)
Violation Description: Failure of the universal waste handler to transfer universal waste to the appropriate designation facility.
Violation Notes: Returned to compliance on 12/12/2014. Fluorescent bulbs are accumulating in a box that was not labeled with the required information. Containers used for universal waste accumulation must be labeled with "universal waste- lamps" and the accumulation start date.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 12/12/2014. All containers and portable tanks used for hazardous waste accumulation must be labeled with the required information. Please provide the required information on all containers of hazardous waste that are not properly labeled.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 12/12/2014. Containers of filter cake are not stored closed. Please store the containers of filters cake closed except when adding or removing waste.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 03-03-2016
Citation: 22 CCR 45 67450.2(c)(10) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.2(c)(10)
Violation Description: Failure of the generator to prepare, maintain, and submit to CUPA an annual report containing the following information: (A) The serial number(s) of the FTU(s) involved in treatment; (B) The physical and

SOUTH COAST CIRCUITS (Continued) **S121675267**

mailing address of the business entity which owns or operates the FTU(s); (C) The name, title and telephone number of each FTU contact person; (D) The name and address or legal description of the facility; (E) The facility identification number; (F) The number of days each FTU was operated; (G) The quantity of hazardous waste(s) treated by each FTU; (H) The composition and hazardous characteristics of the influent hazardous waste(s); (I) The treatment method(s) used for each hazardous waste treated by each FTU; (J) The quantity, composition and hazardous characteristic(s) of any treatment effluent or residual discharged from each FTU to a POTW, if applicable; and (K) The quantity, composition, hazardous characteristic(s) and disposition of any FTU treatment effluent or residual that was not discharged to a POTW, if applicable.

Violation Notes: Returned to compliance on 06/20/2016. Annual PBR/CA documents must be submitted electronically via the California Environmental Reporting System (CERS). These documents and the financial assurance documents must be submitted via CERS located at http://cers.calepa.ca.gov/
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 12-11-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 12/11/2014. One 55-gallon drum of waste oil and one 55-gallon container of spent cobrabond were not labeled with the required information. The containers were labeled with the required information during the inspection. The violation has been corrected. No further corrective action is required.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 15 66265.52 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.52
Violation Description: Failure to include all of the following in the Contingency Plan: 1) A description of actions the facility personnel shall take response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility; 2) A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services; 3) All names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates; 4) A list of all emergency

SOUTH COAST CIRCUITS (Continued) **S121675267**

equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities; 5) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan is to describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires); 6) The current telephone number of the California Emergency Management Agency; and 7) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter.

Violation Notes: Returned to compliance on 10/01/2015. The copper plate out (electrowinning) treatment unit is not adequately indicated on the facility diagram. Please submit a revised plot plan that indicates the location of the electrowinning unit.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 03-03-2016
Citation: 22 CCR 45 67450.13(a)(1) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.13(a)(1)
Violation Description: Failure to prepare a written estimate of the cost of closing each unit which includes the cost that would be incurred for closing a treatment unit when using the owner or operator or generator's own staff and/or personal equipment taking into account any salvage value that may be realized from the sale of wastes, facility structure or equipment, land or other facility assets. This estimate shall be submitted as an attachment to the Certification of Financial Assurance for Permit by Rule and Conditionally Authorized Operations/ Maintenance page(s) of the Unified Program Consolidated Form (x/99)).
Violation Notes: Returned to compliance on 06/06/2016. Financial assurance documents must be submitted electronically via the California Environmental Reporting System (CERS). Annual PBR/CA notification and financial assurance documents must be submitted via CERS located at http://cers.calepa.ca.gov/ Please submit the required documents to CERS within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 12-11-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

SOUTH COAST CIRCUITS (Continued) **S121675267**

Violation Notes: Returned to compliance on 12/22/2014. The electronic submittal in the eSubmit Portal has been declined. Please make the required corrections/amendments within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 15 66265.192(h) - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.192(h)
Violation Description: Failure to obtain and maintain a written assessment reviewed and certified by an independent, qualified, professional engineer stating the new hazardous waste tank system has sufficient structural integrity, is acceptable for the transferring, storing and treating of hazardous waste, and that the tanks and containment system including the foundation, structural support, seams, connections, and pressure controls (if applicable) are suitably designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be transferred, stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. This assessment shall be obtained prior to placing the tank system in service, and shall be kept on file at the facility. The tank assessment shall be good for five years. This assessment shall also include, at a minimum, the following information: (1) Design standard(s) according to which the tank(s) and ancillary equipment are or will be constructed; (2) Hazardous characteristics of the waste(s) to be handled; (3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system is or will be in contact with the soil or with water, a determination by a corrosion expert of: (A) Factors affecting the potential for corrosion, including but not limited to: 1. Soil moisture content; 2. Soil pH; 3. Soil sulfides level; 4. Soil resistivity; 5. Structure to soil potential; 6. Influence of nearby underground metal structures (e.g., piping); 7. Stray electric current; and, 8. Existing corrosion-protection measures (e.g., coating, cathodic protection), and (B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following: 1. Corrosion-resistant materials of construction such as special alloys or fiberglass-reinforced plastic; 2. Corrosion-resistant coating (such as epoxy or f
Violation Notes: Returned to compliance on 09/29/2015. The PE certification dated 10/4/12 states that the tank certification is contingent on specific conditions being addressed (p. 6-8). It does not appear that these conditions have been met. Please conduct the required actions that the report specifies in order to meet the requirements for certification. The conditions must be addressed and/or completed within 60 days.
Violation Division: Orange County Environmental Health
Violation Program: CA
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 15 66265.192(h) - California Code of Regulations, Title 22,

SOUTH COAST CIRCUITS (Continued) **S121675267**

Chapter 15, Section(s) 66265.192(h)

Violation Description: Failure to obtain and maintain a written assessment reviewed and certified by an independent, qualified, professional engineer stating the new hazardous waste tank system has sufficient structural integrity, is acceptable for the transferring, storing and treating of hazardous waste, and that the tanks and containment system including the foundation, structural support, seams, connections, and pressure controls (if applicable) are suitably designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be transferred, stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. This assessment shall be obtained prior to placing the tank system in service, and shall be kept on file at the facility. The tank assessment shall be good for five years. This assessment shall also include, at a minimum, the following information: (1) Design standard(s) according to which the tank(s) and ancillary equipment are or will be constructed; (2) Hazardous characteristics of the waste(s) to be handled; (3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system is or will be in contact with the soil or with water, a determination by a corrosion expert of: (A) Factors affecting the potential for corrosion, including but not limited to: 1. Soil moisture content; 2. Soil pH; 3. Soil sulfides level; 4. Soil resistivity; 5. Structure to soil potential; 6. Influence of nearby underground metal structures (e.g., piping); 7. Stray electric current; and, 8. Existing corrosion-protection measures (e.g., coating, cathodic protection), and (B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following: 1. Corrosion-resistant materials of construction such as special alloys or fiberglass-reinforced plastic; 2. Corrosion-resistant coating (such as epoxy or f

Violation Notes: Returned to compliance on 09/29/2015. The PE certification dated 10/4/12 states that the tank certification is contingent on specific conditions being addressed (p. 6-8). It does not appear that these conditions have been met. Please conduct the required actions that the report specifies in order to meet the requirements for certification. The conditions must be addressed and/or completed within 60 days.

Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 45 67450.11(d)(7)(E) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.11(d)(7)(E)

Violation Description: Failure to maintain the following records at the facility for a minimum of three years from the last date of any activity and made available to authorized representatives of the Department, the CUPA, or the U.S. EPA upon request: 1) Written approval from the agency operating the POTW receiving the facility's discharges; 2) Written method documented in the waste analysis plan for ensuring that the concentration of total cyanide does not exceed 5000 milligrams per liter in the aqueous waste resulting from the mixing; and 3) Documentation that the residual solids generated by the treatment have been either: A) Sent offsite for metals recovery or reclamation; or B)

SOUTH COAST CIRCUITS (Continued) **S121675267**

	Determined to be not amenable for recycling.
Violation Notes:	Returned to compliance on 10/19/2015. Please locate and/or prepare a waste analysis plan for the wastes that are treated in the PBR units. Please submit a copy of the plan to this Agency within 60 days.
Violation Division:	Orange County Environmental Health
Violation Program:	PBR
Violation Source:	CERS
Site ID:	154892
Site Name:	SOUTH COAST CIRCUITS
Violation Date:	02-25-2014
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description:	Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 12/12/2014. The spent cupric chloride tank in building 1 has not been certified by a professional engineer. Hazardous waste tanks must be assessed by an independent, qualified professional engineer, registered in California. The written assessment must attest to the integrity of each on-site hazardous waste storage tank and associated secondary containment system. Please have the spent cupric chloride tank and containment assessed by a PE and provide a copy of the report to this Agency within 60 days.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS
Site ID:	154892
Site Name:	SOUTH COAST CIRCUITS
Violation Date:	02-25-2014
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 12/12/2014. 22CCR 66262.34(f)(2,3)- Hazardous waste tanks must be labeled with the words "hazardous waste" and the accumulation start date. Please label the spent cupric chloride tank with the words "hazardous waste" and the accumulation start date.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS
Site ID:	154892
Site Name:	SOUTH COAST CIRCUITS
Violation Date:	06-21-2010
Citation:	HSC 6.67 Multiple Sections - California Health and Safety Code, Chapter 6.67, Section(s) Multiple Sections
Violation Description:	RCRA Large Quantity Generator Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/30/2011.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS
Site ID:	154892

SOUTH COAST CIRCUITS (Continued) **S121675267**

Site Name: SOUTH COAST CIRCUITS
Violation Date: 12-11-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 12/22/2014. The electronic submittal in the eSubmit Portal has been declined. Please make the required corrections/amendments within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 154892
Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 15 66265.52 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.52
Violation Description: Failure to include all of the following in the Contingency Plan: 1) A description of actions the facility personnel shall take response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility; 2) A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services; 3) All names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates; 4) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities; 5) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan is to describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires); 6) The current telephone number of the California Emergency Management Agency; and 7) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter.
Violation Notes: Returned to compliance on 04/15/2015. Please locate and/or acquire waste analysis records for the wastes that are treated in the PBR units. Please submit a copy of the records to this Agency within 60 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 154892

SOUTH COAST CIRCUITS (Continued) **S121675267**

Site Name: SOUTH COAST CIRCUITS
Violation Date: 02-25-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 12/12/2014. All containers and portable tanks used for hazardous waste accumulation must be labeled with the beginning accumulation date. Please provide the beginning accumulation date on all containers of hazardous waste that are not properly labeled.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 05-23-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: HMBEP Submission Reviewed and Accepted.
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-25-2012
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-31-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Please be advised that 2017 Tiered Permit financial assurance documents submitted to CERS on 3/2/17 were reviewed and request for submittal of revised financial assurance form with correct closure cost (-$1,207,833.51) was made on 3/20/17. To date, revised document has not been submitted to CERS. Revised financial assurance form must be submitted to CERS by 6/16/17 to avoid enforcement action.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-06-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Review of TP forms in CERS. File review required to verify info. Declined submittal due to: Financial Assurance documents have been accepted. Renewal forms- ENV1: Please check the box for precipitation

SOUTH COAST CIRCUITS (Continued) **S121675267**

under treatment combination 2. Uncheck the other options in combinations 4 (drying) and 8 (pH adjust), 2, as they are already covered combination 2. ENV3: Uncheck the options in combination 3 (drying), as it are already covered combination 1. ENV4: Please uncheck the options in treatment combinations 4 (drying) and 8 (pH adjust), as they are already covered combination 2. ENV5: Please uncheck the selected option in treatment combinations 4 (drying), as it is already covered combination 2. ENV6: Please select on option for the Basis for Not Needing a Federal Permit Violation (I278) has been corrected.

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-20-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Permit by Rule and Conditionally Authorized treatment notification and financial assurance documents have been accepted in CERS. Violations (I278) and (I335) have been corrected. Thank you.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-21-2010
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector Name: Dave Dixon
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-30-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector Name: Dave Dixon
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-30-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Discussed with Susan the request from Dan Benson for another extension to the Consent Order for compliance on the Waste Analysis Plan. Email: Good afternoon Dan, I spoke with Susan regarding the Waste Analysis Plan and your request for an extension. Please submit the completed Waste Analysis Plan to Susan as soon as it is done, or by Monday, July 13, 2015 at the latest. Regards, Christine Christine Lane, REHS Supervising Hazardous Waste Specialist Environmental Health Division (714) 433-6210 CUPA | BODY ART | MEDICAL WASTE From: Dan Benson [mailto:dan@sccircuits.com] Sent: Friday, June 26, 2015 3:55 PM To: Berg, Susan Cc: Lane, Christine; Chuck Benson Subject: South Coast

SOUTH COAST CIRCUITS (Continued) **S121675267**

Circuits Hi Susan, I left you voice mail concerning the submission of the Waste analysis plan. As you know I could not get an understanding of the parameters part of the plan so we contracted with Andrian and Associates for assistance. Christine told me to submit to [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-11-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Renewal forms accepted. Declined due to Financial Assurance issues
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-24-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Discussed WAP requirements with David Andrian, consultant for SCS.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-28-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Review draft waste analysis plan submitted by David Andrian. Match up wastes with units, try to determine if tier notification is correct.
Will finish later.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-05-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: AEO File Review. WAP Submitted to HCA Berg.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-19-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Reviewed training plan. Could not locate list of facility employees with HW job title. Sent email to Dan to request this document.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval Date:	09-11-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Multiple submittals were submitted to CERS on 9/6/17 and 9/11/17. Revised Financial Assurance form and renewal forms submitted to CERS on 9/11/17 were reviewed and accepted. Violation I278 regarding failure to prepare a written estiamte of the cost of closing treatment unit, cited in this agency's inspection report dated 5/31/17, has been corrected.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-29-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received and reviewed the following documents: - Hazardous waste tank PE certification dated 4/1/15 (due every 5 years) - Employee training plan Violations (W022) and (W035) have been corrected. Please maintain these documents on site and make them available for review during inspections.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-29-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received and reviewed the following documents: - PE recertification for the hazardous waste tanks and secondary containment Violation (Y016) has been corrected. Please note the date of the original tank certification is 10/4/12. The next tank certification is due 5 years from that date.
Eval Division:	Orange County Environmental Health
Eval Program:	CA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-29-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received and reviewed the following documents: - Revised PBR notification- 4 PBR and 1 CA - PE certification for hazardous waste tanks and containment following anchoring and other required upgrades - Revised waste analysis plan - Waste analysis records Please note the date of the original tank certification is 10/4/12. The next tank certification is due 5 years from that date. The waste analysis plan does not include the copper plateout/electrowinning unit from building 4. Please include this unit in the plan and resubmit to this Agency for review. The waste analysis records appear to be complete with the exception of the wastes for batch treatment in buildings 2 and 4, plus the electrowinning waste. Laboratory results dated 2/5/15 include analysis for the batch wastes in buildings 2 and 4 after they were mixed in the containment/holding tank for treatment. Each of the wastes that are being treated via

SOUTH COAST CIRCUITS (Continued) **S121675267**

batch treatment must be analyzed at the of [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-30-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Per request by Dan Benson, reviewed PE certification to determine if 2015 PE certification addendum could be used as the basis for the 5-certification rather than the 2012 original. The addendum is not a complete certification, therefore the 2012 document is the basis for the next certification. From: Berg, Susan Sent: Wednesday, September 30, 2015 11:19 AM To: 'Dan Benson' <dan@sccircuits.com> Subject: PE Certification Due Date Follow Up Good Morning Dan, In an effort to make sure that I was not missing anything regarding the next certifications for hazardous waste tanks and secondary containment, I re-reviewed your hazardous waste tank and containment certification dated 10/4/12, anchoring system certification dated 5/18/15, and HW tank certification for the cupric chloride tank dated 4/1/15. The anchoring system certification is limited to repairs/upgrades related to the anchoring and is not a complete certification. Therefore the 10/4/12 certification is [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-30-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Received phone calls (David Andrien, Nhan Tran) and multiple documents regarding the waste analysis plan and records, plus other compliance issues. The violation related to the waste analysis records has been corrected. WAP and facility diagram violations are both outstanding due to failure to include the copper plateout/electrowinning process.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-30-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: This report is a revision to the inspection report dated 9/29/15. The waste analysis records were provided from two different sampling events dated 2/5/15 and 3/30/15. The results from 3/30/15 contain the results for batch treatment processes in buildings 2 and 4, plus the analysis for the waste tin strip solution from building 1 (treated in building 4). Therefore the waste analysis records appear to be consistent with the plan and are acceptable. Violation (X017) has been corrected. Violation (X016) will remain outstanding until the waste analysis plan has been revised to include the copper plateout/electrowinning process Violation (P003) was also cited on a previous inspection report for failing to indicate the location of the copper plateout treatment unit on the facility diagram. Please provide

SOUTH COAST CIRCUITS (Continued) **S121675267**

	a revised diagram that includes the location of the plateout unit.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-01-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received the revised facility diagram for building 4 (3512 W Lake Center) that indicates the location of the copper plateout unit. Violation (P003) has been corrected. Violation (X016) was cited on a previous inspection report and remains outstanding. Please submit the revised waste analysis plan that includes the copper plateout unit to this Agency. Thank you.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-19-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	CA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-19-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	All PBR, CA, and HW violations have been corrected. Close CO0056425
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-19-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received and reviewed the revised waste analysis plan. Violation(X016) has been corrected. Please maintain this document on site and make it available for review during inspections. Thank you.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-20-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	File Review and Update.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval General Type:	Other/Unknown
Eval Date:	11-15-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Read/review HMBEP in E-submit. Rejected. Please make the following corrections and re submit via E-submit for re evaluation: 17 for the listed inventory chemicals appear to be below the reportable quantities (< 55 gallons). If these 17 chemicals are actually over the reportable quantities, please update the maximum daily amount. If they are actually < the reportable quantities, then remove them from the chemical inventory.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	03-10-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	03-10-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Review outstanding violations and site info w/Christine and Gerrit prior to AEO.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	03-10-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received and reviewed the waste analysis plan and records. The waste analysis plan does not contain the following required elements: - Parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters - Test methods which will be used to test for these parameters - Sampling and sampling management methods which will be used to obtain a representative sample of the waste to be analyzed The waste analysis records have been reviewed. Process flow diagrams have been provided by South Coast Circuits for buildings 1, 2, and 4. The processes, wastes, and lab analyses for buildings 1 and 2 appear to be consistent. There is only one laboratory analysis for the wastes from building 4, for batch treatment. It appears this sample was taken after the various wastes had been mixed together, which does not allow for analysis of the individual wastes that are to be treated. Please review the wastes from the [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval General Type: Other/Unknown
Eval Date: 03-11-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On site for follow up inspection to evaluate rinse water recycling process and treatment activities. Consent to enter and inspect was given by Nhan Tran. Observed the process lines, rinse water recycling, and treatment activities. Laboratory test results for many of the wastes that are treated on site are available for review. The following observations were made: Building 1 (3506) - Rinse waters from the silver, nickel, cupric etcher, and ammonia lines are treated at this location. The lab results for these waste is consistent with the PBR tier. - The tin strip solution is no longer batch treated in this building. The solution is transferred to the batch treatment in building 4 for treatment under PBR. - The resist strip rinse is currently the only waste being batch treated. The lab results indicate the rinse is nonhazardous for copper and pH, and therefore is not regulated under tiered permitting. Building 2 (3524) - Cobra Bond rinses out are treated in [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-13-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Chemical disclosure and site map declined in portal. Comments: - Copper chloride mixture/High Speed Ac-cu Guard Starter: based upon the waste information provided on the disclosure, this chemical appears to be what was labeled/manifested as copper tetraamine dichloride waste. Please indicate this is a waste on the inventory form (not a mixture). - EH-120: please add the hyphen to the CAS code for ferric chloride (7705-08-0). - Nickel Plating Bath: the CAS code for the nickel bromide component is 13462-88-9 - Nitric Acid Mixture/Sodder stripper: the nitric acid component of this chemical is an extremely hazardous substance (EHS). Please check this box for the nitric acid component. - Post Micro Etch Rinse: the sulfuric acid component is an EHS. Please check this box for this component. - Post Silver Rinse Solution: please check the EHS box for the nitric acid component. - Cupric Chloride Replenisher: please correct the chemical name to sodium chlorate (not [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-13-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Received Request for show cause. Reviewed files and reports. Obtained updates from HCA/Berg. Created HMSS AEO tab and hyperlinked all reports. Scheduled meeting in Doheny for 3-10-15 at 1:00 pm. Drafted Show Cause Letter. Emailed to HCA/Lane for review.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval General Type:	Other/Unknown
Eval Date:	01-20-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Draft Show Cause Letter and give to HCA/Boelter for signature. Updated HMSS AEO Spreadsheet. Generated EN number.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-21-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Review of Show Cause Letter with HCA/Boelter and HCA/Berg. Updated show cause letter. Show Cause letter signed and sent certified mail this date.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-21-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Review request to show cause letter per Pearl's request. Advised to combine CA and PBR violations for PE cert on secondary containment as one finding on the document.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-26-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Phone call from Nhan Tran. Questions regarding disclosure comments.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-27-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Declined Please submit 2018 Contingency Plan Section FOR ALL CHEMICALS: - Remove obsolete Federal Hazard categories. Select from the new 24 options where applicable - Select a Fire Code Hazard Classification WASTE AMMONIA ETCHER: - Maximum Daily Amount should be at least 55 gallons
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	02-02-2015
Violations Found:	No

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Hazmat disclosure documents have been declined in the eSubmit Portal.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-03-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received email from Nhan Tran with questions regarding submittal. Attached MSDS did not include required information. Contacted manufacturer to obtain hazardous component chemical name and CAS. Called Nhan to discuss map, waste disclosure, and other questions.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-03-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Please be advised that this Agency has reviewed the Tiered Permitting Financial Assurance Self Certification for this facility. The 2017 Closure Cost Estimate (CCE) of $19,300.00 is not properly calculated. It does not appear that the estimate is new since costs for some elements have increased (without using inflation factor), some decreased and others are the same as 2016 costs. Please be advised that 2017 CCE should be, at a minimum, your 2016 CCE multiplied by an inflation factor of 1.013. Your 2016 CCE was submitted and approved at $18,999.50. Therefore, your minimum 2016 amount must be $18,999.50 x 1.013 = $19, 246.49. Revised/corrected Certification Of Financial Assurance Form and Estimated Closure Cost form must be submitted before 3/1/17.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-15-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Revised financial assurance documents submitted to CERS on 2/14/17 were not accepted since closure cost estimate has not been calculated properly. Costs for some elements have increased (without using inflation factor), some costs decreased and other costs remained the same as 2016. Revised Certification Of Financial Assurance Form and breakdown of closure costs must be submitted within 30 days of this inspection report.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	CA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-24-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Financial assurance documents submitted to CERS on 1/16/17 and 2/23/17 were reviewed and not accepted since the listed Estimated Closure Costs of $19,246.49 does not reflect the closure costs with deduction of salvage value (-$1,207,833.51). Please use ?Estimated Closure Costs Calculator? in Estimated Closure Costs section on Financial Assurance form to enter costs with salvage value deducted. Corrected Certification Of Financial Assurance Form must be submitted within 30 days of this inspection report.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-25-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	CA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-25-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-25-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-25-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-25-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site for routine hazardous waste inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present are Lisa Wales (OCHCA) and Dan Benson (SCC). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (RCRA LQG). The facility is also regulated for treatment of hazardous waste under the PBR and CA tiers. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under the CA tier is conducted in building 1. - Treatment under the CA and PBR tiers is conducted in building 2. - Silver recovery is conducted in building 3. - Treatment under the PBR tier is conducted in building 4. - The containers of filter cake under the filter presses buildings 1, 2, and 4 are not stored closed. - Two boxes of filter cake at building 4 (one inside, one outside) are not labeled with the required [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-25-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site for routine tiered permitting, conditionally authorized inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present are Lisa Wales (OCHCA) and Dan Benson (SCC). The facility is also regulated for treatment of hazardous waste under the PBR tier. No changes to the treatment systems have been made. There have been no reported releases in the previous three years. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under the CA tier is conducted in building 1. There are two units, one for treatment of rinse waters from the etching, nickel, gold, and silver plating operations and the other for treatment of tin strip solution. [ENV1 and ENV2 according to notification documents] - Treatment under both the CA and PBR tiers is conducted in building 2. There is one CA unit for treatment of rinse waters from oxide line, coating, and [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: CA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-25-2014

SOUTH COAST CIRCUITS (Continued) **S121675267**

Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	On site for routine tiered permitting, permit by rule inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present are Lisa Wales (OCHCA) and Dan Benson (SCC). The facility is also regulated for treatment of hazardous waste under the CA tier. No changes to the treatment systems have been made. There have been no reported releases in the previous three years. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under the CA tier is conducted in building 1. There are two units, one for treatment of rinse waters from the etching, nickel, gold, and silver plating operations and the other for treatment of tin strip solution. [ENV1 and ENV2 according to notification documents] - Treatment under both the CA and PBR tiers is conducted in building 2. There is one CA unit for treatment of rinse waters from oxide line, coating, scrubbing, and [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-26-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Please be advised that this Agency has reviewed Tiered Permitting Financial Assurance Self Certification for this facility. The 2014 Adjusted Closure Cost Estimate (CCE) was not properly calculated since the 2013 inflation factor (1.024) was used. The inflation factor for 2014 is 1.014. Therefore, your 2014 CCE is your 2013 CCE ($17,615.87) multiplied by a factor of 1.014 which is $17,862.49. A corrected Certification Of Financial Assurance Form and Estimated Closure Cost form (enclosed) must be submitted by 3/27/14.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-03-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Discussed submittal with Nhan Tran. WAP and results received, have not yet been reviewed. Revised hazmat in portal.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-03-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	The facility submitted hard copies of the annual PBR/CA notification and financial assurance documents. The documents indicate 1 CA and 4 PBR treatment units. These documents may no longer be submitted in paper form and must be submitted electronically. A notice dated 1/15/16 that explained the change in submittal was provided to the facility and is attached to this report. (Violations cited on PBR F04

SOUTH COAST CIRCUITS (Continued) **S121675267**

	report. This report not sent to facility)
Eval Division:	Orange County Environmental Health
Eval Program:	CA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-03-2016
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	The facility submitted hard copies of the annual PBR/CA notification and financial assurance documents. The documents indicate 1 CA and 4 PBR treatment units. These documents may no longer be submitted in paper form and must be submitted electronically. A notice dated 1/15/16 that explained the change in submittal was provided to the facility and is attached to this report. The submittal is being returned to the facility with this report.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-09-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-09-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Begin review of WAP and analyses.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-10-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Sent the following follow-up email to Dan Benson of SCC: "Just a quick follow up from my visit a week or so ago. I?ve attached the regulations related to the Waste Analysis Plan so that you have an idea of what should be contained in one. The plan should cover all hazardous wastes at point of generation, which is before the tank in which the wastes mix. The plan is only required for the wastes treated under permit by rule. I?ve also attached the most recent treatment notification documents that we have on file. The PBR and CA units are in separate attachments. Please review these documents and submit revised documents if there have been changes. The Unit ID numbers on the forms should match the number that is labeled on the treatment units. The conditionally authorized tier requires that a treatment records be maintained. The document must contain a ?record of the dates, concentrations, amounts, and types of waste treated. Records maintained to comply with state, [Truncated]

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-20-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed WAP submitted by Nhan Tra. Several components are missing and/or incomplete. Emailed comments back to him.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-20-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Revised financial assurance forms submitted to CERS on 3/2/17 were reviewed and not accepted with the following considerations: Listed Estimated Closure Costs of $19,246.49 on the Financial Assurance form does not reflect closure costs with deduction of salvage value (-$1,207,833.51). Please list -$1,207,833.51, as the Estimated Closure Costs on Financial Assurance form.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-22-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	AEO: File review and update of AEO. All violations corrected. A PE was obtained for the PE certification of the Hazardous Waste Tanks and the Secondary Containment. Emailed Dan for update of SEP and any correspondence. AEO will be closed upon receipt.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-23-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received and reviewed revised WAP. Some elements are still incomplete/incorrect. Send comments back to Nhan Tran and Dan Benson.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-04-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received an email from South Coast Circuits containing the PE Assessment that was overdue. Violation has been abated.
Eval Division:	Orange County Environmental Health

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-05-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector Comments: The closure cost estimate is the actual cost of closure. The closure cost listed for 2016, is $18999.50 rather than $18999.47, since it was rounded off to the nearest dollar. Please be advised that the calculated amount should be recorded to the nearest penny and not rounded to the nearest dollar for future calculations.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-14-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Reviewed WAP- unable to accept due to multiple deficiencies. Sent email to Nhan Tran explaining the deficiencies.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-14-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: WAP not acceptable. Discussed site w/Christine due to compliance issue with consent order of AEO.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-15-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: This Agency has received and reviewed the revised training plan. The plan is incomplete. Please revise the document to include the following information: - Name and job title of each employee filling a hazardous waste management position - Records documenting the required training for each of the above personnel: 40-hr Hazmat and annual refresher (according to the plan) Please submit the revised plan to this Agency. The following violations were cited on a previous inspection report and remain outstanding: (W022) Failure to have hazardous waste tank assessed by PE (W035) Failure to develop and maintain an employee training plan
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-15-2015
Violations Found: Yes

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	INSPECTOR COMMENTS This Agency received the following documents for the annual tiered permitting notification for 2015: - UPC Form Business Activities - UPC Form Owner/Operator Identification - UPC Form HW Treatment Notification Facility Page The notification indicates 3 PBR units and 3 CA units. The waste minimization and tiered permitting certification are included in the notification. The revised waste analysis plan has been received and reviewed. Please revise the plan to include the following: - parameters for which each hazardous waste will be analyzed - sample collection procedures for the batch and dragout treatment wastes The waste analysis records have been received and appear consistent with the wastes currently being treated on site. Violation (X017) has been corrected. The following violations were cited on previous inspection reports and remain outstanding: (X015) Failure to obtain a PE certification for the tank containment [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-15-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	AEO CLOSED: Update Files. SEP verified. Draft CERS Enforcement Summary. Draft Compliance Letter. Close CO. Close EN. AEO CLOSED APRIL 15, 2016.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-17-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector Comments: Please be advised that this Agency has reviewed Tiered Permitting Financial Assurance Self Certification for this facility. The 2015 Adjusted Closure Cost Estimate (CCE) was not properly calculated. The 2014 CCE was approved at $17,862.49 - salvage value. Therefore your minimum 2015 CCE is $17,862.49 x 1.016 (inflation factor) = $18,148.29 - salvage value. Revised Certification Of Financial Assurance form and Estimated Closure Cost breakdown must be submitted to this Agency by 5/3/15.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-21-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMSS AEO File Updates. Extension given for Compliance Items. Create CERS Enforcement Case.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-22-2009
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector Name: Orange CUPA
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-23-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	CERS Submission Reviewed and Accepted. Pending Financial Assurance documents
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	03-11-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Update Files. Generate Compliance Schedules and L41 Reports.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-11-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site with Michael Palazolla for routine tiered permitting, permit by rule inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. The facility is also regulated for treatment of hazardous waste under the CA tier. No changes to the treatment systems have been made. There have been no reported releases in the previous three years. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under both the CA and PBR tiers is conducted in building 1. There are two units, one for treatment of rinse waters from the etching, nickel, gold, and silver plating operations (CA) and the other for treatment of tin strip solution (PBR). - Treatment under both the CA and PBR tiers is conducted in building 2. There is one CA unit for treatment of rinse waters from oxide line, coating, scrubbing, and deburring operations. This treatment unit is [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	CA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-11-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site with Michael Palazolla for routine tiered permitting, permit by rule inspection. Consent to enter, inspect, and

SOUTH COAST CIRCUITS (Continued) **S121675267**

take photographs was given by Nhan Tran. The facility is also regulated for treatment of hazardous waste under the CA tier. No changes to the treatment systems have been made. There have been no reported releases in the previous three years. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under both the CA and PBR tiers is conducted in building 1. There are two units, one for treatment of rinse waters from the etching, nickel, gold, and silver plating operations (CA) and the other for treatment of tin strip solution (PBR). - Treatment under both the CA and PBR tiers is conducted in building 2. There is one CA unit for treatment of rinse waters from oxide line, coating, scrubbing, and deburring operations. This treatment unit is [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-11-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site with Michael Palazzola (OCHCA) for routine hazardous waste inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran (SCC). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier and conditionally authorized (CA) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and properly labeled. Adequate aisle space is maintained. Training records were reviewed and accurate. The following documents are current and available for review: - Hazardous waste manifests - Waste Analysis Plan - Contingency Plan - Hazardous waste area inspection log - SB 14 Source Reduction documents - Biennial Report - Training plan and records
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 03-13-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Hazmat disclosure documents have been accepted in the eSubmit Portal.
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous waste inspection with Terry Carrier. Consent to enter, inspect, and take photographs was given by Nhan Tran (SCC). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier and conditionally authorized (CA) tier. Observed facility

SOUTH COAST CIRCUITS (Continued) **S121675267**

and inspected hazardous waste storage. Containers are stored closed and properly labeled. Adequate aisle space is maintained. Training records were reviewed and accurate. The following documents are current and available for review: - Hazardous waste manifests - Contingency Plan - Hazardous waste area inspection log - SB 14 Source Reduction documents - Biennial Report - Training plan and records

Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine tiered permitting inspection with Terry Carrier. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present was Dan Benson (SCC). The process lines and treatment unit was inspected. The treatment unit was properly maintained and inspected on a proper schedule. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist - PE certification dated 10/4/12 (needs to be certified again this year)
Eval Division: Orange County Environmental Health
Eval Program: CA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-14-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine tiered permitting inspection with Terry Carrier. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present was Dan Benson (SCC). The process lines and treatment units were inspected. The treatment units were properly maintained and inspected on a proper schedule. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist - PE certification dated 10/4/12 (needs to be certified again this year)
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous waste inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran (SCC). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier and conditionally authorized (CA) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and properly labeled. Adequate aisle space is maintained. Training records were reviewed and accurate. The following documents are current and

SOUTH COAST CIRCUITS (Continued) **S121675267**

available for review: - Hazardous waste manifests - Contingency Plan - Hazardous waste area inspection log - SB 14 Source Reduction documents - Biennial Report - Training plan and records

Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine tiered permitting inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present was Dan Benson (SCC). The process lines and treatment unit was inspected. The treatment unit was properly maintained and inspected on a proper schedule. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist The PE certification is out of date and needs to be renewed. Dan Benson informed that they should be receiving the new PE assessment within 2 weeks. There is an open violation for this matter. Please send me a copy of the PE Assessment by April 1st, 2018.
Eval Division: Orange County Environmental Health
Eval Program: CA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-15-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine tiered permitting inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present was Dan Benson (SCC). The process lines and treatment units were inspected. The treatment units were properly maintained and inspected on a proper schedule. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist The PE certification is out of date and needs to be renewed. Dan Benson informed that they should be receiving the new PE assessment within 2 weeks. There is an open violation for this matter. Please send me a copy of the PE Assessment by April 1st, 2018.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 03-20-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Reviewed training plan submitted by Dan Benson. The plan appears to be lacking several elements. Sent comments back to Dan.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

SOUTH COAST CIRCUITS (Continued) **S121675267**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-11-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site for routine tiered permitting, conditionally authorized inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present are Lisa Wales (OCHCA) and Dan Benson (SCC). The facility is also regulated for treatment of hazardous waste under the PBR tier. No changes to the treatment systems have been made. There have been no reported releases in the previous three years. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under the both the CA and PBR tiers is conducted in building 1. There are two units, one for treatment of rinse waters from the etching, nickel, gold, and silver plating operations (PBR) and the other for treatment of tin strip solution (CA). - Treatment under both the CA and PBR tiers is conducted in building 2. There is one CA unit for treatment of rinse waters from oxide line, coating, scrubbing, and deburring [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: CA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-11-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site for routine tiered permitting, permit by rule inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present are Lisa Wales (OCHCA) and Dan Benson (SCC). The facility is also regulated for treatment of hazardous waste under the CA tier. No changes to the treatment systems have been made. There have been no reported releases in the previous three years. Observed the process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under both the CA and PBR tiers is conducted in building 1. There are two units, one for treatment of rinse waters from the etching, nickel, gold, and silver plating operations (CA) and the other for treatment of tin strip solution (PBR). - Treatment under both the CA and PBR tiers is conducted in building 2. There is one CA unit for treatment of rinse waters from oxide line, coating, scrubbing, and deburring operations. This [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-11-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: CA
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-11-2014

SOUTH COAST CIRCUITS (Continued) **S121675267**

Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-11-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-11-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-11-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Nhan Tran. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that require disclosure: Process Line - Post acid cleaner rinse (silver line) - Post micro etch rinse (silver line) - Post silver solution rinse (silver line - Nickel plate solution and rinse (nickel line) - Gold plate solution (nickel line) - Cupric etcher, dragout, rinse (cupric etcher line) - Resist strip and rinse (resist strip line) - Ammonia etch, dragout, rinse (ammonia line) - Tin stripper, rinse (ammonia line) New Product and Waste - Resist stripper- new - Cupric chloride replenisher - High speed Replenisher - Sodder stripper - Muriatic acid - WWT-30 - EH-120 - Flocculant and water - Sodium hydroxide - Cupric etchant waste - Copper tetramine dichloride waste The facility is [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-11-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous waste inspection. Consent to enter, inspect, and take photographs was given by Nhan Tran. Also present are Lisa Wales (OCHCA) and Dan Benson (SCC). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (RCRA LQG). Observed the

SOUTH COAST CIRCUITS (Continued) **S121675267**

process and treatment areas in buildings 1 (3506), 2 (3524), 3 (3500), and 4 (3512). The following conditions were observed: - Treatment under the PBR and CA tiers is conducted in buildings 1, 2, and 4. - Silver recovery is conducted in building 3. - One 55-gallon drum of waste oil in building 2 was not labeled with the required information and was not stored closed. - One 55-gallon container of spent cobrabond in building 2 was not labeled with the required information. - One 55-gallon drum of filter cake in building 4 was not stored closed. The accumulation start date was 12/9/14. - All other containers of hazardous waste were [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-12-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-17-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-22-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Declined HazMat submittal in eSubmit portal. Comments Business Activities Please check the box that indicates the facility generates hazardous waste at this location. Chemical Disclosure - Ammonium chloride mixture: the CAS code for ammonium hydroxide is 1366-21-6. - Copper chloride mixture/High Speed Ac-cu Guard Starter: based upon the waste information provided on the disclosure, this chemical appears to be what was labeled/manifested as copper tetraamine dichloride waste. Please indicate this is a waste on the inventory form and complete the field for number of days on site. - Cupric Chloride Replenisher: CAS code 7775-09-9 is for sodium chlorate. Please provide a more accurate CAS code for this chemical. If this chemical is actually sodium chlorate, please modify the disclosure so that sodium chlorate is the chemical name and cupric chloride replenisher (Cu Rep 28) is the common name. - Nitric Acid Mixture/Sodder stripper: the nitric acid component of [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 12-22-2014

SOUTH COAST CIRCUITS (Continued) **S121675267**

Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Read/review re submission of HMBEP. Corrections made. Accepted.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	12-22-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Submit AEO packet to Gerrit
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Enforcement Action:

Site ID:	154892
Site Name:	SOUTH COAST CIRCUITS
Site Address:	3506 W LAKE CENTER DR STE A
Site City:	SANTA ANA
Site Zip:	92704
Enf Action Date:	12-22-2014
Enf Action Type:	AEO - Unified Program
Enf Action Description:	Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes:	SOUTH COAST CIRCUITS INC 3506 W. LAKE CENTER DRIVE SANTA ANA, CA 92704 FA0029275 HW PR0027366 PBR PR0030569 CA PR0030634.
Enf Action Division:	Orange County Environmental Health
Enf Action Program:	CA
Enf Action Source:	CERS
Site ID:	154892
Site Name:	SOUTH COAST CIRCUITS
Site Address:	3506 W LAKE CENTER DR STE A
Site City:	SANTA ANA
Site Zip:	92704
Enf Action Date:	12-22-2014
Enf Action Type:	AEO - Unified Program
Enf Action Description:	Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes:	SOUTH COAST CIRCUITS INC 3506 W. LAKE CENTER DRIVE SANTA ANA, CA 92704 FA0029275 HW PR0027366 PBR PR0030569 CA PR0030634.
Enf Action Division:	Orange County Environmental Health
Enf Action Program:	HWLQG
Enf Action Source:	CERS
Site ID:	154892
Site Name:	SOUTH COAST CIRCUITS
Site Address:	3506 W LAKE CENTER DR STE A
Site City:	SANTA ANA
Site Zip:	92704
Enf Action Date:	12-22-2014
Enf Action Type:	AEO - Unified Program
Enf Action Description:	Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes:	SOUTH COAST CIRCUITS INC 3506 W. LAKE CENTER DRIVE SANTA ANA, CA 92704 FA0029275 HW PR0027366 PBR PR0030569 CA PR0030634.
Enf Action Division:	Orange County Environmental Health
Enf Action Program:	PBR

SOUTH COAST CIRCUITS (Continued) **S121675267**

Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 3506 W LAKE CENTER DR STE A
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92704
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: CHARLES BENSON
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (714) 966-2108

Affiliation Type Desc: Document Preparer
Entity Name: NHAN TRAN
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: DAN BENSON
Entity Title: Vice President
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Onsite Treatment Unit Owner Operator
Entity Name: NHAN TRAN
Entity Title: Environmental Tech
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title: Not reported
Affiliation Address: 1241 East Dyer RoadSuite 120

SOUTH COAST CIRCUITS (Continued) **S121675267**

Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000

Affiliation Type Desc:	Environmental Contact
Entity Name:	NHAN TRAN
Entity Title:	Not reported
Affiliation Address:	3506 W. LAKE CENTER DR. SUITE A
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	SOUTH COAST CIRCUITS INC
Entity Title:	Not reported
Affiliation Address:	3506 W LAKE CENTER DR STE A
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 966-2108

Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	DANIEL BENSON
Entity Title:	VICE PRESIDENT
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Parent Corporation
Entity Name:	SOUTH COAST CIRCUITS, INC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Property Owner
Entity Name:	Chuck Benson
Entity Title:	Not reported
Affiliation Address:	3506 W Lake Center Dr. A
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 966-2108

H55 **North** **1/8-1/4** **0.224 mi.** **1181 ft.**	**SOUTH COAST CIRCUITS, INC.** **3506 W LAKE CENTER DR "A"** **SANTA ANA, CA 92704** **Site 5 of 5 in cluster H**	**RCRA-LQG**	**1001126718** **CAR000018010**

Relative:
Higher

Actual:
34 ft.

RCRA-LQG:

Date form received by agency:	01/19/2018
Facility name:	SOUTH COAST CIRCUITS, INC.
Facility address:	3506 W LAKE CENTER DR "A" SANTA ANA, CA 92704-0000
EPA ID:	CAR000018010
Mailing address:	LAKE CENTER DR "A" SANTA ANA, CA 92704-0000
Contact:	NHAN T TRAN
Contact address:	LAKE CENTER DR "A" SANTA ANA, CA 92704-0000
Contact country:	US
Contact telephone:	714-966-2108
Contact email:	NHAN@SCCIRCUITS.COM
EPA Region:	09
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	CHUCK BENSON
Owner/operator address:	LAKE CENTER DR "A" SANTA ANA, CA 92704
Owner/operator country:	US
Owner/operator telephone:	714-966-2108
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/01/1985
Owner/Op end date:	Not reported
Owner/operator name:	CHUCK BENSON
Owner/operator address:	LAKE CENTER DR "A" SANTA ANA, CA 92704
Owner/operator country:	US
Owner/operator telephone:	714-966-2108
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Owner/Operator Type: Operator
Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Owner/operator name: CHUCK BENSON
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Owner/operator name: CHUCK BENSON
Owner/operator address: 3506 W. LAKE CENTER DR. "A"
SANTA ANA, CA 92704
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 05/27/2016
Site name: SOUTH COAST CIRCUITS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2014
Site name: SOUTH COAST CIRCUITS INC
Classification: Large Quantity Generator

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Date form received by agency: 03/13/2012
Site name: SOUTH COAST CIRCUITS,INC.
Classification: Large Quantity Generator

Date form received by agency: 02/25/2010
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

Date form received by agency: 02/06/2008
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

Date form received by agency: 02/27/2006
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

Date form received by agency: 01/30/2004
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

Date form received by agency: 02/15/2002
Site name: SOUTH COAST CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Site name: SOUTH COAST CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 02/21/1997
Site name: SOUTH COAST CIRCUITS
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 171
. Waste name: Metal sludge (see 121)

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 31688.1

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 16045.9

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 16045.9

Waste code: D008
Waste name: LEAD
Amount (Lbs): 16045.9

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
Amount (Lbs): 25000

Facility Has Received Notices of Violations:
Regulation violated: Not reported

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Area of violation: Generators - Pre-transport
Date violation determined: 12/11/2014
Date achieved compliance: 12/11/2014
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/22/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 30000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/25/2014
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 02/25/2014
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/21/2010
Date achieved compliance: 06/30/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Date violation determined: 05/11/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/11/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 03/15/2018
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/14/2017
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/15/2016
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/22/2016
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/20/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/19/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/30/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/29/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/19/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/05/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/24/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/21/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/15/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/14/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/20/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/11/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/10/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Evaluation date: 03/09/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/03/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/21/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/20/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/13/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/22/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/17/2014
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/17/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/11/2014
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/11/2014
Evaluation lead agency: State

Evaluation date: 12/11/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/25/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/25/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/25/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/21/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/30/2011
Evaluation lead agency: State

Evaluation date: 05/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/11/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 03/08/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

SOUTH COAST CIRCUITS, INC. (Continued) **1001126718**

Evaluation date:	10/02/2003
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State Contractor/Grantee

I56 West 1/4-1/2 0.309 mi. 1630 ft. **ICN PHARMACEUTICALS 3300 HYLAND COSTA MESA, CA 92626** **LUST HIST CORTESE CERS** **S100869272 N/A**

Site 1 of 2 in cluster I

Relative: Lower

Actual: 21 ft.

LUST:

Name:	ICN PHARMACEUTICALS
Address:	3300 HYLAND
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900064
Global Id:	T0605900064
Latitude:	33.692939
Longitude:	-117.923536
Status:	Completed - Case Closed
Status Date:	01/22/1991
Case Worker:	DB
RB Case Number:	083000081T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	89UT150
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0605900064
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Global Id:	T0605900064
Contact Type:	Regional Board Caseworker
Contact Name:	PATRICIA HANNON
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	patricia.hannon@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0605900064
Action Type:	Other
Date:	08/07/1989
Action:	Leak Discovery

Global Id:	T0605900064

ICN PHARMACEUTICALS (Continued) **S100869272**

Action Type:	Other
Date:	08/07/1989
Action:	Leak Reported

LUST:

Global Id:	T0605900064
Status:	Open - Case Begin Date
Status Date:	08/07/1989
Global Id:	T0605900064
Status:	Completed - Case Closed
Status Date:	01/22/1991

LUST REG 8:

Name:	ICN PHARMACEUTICALS
Address:	3300 HYLAND
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000081T
Local Case Num:	89UT150
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900064
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	8/7/1989
Enforcement Date:	Not reported
Close Date:	1/22/1991
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6933248

ICN PHARMACEUTICALS (Continued) **S100869272**

Longitude:	-117.9247702
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	PAH
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

HIST CORTESE:

edr_fname:	ICN PHARMACEUTICALS
edr_fadd1:	3300 HYLAND
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000081T

CERS:

Name:	ICN PHARMACEUTICALS
Address:	3300 HYLAND
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	244489
CERS ID:	T0605900064
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1241 E. DYER ROAD, STE. 120
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7144336255

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	PATRICIA HANNON - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

I57 West 1/4-1/2 0.309 mi. 1630 ft. | **3300 HYLAND I LLC**
3300 HYLAND AVE
COSTA MESA, CA 92626

LUST **S112970176**
HAZNET **N/A**

Site 2 of 2 in cluster I

Relative: Lower

Actual: 21 ft.

ORANGE CO. LUST:

Name:	ICN PHARMACEUTICALS
Address:	3300 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	89UT150
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	01/22/1991
Record ID:	RO0002724

HAZNET:

Name:	3300 HYLAND I LLC
Address:	3300 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 92626
Year:	2008
GEPAID:	CAC002630317
Contact:	JOHN HARTY
Telephone:	7146891440
Mailing Name:	Not reported
Mailing Address:	3 IMPERIAL PROMENADE ST
Mailing City,St,Zip:	SANTA ANA, CA 92707
Gen County:	Orange
TSD EPA ID:	CAD009007626
TSD County:	Los Angeles
Tons:	12
CA Waste Code:	151-Asbestos containing waste
Method:	H132-Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Orange

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58 West 1/4-1/2 0.330 mi. 1742 ft. | **STATE FARM INSURANCE**
3333 HYLAND AVE
COSTA MESA, CA 92626

RCRA-SQG **1000397159**
LUST **CAD982020851**
SWEEPS UST
HIST UST
CA FID UST
FINDS
ECHO
EMI
HAZNET
HIST CORTESE
CERS

Relative: Lower

Actual: 25 ft.

RCRA-SQG:

Date form received by agency:	08/05/1987
Facility name:	STATE FARM INSURANCE
Facility address:	3333 HYLAND AVE COSTA MESA, CA 92626
EPA ID:	CAD982020851
Mailing address:	HYLAND AVE COSTA MESA, CA 92626
Contact:	ENVIRONMENTAL MANAGER
Contact address:	3333 HYLAND AVE COSTA MESA, CA 92626

STATE FARM INSURANCE (Continued) **1000397159**

Contact country:	US
Contact telephone:	714-241-2141
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STATE FARM INSURANCE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

STATE FARM INSURANCE (Continued) **1000397159**

LUST:

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901167
Global Id:	T0605901167
Latitude:	33.6924891
Longitude:	-117.9248468
Status:	Completed - Case Closed
Status Date:	08/21/1996
Case Worker:	DB
RB Case Number:	083001527T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	93UT001
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0605901167
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Global Id:	T0605901167
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0605901167
Action Type:	Other
Date:	12/23/1992
Action:	Leak Discovery

Global Id:	T0605901167
Action Type:	Other
Date:	12/23/1992
Action:	Leak Reported

Global Id:	T0605901167
Action Type:	ENFORCEMENT
Date:	08/21/1996
Action:	Closure/No Further Action Letter

STATE FARM INSURANCE (Continued) **1000397159**

LUST:

Global Id:	T0605901167
Status:	Open - Case Begin Date
Status Date:	12/23/1992

Global Id:	T0605901167
Status:	Completed - Case Closed
Status Date:	08/21/1996

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605957851
Global Id:	T0605957851
Latitude:	33.694007
Longitude:	-117.926398
Status:	Completed - Case Closed
Status Date:	11/07/1990
Case Worker:	DB
RB Case Number:	Not reported
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	90UT111
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0605957851
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Global Id:	T0605957851
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0605957851
Action Type:	Other
Date:	04/18/1990
Action:	Leak Discovery

Global Id:	T0605957851
Action Type:	Other

STATE FARM INSURANCE (Continued) **1000397159**

Date: 04/18/1990
Action: Leak Reported

LUST:
Global Id: T0605957851
Status: Open - Case Begin Date
Status Date: 04/18/1990

Global Id: T0605957851
Status: Completed - Case Closed
Status Date: 11/07/1990

ORANGE CO. LUST:
Name: STATE FARM INSURANCE
Address: 3333 HYLAND AVE
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 90UT111
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 11/07/1990
Record ID: RO0002021

Name: STATE FARM INSURANCE
Address: 3333 HYLAND AVE
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 93UT001
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 08/21/1996
Record ID: RO0001800

LUST REG 8:
Name: STATE FARM INSURANCE
Address: 3333 HYLAND
City: COSTA MESA
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001527T
Local Case Num: 93UT001
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605901167
How Stopped Date: 9/9/9999
Enter Date: Not reported

STATE FARM INSURANCE (Continued) **1000397159**

Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/23/1992
Enforcement Date:	Not reported
Close Date:	8/21/1996
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6937858
Longitude:	-117.9250382
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	90UT111
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown

STATE FARM INSURANCE (Continued) **1000397159**

Global ID:	T0605957851
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	4/18/1990
Enforcement Date:	Not reported
Close Date:	11/7/1990
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

SWEEPS UST:

Name:	STATE FARM INSURANCE CO
Address:	3333 HYLAND AVE
City:	COSTA MESA
Status:	Not reported
Comp Number:	6376
Number:	Not reported
Board Of Equalization:	44-008105
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-006376-000003
Tank Status:	Not reported
Capacity:	6000
Active Date:	Not reported
Tank Use:	UNKNOWN

STATE FARM INSURANCE (Continued) **1000397159**

STG: PRODUCT
Content: Not reported
Number Of Tanks: 1

Name: STATE FARM INSURANCE CO
Address: 3333 HYLAND AVE
City: COSTA MESA
Status: Active
Comp Number: 6376
Number: 9
Board Of Equalization: 44-008105
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-006376-000001
Tank Status: A
Capacity: 6000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 2

Name: STATE FARM INSURANCE CO
Address: 3333 HYLAND AVE
City: COSTA MESA
Status: Active
Comp Number: 6376
Number: 9
Board Of Equalization: 44-008105
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-006376-000002
Tank Status: A
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

HIST UST:
Name: STATE FARM INSURANCE COMPANY
Address: 3333 HYLAND AVENUE
City,State,Zip: COSTA MESA, CA 92626
File Number: 0002EE8D
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EE8D.pdf
Region: STATE
Facility ID: 00000000631
Facility Type: Other
Other Type: INSURANCE
Contact Name: Not reported
Telephone: 7142412137
Owner Name: STATE FARM INSURANCE COMPANY

STATE FARM INSURANCE (Continued) **1000397159**

Owner Address: 3333 HYLAND AVENUE
Owner City,St,Zip: COSTA MESA, CA 92626
Total Tanks: 0002

Tank Num: 001
Container Num: 2
Year Installed: 1980
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Tank Num: 002
Container Num: 1
Year Installed: 1983
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor, Vapor Sniff Well, Pressure Test

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 30003171
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7142412141
Mail To: Not reported
Mailing Address: 1 STATE FARM PLZ
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:

Registry ID: 110002778414

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

STATE FARM INSURANCE (Continued) **1000397159**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000397159
Registry ID:	110002778414
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002778414

EMI:

Name:	ST FARM INSURANCE CO
Address:	3333 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 92626
Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	6898
Air District Name:	SC
SIC Code:	5311
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	5
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	STATE FARM MUTUAL INSURANCE CO
Address:	3333 HYLAND AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	6898
Air District Name:	SC
SIC Code:	6411
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	STATE FARM MUTUAL INSURANCE CO
Address:	3333 HYLAND AV
City,State,Zip:	COSTA MESA, CA 92626
Year:	1995
County Code:	30
Air Basin:	SC

STATE FARM INSURANCE (Continued) **1000397159**

Facility ID:	6898
Air District Name:	SC
SIC Code:	6411
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HAZNET:

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2005
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Orange
TSD EPA ID:	CAD050806850
TSD County:	Los Angeles
Tons:	4.73309
CA Waste Code:	731-Liquids with polychloronated biphenyls >= 50 Mg./L
Method:	H01-Transfer Station
Facility County:	Orange

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2005
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Orange
TSD EPA ID:	CAD009007626
TSD County:	Los Angeles
Tons:	29.498
CA Waste Code:	151-Asbestos containing waste
Method:	D80-Disposal, Land Fill
Facility County:	Orange

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2004
GEPAID:	CAD982020851
Contact:	JOHN HINKLE

STATE FARM INSURANCE (Continued) **1000397159**

Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Orange
TSD EPA ID:	CAT080033681
TSD County:	Los Angeles
Tons:	0.25
CA Waste Code:	141-Off-specification, aged or surplus inorganics
Method:	R01-Recycler
Facility County:	Orange

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2004
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Orange
TSD EPA ID:	CAL000827758
TSD County:	San Bernardino
Tons:	0.005
CA Waste Code:	181-Other inorganic solid waste
Method:	R01-Recycler
Facility County:	Orange

Name:	STATE FARM INSURANCE
Address:	3333 HYLAND AVE
City,State,Zip:	COSTA MESA, CA 926260000
Year:	2004
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Orange
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Tons:	0.25
CA Waste Code:	331-Off-specification, aged or surplus organics
Method:	T01-Treatment, Tank
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
44 additional CA_HAZNET: record(s) in the EDR Site Report.

HIST CORTESE:

edr_fname:	STATE FARM INSURANCE
edr_fadd1:	3333 HYLAND
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30

STATE FARM INSURANCE (Continued) **1000397159**

Reg By: LTNKA
Reg Id: 083001527T

CERS:
Name: STATE FARM INSURANCE
Address: 3333 HYLAND
City,State,Zip: COSTA MESA, CA 92626
Site ID: 188472
CERS ID: T0605957851
CERS Description: Leaking Underground Storage Tank Cleanup Site

Coordinates:
Site ID: 188472
Facility Name: STATE FARM INSURANCE
Env Int Type Code: LUSTCS
Program ID: T0605901167
Coord Name: Not reported
Ref Point Type Desc: Unknown
Latitude: 33.692489
Longitude: -117.924846

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Affiliation Type Desc: Regional Board Caseworker
Entity Name: NANCY OLSON-MARTIN - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: STATE FARM INSURANCE
Address: 3333 HYLAND
City,State,Zip: COSTA MESA, CA 92626
Site ID: 188472
CERS ID: T0605901167
CERS Description: Leaking Underground Storage Tank Cleanup Site

Coordinates:
Site ID: 188472
Facility Name: STATE FARM INSURANCE
Env Int Type Code: LUSTCS
Program ID: T0605901167
Coord Name: Not reported
Ref Point Type Desc: Unknown

STATE FARM INSURANCE (Continued) **1000397159**

Latitude: 33.692489
Longitude: -117.924846

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Affiliation Type Desc: Regional Board Caseworker
Entity Name: NANCY OLSON-MARTIN - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

J59 **ARCO #6131** **LUST** **S103988307**
SSW **3201 HARBOR** **CERS** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.338 mi.
1784 ft. **Site 1 of 2 in cluster J**

Relative:
Higher

Actual:
32 ft.

LUST:
Name: ARCO #6131
Address: 3201 HARBOR
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901336
Global Id: T0605901336
Latitude: 33.686964
Longitude: -117.919628
Status: Completed - Case Closed
Status Date: 03/08/2006
Case Worker: DB
RB Case Number: 083001784T
Local Agency: ORANGE COUNTY LOP
File Location: Local Agency Warehouse
Local Case Number: 92UT012
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History: Not reported

LUST:
Global Id: T0605901336
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120

ARCO #6131 (Continued) **S103988307**

City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Global Id: T0605901336
Contact Type: Regional Board Caseworker
Contact Name: VALERIE JAHN-BULL
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: valerie.jahn-bull@waterboards.ca.gov
Phone Number: 9517824903

LUST:

Global Id: T0605901336
Action Type: Other
Date: 12/27/1990
Action: Leak Discovery

Global Id: T0605901336
Action Type: REMEDIATION
Date: 08/13/1998
Action: Soil Vapor Extraction (SVE)

Global Id: T0605901336
Action Type: REMEDIATION
Date: 11/06/2000
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901336
Action Type: REMEDIATION
Date: 12/11/2000
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 03/08/2006
Action: Closure/No Further Action Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 02/05/1992
Action: Notice of Responsibility

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 07/14/2003
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 01/11/2005
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 04/12/2005

ARCO #6131 (Continued) **S103988307**

Action: Staff Letter

Global Id: T0605901336
Action Type: Other
Date: 01/28/1992
Action: Leak Reported

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 03/08/2004
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 06/27/2005
Action: Staff Letter

LUST:
Global Id: T0605901336
Status: Open - Case Begin Date
Status Date: 12/27/1990

Global Id: T0605901336
Status: Open - Remediation
Status Date: 08/13/1998

Global Id: T0605901336
Status: Open - Verification Monitoring
Status Date: 02/28/2005

Global Id: T0605901336
Status: Completed - Case Closed
Status Date: 03/08/2006

ORANGE CO. LUST:
Name: ARCO #6131
Address: 3201 HARBOR BLVD
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 92UT012
Released Substance: Waste oil/Used oil; Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 03/08/2006
Record ID: RO0001148

LUST REG 8:
Name: ARCO #6131
Address: 3201 HARBOR
City: COSTA MESA
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Remedial action (cleanup) Underway
Case Number: 083001784T
Local Case Num: 92UT012

ARCO #6131 (Continued) **S103988307**

Case Type:	Other ground water affected
Substance:	12035,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	SA
How Stopped:	New Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605901336
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/27/1990
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	8/13/1998
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.686964
Longitude:	-117.919628
MTBE Date:	12/13/2001
Max MTBE GW:	8900
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

CERS:

Name:	ARCO #6131
Address:	3201 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	232884
CERS ID:	T0605901336

ARCO #6131 (Continued) **S103988307**

CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1241 E. DYER ROAD, STE. 120
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7144336255

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	VALERIE JAHN-BULL - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517824903

J60 **MOBIL #18-HDR** **LUST** **S101631292**
SSW **3195 HARBOR** **SWEEPS UST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626** **CA FID UST**
0.362 mi. **Cortese**
1910 ft. **Site 2 of 2 in cluster J** **HIST CORTESE**
CERS

Relative:
Higher

Actual:
33 ft.

LUST:

Name:	MOBIL #18-HDR
Address:	3195 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900556
Global Id:	T0605900556
Latitude:	33.686694
Longitude:	-117.919622
Status:	Open - Site Assessment
Status Date:	01/03/2017
Case Worker:	TE
RB Case Number:	083000703T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	87UT226
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

LUST:

Global Id:	T0605900556
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT

MOBIL #18-HDR (Continued) **S101631292**

Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rose.scott@waterboards.ca.gov
Phone Number: 9513206375

Global Id: T0605900556
Contact Type: Local Agency Caseworker
Contact Name: TAMARA ESCOBEDO
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: tescobedo@ochca.com
Phone Number: 7144336251

LUST:

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 04/21/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/10/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/27/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 09/21/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 10/15/2014
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 06/03/2010
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/04/2015
Action: Staff Letter

Global Id: T0605900556
Action Type: Other
Date: 11/23/1987
Action: Leak Discovery

Global Id: T0605900556

MOBIL #18-HDR (Continued) **S101631292**

Action Type: ENFORCEMENT
Date: 03/25/2011
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 12/17/2010
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/01/2011
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/11/2011
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 09/15/2010
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/19/2010
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/04/2010
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 05/24/2011
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/23/2010
Action: Staff Letter

Global Id: T0605900556
Action Type: RESPONSE
Date: 05/11/2015
Action: Correspondence

Global Id: T0605900556
Action Type: RESPONSE
Date: 08/25/2017
Action: Site Assessment Report

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 04/27/2017

MOBIL #18-HDR (Continued) **S101631292**

Action: Staff Letter

Global Id: T0605900556
Action Type: RESPONSE
Date: 05/31/2017
Action: Groundwater Monitoring Plan - Regulator Responded

Global Id: T0605900556
Action Type: RESPONSE
Date: 06/06/2018
Action: Site Investigation Workplan - Regulator Responded

Global Id: T0605900556
Action Type: RESPONSE
Date: 03/03/2017
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0605900556
Action Type: REMEDIATION
Date: 05/31/1996
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 04/15/1999
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 04/06/2000
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 06/02/2003
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 10/29/1987
Action: Excavation

Global Id: T0605900556
Action Type: REMEDIATION
Date: 09/28/1994
Action: Excavation

Global Id: T0605900556
Action Type: REMEDIATION
Date: 05/03/1995
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900556
Action Type: REMEDIATION
Date: 08/24/2006
Action: Soil Vapor Extraction (SVE)

MOBIL #18-HDR (Continued) **S101631292**

Global Id: T0605900556
Action Type: REMEDIATION
Date: 08/01/2011
Action: Excavation

Global Id: T0605900556
Action Type: REMEDIATION
Date: 03/29/1999
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/13/1987
Action: Notice of Responsibility

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 04/17/2003
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/06/2003
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/06/2004
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 02/06/2006
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/13/2007
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/27/2006
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 12/10/2007
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 02/04/2016
Action: Clean Up Fund - Letter to RP

Global Id: T0605900556
Action Type: ENFORCEMENT

MOBIL #18-HDR (Continued) **S101631292**

Date: 02/08/2016
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/03/2017
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 06/07/2017
Action: Staff Letter

Global Id: T0605900556
Action Type: Other
Date: 11/23/1987
Action: Leak Reported

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 12/29/2003
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/06/2006
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 03/21/2008
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/30/2012
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/06/2013
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/26/2017
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/03/2018
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 10/31/2008
Action: Staff Letter

MOBIL #18-HDR (Continued) **S101631292**

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/21/2008
Action: Staff Letter

Global Id: T0605900556
Action Type: RESPONSE
Date: 01/14/2014
Action: Correspondence

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 02/24/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 06/22/2011
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/06/2013
Action: Clean Up Fund - Letter to RP

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/06/2013
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 06/07/2017
Action: Staff Letter

LUST:
Global Id: T0605900556
Status: Open - Case Begin Date
Status Date: 11/04/1987

Global Id: T0605900556
Status: Open - Remediation
Status Date: 11/04/1987

Global Id: T0605900556
Status: Open - Verification Monitoring
Status Date: 01/15/2010

Global Id: T0605900556
Status: Open - Eligible for Closure
Status Date: 01/30/2012

Global Id: T0605900556
Status: Open - Verification Monitoring
Status Date: 07/29/2015

Global Id: T0605900556

MOBIL #18-HDR (Continued) **S101631292**

Status: Open - Site Assessment
Status Date: 01/03/2017

ORANGE CO. LUST:

Name:	MOBIL #18-HDR
Address:	3195 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	87UT226
Released Substance:	Waste oil/Used oil; Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	Not reported
Record ID:	RO0001598

LUST REG 8:

Name:	MOBIL #18-HDR
Address:	3195 HARBOR
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083000703T
Local Case Num:	87UT226
Case Type:	Other ground water affected
Substance:	12035,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	New Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605900556
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	11/23/1987
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	11/4/1987
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST

MOBIL #18-HDR (Continued) **S101631292**

Latitude:	33.686694
Longitude:	-117.919622
MTBE Date:	5/20/2004
Max MTBE GW:	1520
MTBE Concentration:	0
Max MTBE Soil:	169
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

SWEEPS UST:

Name:	ED'S MOBIL
Address:	3195 HARBOR BLVD
City:	COSTA MESA
Status:	Active
Comp Number:	2069
Number:	9
Board Of Equalization:	44-000400
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002069-000001
Tank Status:	A
Capacity:	1000
Active Date:	Not reported
Tank Use:	PETROLEUM
STG:	P
Content:	Not reported
Number Of Tanks:	4

Name:	ED'S MOBIL
Address:	3195 HARBOR BLVD
City:	COSTA MESA
Status:	Active
Comp Number:	2069
Number:	9
Board Of Equalization:	44-000400
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002069-000004
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL

MOBIL #18-HDR (Continued) **S101631292**

STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: ED'S MOBIL
Address: 3195 HARBOR BLVD
City: COSTA MESA
Status: Active
Comp Number: 2069
Number: 9
Board Of Equalization: 44-000400
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002069-000005
Tank Status: A
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: ED'S MOBIL
Address: 3195 HARBOR BLVD
City: COSTA MESA
Status: Active
Comp Number: 2069
Number: 9
Board Of Equalization: 44-000400
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002069-000006
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 30000717
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7145459268
Mail To: Not reported
Mailing Address: 3225 GALLOWS RD ATTN: EAR
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported

MOBIL #18-HDR (Continued) **S101631292**

DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CORTESE:

Name:	MOBIL #18-HDR
Address:	3195 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605900556
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - SITE ASSESSMENT
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	MOBIL #18-HDR
edr_fadd1:	3195
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000703T

CERS:

Name:	MOBIL #18-HDR
Address:	3195 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	247447
CERS ID:	T0605900556
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	TAMARA ESCOBEDO - ORANGE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1241 EAST DYER ROAD SUITE 120
Affiliation City:	SANTA ANA
Affiliation State:	CA

MOBIL #18-HDR (Continued) **S101631292**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7144336251
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	ROSE SCOTT - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9513206375

61
SSW
1/4-1/2
0.368 mi.
1943 ft.

Relative:
Higher

Actual:
32 ft.

CHEVRON 94660
3190 HARBOR BLVD.
COSTA MESA, CA 92626

RCRA-LQG **1000595747**
LUST **CAD983597014**
CA FID UST
CHMIRS
FINDS
ECHO
HIST CORTESE
CERS

RCRA-LQG:

Date form received by agency:	02/17/2008
Facility name:	CHEVRON 94660
Facility address:	3190 HARBOR BLVD. COSTA MESA, CA 92626
EPA ID:	CAD983597014
Mailing address:	PO BOX 6004 SAN RAMON, CA 94583
Contact:	KATHY L NORRIS
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	925-842-5931
Contact email:	NAWTDESK@CHEVRON.COM
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	CHEVRON PRODUCTS CO.
Owner/operator address:	PO BOX 6004 SAN RAMON, CA 94583

CHEVRON 94660 (Continued) **1000595747**

Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/13/1967
Owner/Op end date: Not reported

Owner/operator name: CHEVRON PRODUCTS CO.
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 11/13/1967
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 05/14/2002
Site name: CHEVRON STATION NO 94660
Classification: Small Quantity Generator

Date form received by agency: 10/12/2000
Site name: CHEVRON 94660
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

CHEVRON 94660 (Continued) **1000595747**

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

LUST:
Name: CHEVRON S S #9-4660
Address: 3190 HARBOR
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900914
Global Id: T0605900914
Latitude: 33.6865971
Longitude: -117.919197
Status: Completed - Case Closed
Status Date: 03/27/1997
Case Worker: DB
RB Case Number: 083001156T
Local Agency: ORANGE COUNTY LOP
File Location: Local Agency
Local Case Number: 89UT031
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605900914
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Global Id: T0605900914
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rose.scott@waterboards.ca.gov
Phone Number: 9513206375

LUST:
Global Id: T0605900914
Action Type: Other
Date: 01/20/1989
Action: Leak Discovery

Global Id: T0605900914
Action Type: Other
Date: 01/20/1989
Action: Leak Reported

Global Id: T0605900914
Action Type: ENFORCEMENT

CHEVRON 94660 (Continued) **1000595747**

Date: 03/20/1997
Action: LOP Case Closure Summary to RB

LUST:
Global Id: T0605900914
Status: Open - Case Begin Date
Status Date: 01/20/1989

Global Id: T0605900914
Status: Completed - Case Closed
Status Date: 03/27/1997

Name: CHEVRON #9-4660
Address: 3190 HARBOR
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605998652
Global Id: T0605998652
Latitude: 33.686734
Longitude: -117.918989
Status: Completed - Case Closed
Status Date: 10/04/2002
Case Worker: DB
RB Case Number: Not reported
Local Agency: ORANGE COUNTY LOP
File Location: Local Agency
Local Case Number: 98UT111
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605998652
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Global Id: T0605998652
Contact Type: Regional Board Caseworker
Contact Name: MIGUEL OVIEDO
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: miguel.oviedo@waterboards.ca.gov
Phone Number: 9517823238

LUST:
Global Id: T0605998652
Action Type: Other
Date: 07/17/1998
Action: Leak Discovery

CHEVRON 94660 (Continued) **1000595747**

Global Id: T0605998652
Action Type: Other
Date: 07/17/1998
Action: Leak Reported

Global Id: T0605998652
Action Type: ENFORCEMENT
Date: 07/15/2002
Action: LOP Case Closure Summary to RB

LUST:
Global Id: T0605998652
Status: Open - Case Begin Date
Status Date: 07/17/1998

Global Id: T0605998652
Status: Completed - Case Closed
Status Date: 10/04/2002

ORANGE CO. LUST:
Name: CHEVRON #9-4660
Address: 3190 HARBOR BLVD
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 98UT111
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 10/04/2002
Record ID: RO0001456

Name: CHEVRON S S #9-4660
Address: 3190 HARBOR BLVD
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 89UT031
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 03/27/1997
Record ID: RO0001570

LUST REG 8:
Name: CHEVRON S S #9-4660
Address: 3190 HARBOR
City: COSTA MESA
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001156T
Local Case Num: 89UT031
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported

CHEVRON 94660 (Continued) **1000595747**

How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900914
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/20/1989
Enforcement Date:	Not reported
Close Date:	3/27/1997
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6865971
Longitude:	-117.919197
MTBE Date:	11/21/2001
Max MTBE GW:	32
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Name:	CHEVRON #9-4660
Address:	3190 HARBOR BLVD
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	98UT111
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605998652
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	7/17/1998
Enforcement Date:	Not reported
Close Date:	10/4/2002
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CA FID UST:

Facility ID:	30000903
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145409560
Mail To:	Not reported
Mailing Address:	P O BOX 2833 1300 S
Mailing Address 2:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CHMIRS:

Name:	Not reported
Address:	3190 HARBOR BLVD.
City,State,Zip:	COSTA MESA, CA 94660
OES Incident Number:	4-7457
OES notification:	12/31/2014
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1624
Year:	2014
Agency:	NRC

CHEVRON 94660 (Continued) **1000595747**

Incident Date:	12/30/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline; Automotive Unleaded
Quantity Released:	20
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Human Error
Fatals:	No
Comments:	Not reported
Description:	Per NRC: "Caller stated a customer was not attentive to what they were doing and spilled gasoline onto the ground while fueling their vehicle at a gas station. Remedial Actions: caller stated the spill was contained and cleaned up."

Name:	Not reported
Address:	3190 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	15-2585
OES notification:	05/08/2015
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Site Personnel
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1905
Year:	2015
Agency:	Chevron
Incident Date:	05/08/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	7
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Caller states seven (7) ounces of gasoline discharged at a gas station while a customer was trying to "Top-Off" their car. Release was contained and cleaned up by station personnel.
Name:	Not reported
Address:	3190 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	15-1681
OES notification:	03/24/2015
OES Date:	Not reported
OES Time:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business
Cleanup By:	Responsible Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1350
Year:	2015
Agency:	NRC
Incident Date:	03/24/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	GASOLINE
Quantity Released:	12
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No

CHEVRON 94660 (Continued) **1000595747**

#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Per NRC#1111628: "CALLER IS REPORTING THAT CUSTOMER WAS PUMPING GASOLINE AND OVERFILLED THEIR VEHICLE. CONTAINED AND CLEANED BY STATION PERSONNEL"
Name:	Not reported
Address:	3190 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	15-0244
OES notification:	01/13/2015
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	on site personnel
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	2120

CHEVRON 94660 (Continued) **1000595747**

Year:	2015
Agency:	NRC
Incident Date:	01/13/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Fuel - Gasoline
Quantity Released:	16
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Per NRC report: The caller is reporting a gasoline discharge onto concrete pad at a gas station, the caller stated that the spill was due to customer negligence when the tank was overfilled as the subject talked on his cell phone.
Name:	Not reported
Address:	3190 HARBOR BLVD.
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	15-3047
OES notification:	05/31/2015
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	None
Spill Site:	Service Station
Cleanup By:	On-Site Personnel
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1215
Year:	2015
Agency:	Chevron
Incident Date:	05/31/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	None
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	8
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	The reporting party states a customer overfilled the gas tank of their vehicle. The excess gasoline spilled onto the concrete pad. No waterways were impacted. On-site personnel conducted the clean-up.
Name:	Not reported
Address:	3190 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	15-1831

CHEVRON 94660 (Continued) **1000595747**

OES notification:	04/02/2015
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	Not reported
Year:	2015
Agency:	Chevron
Incident Date:	04/02/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	8
Unknown:	Not reported
Substance #2:	Gasoline 8
Substance #3:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Two spills occurred at this location by two different customers topping off their vehicles. First release occurred at 0615 and the second release occurred at 0915 today 4/2/15. The releases were to asphalt only and no waterways were affected by these two releases. The releases were cleaned by the service station attendant.

Name:	Not reported
Address:	3190 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
OES Incident Number:	15-1629
OES notification:	03/21/2015
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Reporting Party

CHEVRON 94660 (Continued) **1000595747**

Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	648
Year:	2015
Agency:	Chevron Corp.
Incident Date:	03/21/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline, Unleaded
Quantity Released:	14
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	RP states that a customer overfilled their vehicle causing the release. Cleanup was completed by onsite station personnel.
Name:	Not reported
Address:	3190 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	4-4679
OES notification:	08/20/2014
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1848
Year:	2014
Agency:	NRC
Incident Date:	8/20/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	24
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Human Error
Fatals:	No
Comments:	Not reported
Description:	Per NRC Fax: the caller reported that 24 ounces of gasoline discharged from the nozzle due to customer overfill. REMEDIAL ACTIONS, Clean-up was completed by store personnel.

CHEVRON 94660 (Continued) **1000595747**

FINDS:

Registry ID: 110057106457

Environmental Interest/Information System
STATE MASTER

Registry ID: 110002854536

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000595747
Registry ID: 110002854536
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002854536

HIST CORTESE:
edr_fname: CHEVRON #9-4660
edr_fadd1: 3190 HARBOR
City,State,Zip: COSTA MESA, CA 92626
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001156T

CERS:
Name: CHEVRON S S #9-4660
Address: 3190 HARBOR
City,State,Zip: COSTA MESA, CA 92626
Site ID: 214239
CERS ID: T0605900914
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: ROSE SCOTT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported

CHEVRON 94660 (Continued) **1000595747**

Affiliation Phone: 9513206375

Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Name: CHEVRON #9-4660
Address: 3190 HARBOR
City,State,Zip: COSTA MESA, CA 92626
Site ID: 257445
CERS ID: T0605998652
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Affiliation Type Desc: Regional Board Caseworker
Entity Name: MIGUEL OVIEDO - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 Main Street, Suite 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517823238

---

62 **C J SEGERSTROM & SONS** **LUST** **S101631288**
ESE **3315 FAIRVIEW** **HIST UST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626** **CA FID UST**
0.377 mi. **CERS TANKS**
1991 ft. **CHMIRS**
HIST CORTESE
Relative: **CERS**
Higher
Actual:
32 ft.

LUST:
Name: C J SEGERSTROM & SONS
Address: 3315 FAIRVIEW
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901920
Global Id: T0605901920

C J SEGERSTROM & SONS (Continued) **S101631288**

Latitude:	33.6882811
Longitude:	-117.9081407
Status:	Completed - Case Closed
Status Date:	06/19/1997
Case Worker:	DB
RB Case Number:	083002787T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	95UT073
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0605901920
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Global Id:	T0605901920
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	valerie.jahn-bull@waterboards.ca.gov
Phone Number:	9517824903

LUST:

Global Id:	T0605901920
Action Type:	Other
Date:	12/06/1995
Action:	Leak Discovery

Global Id:	T0605901920
Action Type:	Other
Date:	12/06/1995
Action:	Leak Reported

LUST:

Global Id:	T0605901920
Status:	Open - Case Begin Date
Status Date:	12/06/1995

Global Id:	T0605901920
Status:	Completed - Case Closed
Status Date:	06/19/1997

ORANGE CO. LUST:

Name:	C J SEGERSTROM & SONS
Address:	3315 FAIRVIEW RD

C J SEGERSTROM & SONS (Continued) **S101631288**

City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	95UT073
Released Substance:	Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed:	06/19/1997
Record ID:	RO0002763

LUST REG 8:

Name:	C J SEGERSTROM & SONS
Address:	3315 FAIRVIEW
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083002787T
Local Case Num:	95UT073
Case Type:	Other ground water affected
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901920
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/6/1995
Enforcement Date:	Not reported
Close Date:	6/19/1997
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6882811
Longitude:	-117.9081407
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*

C J SEGERSTROM & SONS (Continued) **S101631288**

Staff:	VJJ
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

HIST UST:

Name:	GREENVILLE WAREHOUSE
Address:	3315 FAIRVIEW ROAD
City,State,Zip:	COSTA MESA, CA 92626
File Number:	0002E99C
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002E99C.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	30005405
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145460110
Mail To:	Not reported

C J SEGERSTROM & SONS (Continued) **S101631288**

Mailing Address:	3315 FAIRVIEW RD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CERS TANKS:

Name:	C. J. SEGERSTROM & SONS
Address:	3315 FAIRVIEW RD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	434183
CERS ID:	10756807
CERS Description:	Aboveground Petroleum Storage

CHMIRS:

Name:	Not reported
Address:	3315 FAIRVIEW RD.
City,State,Zip:	COSTA MESA, CA
OES Incident Number:	12-5273
OES notification:	09/03/2012
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business,Residence
Cleanup By:	Unrecoverable

C J SEGERSTROM & SONS (Continued) **S101631288**

Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Unknown
Other:	Not reported
Date/Time:	1904
Year:	2012
Agency:	Southern California Gas Company
Incident Date:	9/2/2012
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Natural Gas
Quantity Released:	Unkown
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller states: A vehicle accident damaged a 1" plastic service line causing the release. The release was securred shortly after the accident at 2140.

HIST CORTESE:

edr_fname:	C. J. SEGERSTROM AND SONS
edr_fadd1:	3315
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002787T

CERS:

Name:	C J SEGERSTROM & SONS
Address:	3315 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	224226
CERS ID:	T0605901920
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	DENAMARIE BAKER - ORANGE COUNTY LOP

C J SEGERSTROM & SONS (Continued) **S101631288**

Entity Title:	Not reported
Affiliation Address:	1241 E. DYER ROAD, STE. 120
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7144336255
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	VALERIE JAHN-BULL - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517824903
Name:	C. J. SEGERSTROM & SONS
Address:	3315 FAIRVIEW RD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	434183
CERS ID:	10756807
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	434183
Site Name:	C. J. Segerstrom & Sons
Violation Date:	04-02-2019
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Business has failed to adequately submit, establish and implement a business plan when storing and or handling a hazardous material at or above reportable quantities. Please contact me if you have any questions or need assistance, I am here to help. Thank you in advance, Michelle Rudaitis CMFD 714 327 7402 michelle.rudaitis@costamesaca.gov
Violation Division:	Costa Mesa Fire Department
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-26-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-02-2019
Violations Found:	Yes

C J SEGERSTROM & SONS (Continued) **S101631288**

Eval Type:	Routine done by local agency
Eval Notes:	Business has failed to adequately submit, establish and implement a business plan when storing and or handling a hazardous material at or above reportable quantities. Please contact me if you have any questions or need assistance, I am here to help. Thank you in advance, Michelle Rudaitis CMFD 714 327 7402 michelle.rudaitis@costamesaca.gov
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS

Coordinates:

Site ID:	434183
Facility Name:	C. J. Segerstrom & Sons
Env Int Type Code:	APSA
Program ID:	10756807
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.690500
Longitude:	-117.909040

Affiliation:

Affiliation Type Desc:	Document Preparer
Entity Name:	robert thomas
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3315 Fairview Road
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626
Affiliation Phone:	Not reported

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA

C J SEGERSTROM & SONS (Continued) **S101631288**

Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000

Affiliation Type Desc:	Environmental Contact
Entity Name:	Robert Thomas
Entity Title:	Not reported
Affiliation Address:	3315 Fairview Road
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Robert Thomas
Entity Title:	Construction Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	C. J. Segerstrom & Sons
Entity Title:	Not reported
Affiliation Address:	3315 Fairview Road
Affiliation City:	Costa Mesaq
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92626
Affiliation Phone:	(714) 546-0110

Affiliation Type Desc:	Operator
Entity Name:	C. J. Segerstrom & Sons
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 546-0110

Affiliation Type Desc:	Parent Corporation
Entity Name:	C. J. Segerstrom & Sons
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Property Owner
Entity Name:	C. J. Segerstrom & Sons
Entity Title:	Not reported

C J SEGERSTROM & SONS (Continued) **S101631288**

Affiliation Address:	3315 Fairview Road
Affiliation City:	Costa Mesa
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92626
Affiliation Phone:	(714) 546-0110

63
East
1/4-1/2
0.423 mi.
2235 ft.

Relative:
Lower

Actual:
29 ft.

AUTOMOBILE CLUB OF SO CALIFORN
3333 FAIRVIEW
COSTA MESA, CA 92626

LUST
SWEEPS UST
CA FID UST
HAZNET
HIST CORTESE
CERS

S101609497
N/A

LUST:

Name:	AUTOMOBILE CLUB OF SO CALIFORN
Address:	3333 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605902033
Global Id:	T0605902033
Latitude:	33.691495
Longitude:	-117.909485
Status:	Completed - Case Closed
Status Date:	06/05/1998
Case Worker:	DB
RB Case Number:	083002970T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	97UT003
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel, Gasoline
Site History:	Not reported

LUST:

Global Id:	T0605902033
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Global Id:	T0605902033
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	valerie.jahn-bull@waterboards.ca.gov
Phone Number:	9517824903

LUST:

Global Id:	T0605902033
Action Type:	Other

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

Date: 01/27/1997
Action: Leak Discovery

Global Id: T0605902033
Action Type: ENFORCEMENT
Date: 06/05/1998
Action: Closure/No Further Action Letter

Global Id: T0605902033
Action Type: Other
Date: 01/27/1997
Action: Leak Reported

LUST:
Global Id: T0605902033
Status: Open - Case Begin Date
Status Date: 01/27/1997

Global Id: T0605902033
Status: Completed - Case Closed
Status Date: 06/05/1998

ORANGE CO. LUST:
Name: AUTOMOBILE CLUB OF SO CALIFORN
Address: 3333 FAIRVIEW RD
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 97UT003
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4; Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/05/1998
Record ID: RO0000920

LUST REG 8:
Name: AUTOMOBILE CLUB OF SO CALIFORN
Address: 3333 FAIRVIEW
City: COSTA MESA
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083002970T
Local Case Num: 97UT003
Case Type: Other ground water affected
Substance: 12034,800661
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605902033

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/27/1997
Enforcement Date:	Not reported
Close Date:	6/5/1998
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6887871
Longitude:	-117.9081267
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	VJJ
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

SWEEPS UST:

Name:	AUTOMOBILE CLUB OF SO CALIF
Address:	3333 FAIRVIEW
City:	COSTA MESA
Status:	Active
Comp Number:	5305
Number:	9
Board Of Equalization:	44-016356
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-005305-000001
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

Content:	REG UNLEADED
Number Of Tanks:	2

Name:	AUTOMOBILE CLUB OF SO CALIF
Address:	3333 FAIRVIEW
City:	COSTA MESA
Status:	Active
Comp Number:	5305
Number:	9
Board Of Equalization:	44-016356
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-005305-000002
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	30000171
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7148505034
Mail To:	Not reported
Mailing Address:	2601 S FIGUEROA ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

HAZNET:

Name:	AAA CLUB OF SO CALIFORNIA
Address:	3333 FAIRVIEW RD
City,State,Zip:	COSTA MESA, CA 926261610
Year:	2013
GEPAID:	CAC002735435
Contact:	STEVE EVANS
Telephone:	9516846006
Mailing Name:	Not reported
Mailing Address:	3333 FAIRVIEW RD
Mailing City,St,Zip:	COSTA MESA, CA 926261610
Gen County:	Orange
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

Tons: 5.0568
CA Waste Code: 181-Other inorganic solid waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Orange

HIST CORTESE:
edr_fname: SEARS AUTO CENTER
edr_fadd1: 3333
City,State,Zip: COSTA MESA, CA 92626
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000754T

edr_fname: AUTOMOBILE CLUB OF SOUTHE
edr_fadd1: 3333
City,State,Zip: COSTA MESA, CA 92626
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083002970T

CERS:
Name: AUTOMOBILE CLUB OF SO CALIFORN
Address: 3333 FAIRVIEW
City,State,Zip: COSTA MESA, CA 92626
Site ID: 255271
CERS ID: T0605902033
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: VALERIE JAHN-BULL - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824903

Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

K64 ENE 1/4-1/2 0.438 mi. 2310 ft.

SHELL SERVICE STATION
3820 S FAIRVIEW / SUNFLOWER
SANTA ANA, CA 92704

Site 1 of 4 in cluster K

RCRA-SQG
LUST
FINDS
ECHO

1001967437
CAR000069021

Relative: Lower

Actual: 25 ft.

RCRA-SQG:

Date form received by agency:	02/26/2004
Facility name:	SHELL SERVICE STATION
Facility address:	3820 S FAIRVIEW / SUNFLOWER SAP #136060 SANTA ANA, CA 92704
EPA ID:	CAR000069021
Mailing address:	SHELL OIL PRODUCTS US 12700 NORTHBOROUGH DR MFT240G HOUSTON, TX 77067-2508
Contact:	GARY V WING
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	714-731-8337
Contact email:	GVWING@SHELLOPUS.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	EQUILON ENTERPRISES LLC
Owner/operator address:	P O BOX 2099 RM 1241 HOUSTON, TX 77252
Owner/operator country:	Not reported
Owner/operator telephone:	713-241-2258
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	EQUILON ENTERPRISES LLC DBA SHELL OIL PR
Owner/operator address:	PO BOX 2648 HOUSTON, TX 77252
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported

Owner/operator name:	SHELL OIL PRODUCTS US
Owner/operator address:	Not reported

SHELL SERVICE STATION (Continued) **1001967437**

	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	02/26/2004
Site name:	SHELL SERVICE STATION
Classification:	Large Quantity Generator
Date form received by agency:	03/30/2000
Site name:	SHELL SERVICE STATION
Classification:	Small Quantity Generator

Hazardous Waste Summary:

. Waste code:	D000
. Waste name:	Not Defined
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D018
. Waste name:	BENZENE
Violation Status:	No violations found

LUST:

Name:	SHELL #3820
Address:	3820 FAIRVIEW AVE
City,State,Zip:	SANTA ANA, CA 92704
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Type:	LUST Cleanup Site

SHELL SERVICE STATION (Continued) **1001967437**

Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605902158
Global Id:	T0605902158
Latitude:	33.69595539
Longitude:	-117.9080182
Status:	Completed - Case Closed
Status Date:	09/14/2016
Case Worker:	CAB
RB Case Number:	083003174T
Local Agency:	SANTA ANA, CITY OF
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0605902158
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	carl.bernhardt@waterboards.ca.gov
Phone Number:	9517824495

Global Id:	T0605902158
Contact Type:	Local Agency Caseworker
Contact Name:	CHRISTOPHER CIRAULO
Organization Name:	SANTA ANA, CITY OF
Address:	1439 S. BROADWAY
City:	SANTA ANA
Email:	cciraulo@santa-ana.org
Phone Number:	Not reported

LUST:

Global Id:	T0605902158
Action Type:	ENFORCEMENT
Date:	05/12/2015
Action:	Meeting

Global Id:	T0605902158
Action Type:	RESPONSE
Date:	12/30/2009
Action:	Other Report / Document

Global Id:	T0605902158
Action Type:	RESPONSE
Date:	01/30/2006
Action:	Monitoring Report - Quarterly

Global Id:	T0605902158
Action Type:	RESPONSE
Date:	06/11/2014
Action:	Monitoring Report - Semi-Annually

Global Id:	T0605902158
Action Type:	ENFORCEMENT

SHELL SERVICE STATION (Continued) **1001967437**

Date: 01/22/2002
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 08/30/2002
Action: Site Visit / Inspection / Sampling

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 09/20/2002
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 01/28/2003
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 07/29/2009
Action: Staff Letter

Global Id: T0605902158
Action Type: RESPONSE
Date: 06/30/2002
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 11/02/2002
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2010
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 12/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: RESPONSE
Date: 05/10/2004
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/21/2003
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 11/04/2002
Action: Soil and Water Investigation Workplan

SHELL SERVICE STATION (Continued) **1001967437**

Global Id: T0605902158
Action Type: RESPONSE
Date: 03/06/2003
Action: Interim Remedial Action Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 09/30/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/21/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/28/2005
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2004
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 06/19/2003
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/14/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 05/15/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1001967437**

Date: 01/29/2016
Action: Email Correspondence

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 07/08/2003
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 09/15/2004
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 04/13/2005
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 05/19/2005
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 10/07/2011
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 01/12/2015
Action: Technical Correspondence / Assistance / Other

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 09/04/2015
Action: Email Correspondence

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 09/03/2015
Action: Verbal Communication

Global Id: T0605902158
Action Type: Other
Date: 04/29/1998
Action: Leak Discovery

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2004
Action: Soil and Water Investigation Workplan

SHELL SERVICE STATION (Continued) **1001967437**

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 03/07/2016
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 10/14/2015
Action: Notification - Public Notice of Case Closure

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 09/14/2016
Action: Closure/No Further Action Letter

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/29/2005
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: ENFORCEMENT

SHELL SERVICE STATION (Continued) **1001967437**

Date: 01/10/2008
Action: Staff Letter

Global Id: T0605902158
Action Type: RESPONSE
Date: 12/31/2005
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0605902158
Action Type: RESPONSE
Date: 08/01/2005
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 08/01/2005
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 12/01/2014
Action: Email Correspondence - Regulator Responded

Global Id: T0605902158
Action Type: RESPONSE
Date: 09/04/2015
Action: Email Correspondence - Regulator Responded

Global Id: T0605902158
Action Type: REMEDIATION
Date: 08/08/2008
Action: In Situ Biological Treatment

Global Id: T0605902158
Action Type: REMEDIATION
Date: 02/09/2012
Action: Monitored Natural Attenuation

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 02/09/2012
Action: Staff Letter

Global Id: T0605902158
Action Type: Other
Date: 05/06/1998
Action: Leak Reported

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2005
Action: Monitoring Report - Quarterly

SHELL SERVICE STATION (Continued) **1001967437**

Global Id: T0605902158
Action Type: RESPONSE
Date: 12/14/2007
Action: Unknown

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/24/2012
Action: Request for Closure

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 11/21/2002
Action: * Verbal Communication

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 11/20/2002
Action: Staff Letter

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/04/2008
Action: Other Workplan

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 02/04/2013
Action: Verbal Enforcement

Global Id: T0605902158
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1001967437**

Date: 04/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/20/2002
Action: Preliminary Site Assessment Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/06/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2003
Action: Monitoring Report - Quarterly

SHELL SERVICE STATION (Continued) **1001967437**

LUST:

Global Id: T0605902158
Status: Open - Case Begin Date
Status Date: 04/29/1998

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 04/29/1998

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 10/29/1999

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 03/23/2000

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 01/20/2002

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 01/22/2002

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 06/19/2003

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 07/09/2004

Global Id: T0605902158
Status: Open - Remediation
Status Date: 12/23/2005

Global Id: T0605902158
Status: Open - Remediation
Status Date: 12/27/2005

Global Id: T0605902158
Status: Open - Eligible for Closure
Status Date: 05/13/2015

Global Id: T0605902158
Status: Completed - Case Closed
Status Date: 09/14/2016

FINDS:

Registry ID: 110064127092

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource

SHELL SERVICE STATION (Continued) **1001967437**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001967437
Registry ID:	110064127092
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110064127092

K65
ENE
1/4-1/2
0.438 mi.
2310 ft.

SHELL #3820
3820 FAIRVIEW AVE
SANTA ANA, CA 92704

Site 2 of 4 in cluster K

LUST **S104791867**
CERS **N/A**

Relative:
Lower

Actual:
25 ft.

LUST REG 8:

Name:	SHELL #3820
Address:	3820 FAIRVIEW AVE
City:	SANTA ANA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083003174T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	SUNFLOWERE
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0605902158
How Stopped Date:	Not reported
Enter Date:	6/29/1998
Date Confirmation of Leak Began:	4/29/1998
Date Preliminary Assessment Began:	1/22/2002
Discover Date:	4/29/1998
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	1/20/2002
Date Pollution Characterization Began:	7/9/2004
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported

SHELL #3820 (Continued) **S104791867**

Enter Date:	6/29/1998
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.69595539
Longitude:	-117.9080182
MTBE Date:	5/22/2002
Max MTBE GW:	11000
MTBE Concentration:	1
Max MTBE Soil:	1300
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	A
Staff:	CAB
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CERS:

Name:	SHELL #3820
Address:	3820 FAIRVIEW AVE
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	234076
CERS ID:	T0605902158
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	CHRISTOPHER CIRAULO - SANTA ANA, CITY OF
Entity Title:	Not reported
Affiliation Address:	1439 S. BROADWAY
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517824495

66 NNW 1/4-1/2 0.446 mi. 2354 ft.

Relative: Higher

Actual: 37 ft.

UNOCAL #5404
3599 HARBOR
COSTA MESA, CA 92626

Database(s): LUST, CERS HAZ WASTE, HIST UST, CERS TANKS, Cortese, HAZNET, HIST CORTESE, CERS

EDR ID Number: S103065416
EPA ID Number: N/A

LUST:

Name:	UNOCAL #5404
Address:	3599 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901461
Global Id:	T0605901461
Latitude:	33.701893548
Longitude:	-117.919946928
Status:	Open - Remediation
Status Date:	11/01/2004
Case Worker:	DW
RB Case Number:	083001957T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	91UT134
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

LUST:

Global Id:	T0605901461
Contact Type:	Local Agency Caseworker
Contact Name:	DAN WEERASEKERA
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. Dyer Rd. Suite 120
City:	SANTA ANA
Email:	dweerasekera@ochca.com
Phone Number:	7144336255

Global Id:	T0605901461
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0605901461
Action Type:	ENFORCEMENT
Date:	07/13/2009
Action:	Staff Letter

Global Id:	T0605901461

UNOCAL #5404 (Continued) **S103065416**

Action Type: ENFORCEMENT
Date: 11/09/2018
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 11/16/2018
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 05/02/2019
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 02/18/2015
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 12/30/2010
Action: File review

Global Id: T0605901461
Action Type: Other
Date: 10/31/1991
Action: Leak Discovery

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 01/07/2011
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 08/11/2010
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/29/2016
Action: Staff Letter

Global Id: T0605901461
Action Type: RESPONSE
Date: 06/12/2018
Action: CAP/RAP - Other Report

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 09/21/2010
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 10/13/2010

UNOCAL #5404 (Continued) **S103065416**

Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 04/06/2011
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 06/04/2011
Action: File review

Global Id: T0605901461
Action Type: RESPONSE
Date: 05/16/2016
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded

Global Id: T0605901461
Action Type: RESPONSE
Date: 09/17/2018
Action: Well Installation Workplan - Regulator Responded

Global Id: T0605901461
Action Type: RESPONSE
Date: 03/29/2019
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded

Global Id: T0605901461
Action Type: REMEDIATION
Date: 11/28/1995
Action: Excavation

Global Id: T0605901461
Action Type: REMEDIATION
Date: 11/28/1995
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605901461
Action Type: REMEDIATION
Date: 11/01/2004
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901461
Action Type: REMEDIATION
Date: 10/29/1991
Action: Excavation

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 10/17/2003
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/09/2004
Action: Staff Letter

UNOCAL #5404 (Continued) **S103065416**

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/14/2005
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 06/05/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/05/2008
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 10/24/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: Other
Date: 10/31/1991
Action: Leak Reported

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 04/27/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 05/08/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 01/05/2006
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 11/21/1991
Action: Notice of Responsibility

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 05/26/2004
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 08/20/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT

UNOCAL #5404 (Continued) **S103065416**

Date: 07/11/2008
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 09/04/2008
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 04/17/2012
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/06/2019
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 02/11/2009
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 09/26/2012
Action: Staff Letter

LUST:
Global Id: T0605901461
Status: Open - Case Begin Date
Status Date: 10/31/1991

Global Id: T0605901461
Status: Open - Verification Monitoring
Status Date: 12/22/1995

Global Id: T0605901461
Status: Open - Remediation
Status Date: 11/01/2004

ORANGE CO. LUST:
Name: UNOCAL #5404
Address: 3599 HARBOR BLVD
City,State,Zip: COSTA MESA, CA 92626
Region: ORANGE
Facility Id: 91UT134
Released Substance: Waste oil/Used oil; Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Record ID: RO0002801

LUST REG 8:
Name: UNOCAL #5404
Address: 3599 HARBOR

UNOCAL #5404 (Continued) **S103065416**

City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Post remedial action monitoring
Case Number:	083001957T
Local Case Num:	91UT134
Case Type:	Other ground water affected
Substance:	12035,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605901461
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	10/31/1991
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	12/22/1995
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6956138
Longitude:	-117.919625
MTBE Date:	10/18/2001
Max MTBE GW:	430
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	NOM
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

UNOCAL #5404 (Continued) **S103065416**

CERS HAZ WASTE:

Name:	VALVOLINE INSTANT OIL CHANGE GN0015
Address:	3599 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	80065
CERS ID:	10160667
CERS Description:	Hazardous Waste Generator

HIST UST:

Name:	UNION OIL SERV STATION 5404
Address:	3599 HARBOR BOULEVARD
City,State,Zip:	COSTA MESA, CA 92626
File Number:	0002EF93
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EF93.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CERS TANKS:

Name:	VALVOLINE INSTANT OIL CHANGE GN0015
Address:	3599 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	80065
CERS ID:	10160667
CERS Description:	Aboveground Petroleum Storage

CORTESE:

Name:	UNOCAL #5404
Address:	3599 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605901461
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - REMEDIATION
Status Date:	Not reported
Site Code:	Not reported

UNOCAL #5404 (Continued) **S103065416**

Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HAZNET:

Name:	VALVOLINE INSTANT OIL CHANGE GN0015
Address:	3599 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Year:	2017
GEPAID:	CAL000370598
Contact:	JOSE HERRERA
Telephone:	9494741300
Mailing Name:	Not reported
Mailing Address:	17802 SKY PARK CIRCLE STE 104
Mailing City,St,Zip:	IRVINE, CA 926140000
Gen County:	Orange
TSD EPA ID:	CAD097030993
TSD County:	Los Angeles
Tons:	0.575
CA Waste Code:	352-Other organic solids
Method:	H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Orange

Name:	VALVOLINE INSTANT OIL CHANGE GN0015
Address:	3599 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Year:	2016
GEPAID:	CAL000370598
Contact:	JOSE HERRERA
Telephone:	9494741300
Mailing Name:	Not reported
Mailing Address:	54 JACONNET ST STE 100
Mailing City,St,Zip:	NEWTON HIGHLANDS, MA 024611956
Gen County:	Orange
TSD EPA ID:	AZR000515924
TSD County:	99
Tons:	0.25
CA Waste Code:	352-Other organic solids
Method:	H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Orange

HIST CORTESE:

edr_fname:	UNOCAL #5404

UNOCAL #5404 (Continued) **S103065416**

edr_fadd1:	3599
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001957T

CERS:

Name:	UNOCAL #5404
Address:	3599 HARBOR
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	188796
CERS ID:	T0605901461
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	NANCY OLSON-MARTIN - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	DAN WEERASEKERA - ORANGE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1241 E. Dyer Rd. Suite 120
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7144336255

Name:	VALVOLINE INSTANT OIL CHANGE GN0015
Address:	3599 HARBOR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	80065
CERS ID:	10160667
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	80065
Site Name:	Valvoline Instant Oil Change GN0015
Violation Date:	10-14-2014
Citation:	19 CCR 4 2729.2(a)(3) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(3)
Violation Description:	Failure to complete and/or submit an annotated site map if required by CUPA.
Violation Notes:	Not reported
Violation Division:	Orange County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS

UNOCAL #5404 (Continued) **S103065416**

Evaluation:

Eval General Type:	Other/Unknown
Eval Date:	05-27-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	CERS 2016 APST Facility Statement filed
Eval Division:	Orange County Environmental Health
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-27-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	CERS 2016 OW/BA pg
Eval Division:	Orange County Environmental Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-10-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Costa Mesa Fire Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-14-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-24-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Onsite to conduct a routine aboveground storage tank inspection. Met with Rosendo Ruiz. Spill Prevention Control and Countermeasure Plan (SPCC) prepared and implemented onsite. The SPCC for this facility was completed in July 2012. Periodic inspections per the SPCC are being conducted. SPCC has been reviewed and evaluated every 5 years. Appropriate secondary containment or diversionary structures are in place.
Eval Division:	Orange County Environmental Health
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-01-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Onsite to conduct a routine aboveground storage tank inspection. Met

UNOCAL #5404 (Continued) **S103065416**

with Diana. Spill Prevention Control and Countermeasure Plan (SPCC) prepared and implemented onsite. The SPCC for this facility was completed in 2012. Periodic inspections per the SPCC are being conducted. SPCC has been reviewed and evaluated every 5 years. Appropriate secondary containment or diversionary structures are in place.

Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-01-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Onsite to conduct a routine hazardous waste inspection. Met with Diana. Inspected used oil, drained used oil/fuel filters, and waste antifreeze. Drums and tanks were provided with a lid, stored in a secure manner and appear to be in good condition. The operator completes a maintenance inspection on the drums and tanks on a weekly basis. A Hazardous Waste label was noted on all drums and tanks with the required identification. Municipal dumpster area does not appear to contain any hazardous waste. Perimeter of facility inspected - did not observe any water runoff or staining at this time. Hazardous Waste Emergency Response plan was available for review. Manifests and bills of lading for all hazardous waste streams were reviewed today. Ensure all hazardous waste manifests/disposal documents are maintained on site for at least three years from the date of transport and are available for review during normal business hours. Please continue to ensure all [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-20-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: CERS review
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-29-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-29-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health

UNOCAL #5404 (Continued) **S103065416**

Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	12-05-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Onsite to conduct a routine hazardous waste inspection. Met with Jose Ledesma Inspected used oil, drained used oil/fuel filters, and waste antifreeze. Drums and tanks were provided with a lid, stored in a secure manner and appear to be in good condition. The operator completes a maintenance inspection on the drums and tanks on a weekly basis. A Hazardous Waste label was noted on all drums and tanks with the required identification. Municipal dumpster area does not appear to contain any hazardous waste. Perimeter of facility inspected - did not observe any water runoff or staining at this time. Hazardous Waste Emergency Response plan was available for review. Manifests and bills of lading for all hazardous waste streams were reviewed today. Ensure all hazardous waste manifests/disposal documents are maintained on site for at least three years from the date of transport and are available for review during normal business hours. Please continue to ensure [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HW
Eval Source:	CERS

Coordinates:

Site ID:	80065
Facility Name:	Valvoline Instant Oil Change GN0015
Env Int Type Code:	HWG
Program ID:	10160667
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	33.701690
Longitude:	-117.919930

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	17802 Sky Park Circle Ste 104
Affiliation City:	Irvine
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92614-6405
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Keith Rondeau
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

UNOCAL #5404 (Continued) **S103065416**

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000

Affiliation Type Desc:	Identification Signer
Entity Name:	Keith Rondeau
Entity Title:	Asset Protection and EH&S Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Henley Pacific LA LLC
Entity Title:	Not reported
Affiliation Address:	54 Jaconnet Street, Ste 100
Affiliation City:	Newton Highlands
Affiliation State:	MA
Affiliation Country:	United States
Affiliation Zip:	02461
Affiliation Phone:	(617) 243-0404

Affiliation Type Desc:	Parent Corporation
Entity Name:	Henley Pacific LA LLC dba Valvoline Instant Oil Change
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	Keith Rondeau
Entity Title:	Not reported
Affiliation Address:	54 Jaconnet Street, Ste 100
Affiliation City:	Newton
Affiliation State:	MA
Affiliation Country:	Not reported
Affiliation Zip:	02461
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Henley Pacific LA LLC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

UNOCAL #5404 (Continued) **S103065416**

Affiliation Zip:	Not reported
Affiliation Phone:	(617) 243-0404
Affiliation Type Desc:	Property Owner
Entity Name:	Todd I. Schiffman Living Trust c/o Schiffman Ent
Entity Title:	Not reported
Affiliation Address:	9229 W. Sunset Blvd, Suite 501
Affiliation City:	Los Angeles
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	90069
Affiliation Phone:	(310) 859-9600

K67 **ARCO #3083** **HIST CORTESE** **S102433835**
ENE **3470 FAIRVIEW** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.462 mi.
2438 ft. **Site 3 of 4 in cluster K**

Relative:
Lower
Actual:
25 ft.

HIST CORTESE:

edr_fname:	ARCO #3083
edr_fadd1:	3470 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000049T

K68 **MOBIL #18-JMY** **LUST** **U002096210**
ENE **3470 FAIRVIEW** **SWEEPS UST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626** **CA FID UST**
0.462 mi. **Cortese**
2438 ft. **Site 4 of 4 in cluster K** **HIST CORTESE**
CERS

Relative:
Lower
Actual:
25 ft.

LUST:

Name:	MOBIL #18-JMY
Address:	3470 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626
Lead Agency:	ORANGE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900040
Global Id:	T0605900040
Latitude:	33.695891828
Longitude:	-117.9074977
Status:	Open - Remediation
Status Date:	03/07/2000
Case Worker:	DW
RB Case Number:	083000049T
Local Agency:	ORANGE COUNTY LOP
File Location:	Local Agency
Local Case Number:	94UT055
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in

MOBIL #18-JMY (Continued) **U002096210**

GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

LUST:

Global Id:	T0605900040
Contact Type:	Local Agency Caseworker
Contact Name:	DAN WEERASEKERA
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. Dyer Rd. Suite 120
City:	SANTA ANA
Email:	dweerasekera@ochca.com
Phone Number:	7144336255

Global Id:	T0605900040
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rose.scott@waterboards.ca.gov
Phone Number:	9513206375

LUST:

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	04/20/2009
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	05/16/2018
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	07/13/2009
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	09/21/2009
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	04/28/2010
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	01/20/2011
Action:	File review

Global Id:	T0605900040
Action Type:	Other
Date:	04/21/1993

MOBIL #18-JMY (Continued) **U002096210**

Action: Leak Discovery

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 04/05/2011
Action: File review

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 07/12/2010
Action: File review

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 09/23/2010
Action: File review

Global Id: T0605900040
Action Type: RESPONSE
Date: 02/08/2013
Action: Other Workplan - Regulator Responded

Global Id: T0605900040
Action Type: RESPONSE
Date: 10/21/2014
Action: Interim Remedial Action Plan - Regulator Responded

Global Id: T0605900040
Action Type: RESPONSE
Date: 10/12/2017
Action: Request for Closure - Regulator Responded

Global Id: T0605900040
Action Type: REMEDIATION
Date: 03/07/2000
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 11/07/1994
Action: Notice of Responsibility

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 03/03/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 05/30/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 08/07/2003
Action: Staff Letter

MOBIL #18-JMY (Continued) **U002096210**

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/01/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/17/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 01/23/2004
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 06/02/2004
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 09/25/2007
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/03/2007
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 11/14/2011
Action: Notice of Responsibility

Global Id: T0605900040
Action Type: Other
Date: 04/21/1993
Action: Leak Reported

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 04/25/2012
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 09/13/2016
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/05/2017
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT

MOBIL #18-JMY (Continued) **U002096210**

Date: 11/02/2012
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 05/18/2018
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

LUST:
Global Id: T0605900040
Status: Open - Case Begin Date
Status Date: 04/21/1993

Global Id: T0605900040
Status: Open - Remediation
Status Date: 03/07/2000

Name: ARCO # 3083
Address: 3470 FAIRVIEW
City,State,Zip: COSTA MESA, CA 92626
Lead Agency: ORANGE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901818
Global Id: T0605901818
Latitude: 33.6960369
Longitude: -117.907253
Status: Completed - Case Closed
Status Date: 12/28/1994
Case Worker: DB
RB Case Number: 083002609T
Local Agency: ORANGE COUNTY LOP
File Location: Local Agency
Local Case Number: 86UT174
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605901818
Contact Type: Local Agency Caseworker
Contact Name: DENAMARIE BAKER
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD, STE. 120
City: SANTA ANA
Email: dbaker@ochca.com
Phone Number: 7144336255

Global Id: T0605901818
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rose.scott@waterboards.ca.gov
Phone Number: 9513206375

MOBIL #18-JMY (Continued) **U002096210**

LUST:

Global Id:	T0605901818
Action Type:	ENFORCEMENT
Date:	12/28/1994
Action:	Closure/No Further Action Letter
Global Id:	T0605901818
Action Type:	Other
Date:	10/08/1986
Action:	Leak Discovery
Global Id:	T0605901818
Action Type:	REMEDIATION
Date:	10/08/1986
Action:	Excavation
Global Id:	T0605901818
Action Type:	Other
Date:	10/08/1986
Action:	Leak Reported

LUST:

Global Id:	T0605901818
Status:	Open - Case Begin Date
Status Date:	10/08/1986
Global Id:	T0605901818
Status:	Completed - Case Closed
Status Date:	12/28/1994

ORANGE CO. LUST:

Name:	ARCO # 3083
Address:	3470 FAIRVIEW RD
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	86UT174
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	12/28/1994
Record ID:	RO0002594
Name:	MOBIL #18-JMY
Address:	3470 FAIRVIEW RD
City,State,Zip:	COSTA MESA, CA 92626
Region:	ORANGE
Facility Id:	94UT055
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	Not reported
Record ID:	RO0002329

LUST REG 8:

Name:	MOBIL #18-JMY
Address:	3470 FAIRVIEW
City:	COSTA MESA
Region:	8

MOBIL #18-JMY (Continued) **U002096210**

County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083000049T
Local Case Num:	94UT055
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	OM
How Stopped:	Other Means
Leak Cause:	Unknown
Leak Source:	D
Global ID:	T0605900040
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	4/21/1993
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	3/7/2000
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6932099
Longitude:	-117.9075477
MTBE Date:	6/13/2002
Max MTBE GW:	354000
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Name: ARCO # 3083

MOBIL #18-JMY (Continued) **U002096210**

Address:	3470 FAIRVIEW
City:	COSTA MESA
Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083002609T
Local Case Num:	86UT174
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901818
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	10/8/1986
Enforcement Date:	Not reported
Close Date:	12/28/1994
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.69595297
Longitude:	-117.9074727
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

MOBIL #18-JMY (Continued) **U002096210**

Summary: Not reported

SWEEPS UST:

Name:	MOBIL OIL SS # 18JMY
Address:	3470 FAIRVIEW
City:	COSTA MESA
Status:	Active
Comp Number:	2078
Number:	9
Board Of Equalization:	Not reported
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002078-000001
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	4

Name:	MOBIL OIL SS # 18JMY
Address:	3470 FAIRVIEW
City:	COSTA MESA
Status:	Active
Comp Number:	2078
Number:	9
Board Of Equalization:	Not reported
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002078-000002
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	MOBIL OIL SS # 18JMY
Address:	3470 FAIRVIEW
City:	COSTA MESA
Status:	Active
Comp Number:	2078
Number:	9
Board Of Equalization:	Not reported
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002078-000003
Tank Status:	A
Capacity:	10000

MOBIL #18-JMY (Continued) **U002096210**

Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	MOBIL OIL SS # 18JMY
Address:	3470 FAIRVIEW
City:	COSTA MESA
Status:	Active
Comp Number:	2078
Number:	9
Board Of Equalization:	Not reported
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002078-000004
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	30000423
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7149797118
Mail To:	Not reported
Mailing Address:	3225 GALLOWS RD ATTN: EAR
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CORTESE:

Name:	MOBIL #18-JMY
Address:	3470 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605900040
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	OPEN - REMEDIATION
Status Date:	Not reported
Site Code:	Not reported

MOBIL #18-JMY (Continued) **U002096210**

Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	MOBIL #18-JMY
edr_fadd1:	3470
City,State,Zip:	COSTA MESA, CA 92626
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002609T

CERS:

Name:	MOBIL #18-JMY
Address:	3470 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626
Site ID:	241509
CERS ID:	T0605900040
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	DAN WEERASEKERA - ORANGE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	1241 E. Dyer Rd. Suite 120
Affiliation City:	SANTA ANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7144336255

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	ROSE SCOTT - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9513206375

Name:	ARCO # 3083
Address:	3470 FAIRVIEW
City,State,Zip:	COSTA MESA, CA 92626

MOBIL #18-JMY (Continued) **U002096210**

Site ID: 242818
CERS ID: T0605901818
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: DENAMARIE BAKER - ORANGE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 1241 E. DYER ROAD, STE. 120
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7144336255

Affiliation Type Desc: Regional Board Caseworker
Entity Name: ROSE SCOTT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9513206375

69
NW
1/2-1
0.569 mi.
3002 ft.

Relative:
Higher

Actual:
36 ft.

AVIATION EQUIPMENT
1571 MACARTHUR BLVD.
COSTA MESA, CA 92626

ENVIROSTOR **S110493658**
CERS HAZ WASTE **N/A**
Orange Co. Industrial Site
NPDES
CIWQS
CERS

ENVIROSTOR:
Name: AVIATION EQUIPMENT
Address: 1571 MACARTHUR BLVD.
City,State,Zip: COSTA MESA, CA 92626
Facility ID: 30370195
Status: Refer: 1248 Local Agency
Status Date: 12/21/2001
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Cypress
Assembly: 68
Senate: Not reported
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 33.70195
Longitude: -117.9231

AVIATION EQUIPMENT (Continued) **S110493658**

APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	30370195
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Name:	AVIATION EQUIPMENT STRUCTURES, INC
Address:	1571 MACARTHUR BL
City,State,Zip:	COSTA MESA, CA 92626
Facility ID:	71003283
Status:	Refer: Local Agency
Status Date:	05/07/2015
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	2
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Barbara Cook
Division Branch:	Cleanup Cypress
Assembly:	69
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.70011
Longitude:	-117.8885
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAR000046433
Alias Type:	EPA Identification Number
Alias Name:	110002925452
Alias Type:	EPA (FRS #)

AVIATION EQUIPMENT (Continued) **S110493658**

Alias Name: 71003283
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Non-Submittal
Completed Date: 01/11/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS HAZ WASTE:
Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Address: 1571 MACARTHUR BLVD
City,State,Zip: COSTA MESA, CA 92626-1407
Site ID: 387360
CERS ID: 10153249
CERS Description: Hazardous Waste Generator

Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Address: 1571 MACARTHUR BLVD
City,State,Zip: COSTA MESA, CA 92626-1407
Site ID: 387360
CERS ID: 10153249
CERS Description: RCRA LQ HW Generator

Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Address: 1571 MACARTHUR BLVD
City,State,Zip: COSTA MESA, CA 92626-1407
Site ID: 387360
CERS ID: 10153249
CERS Description: Hazardous Waste Onsite Treatment

Orange Co. Industrial Site:
Name: AVIATION EQUIPMENT
Address: 1571 MACARTHUR BLVD
City,State,Zip: COSTA MESA, CA 92626
Case ID: 01IC037
Record ID: RO0003019
Current Status: CLOSED 2/18/2009
Closure Type: Closure certification issued
Released Chemical: SOLVENTS-HALOGENATED; ORGANIC COMPOUNDS

NPDES:
Name: AVIATION EQUIPMENT PROCESSING
Address: 1571 MACARTHUR BLVD
City,State,Zip: COSTA MESA, CA 92626

AVIATION EQUIPMENT (Continued) **S110493658**

Facility Status:	Active
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	406827
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 30I022813
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/01/2010
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	1571 MacArthur Blvd
Discharge Name:	Aviation Equipment Processing
Discharge City:	Costa Mesa
Discharge State:	California
Discharge Zip:	92626
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	406827
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30I022813
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	09/01/2010
Processed Date:	09/01/2010
Status:	Active
Status Date:	09/01/2010
Place Size:	95500
Place Size Unit:	SqFt
Contact:	Dennis Heider
Contact Title:	Not reported
Contact Phone:	714-850-2080
Contact Phone Ext:	Not reported
Contact Email:	dennis@aveprocessing.com

AVIATION EQUIPMENT (Continued) **S110493658**

Operator Name:	Aviation Equipment Processing
Operator Address:	1571 MacArthur Blvd
Operator City:	Costa Mesa
Operator State:	California
Operator Zip:	92626
Operator Contact:	Alverto Vasquez
Operator Contact Title:	Compliance Officer
Operator Contact Phone:	714-850-2080
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Alverto@aveprocessing.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Alverto Vasquez
Certifier Title:	Wastewater Manager
Certification Date:	06-AUG-15
Primary Sic:	3471-Electroplating, Plating, Polishing, Anodizing, and Coloring
Secondary Sic:	3728-Aircraft Parts and Auxiliary Equipment, NEC
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	406827
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 30I022813
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Effective Date Of Regulatory Measure:	09/01/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Aviation Equipment Processing
Discharge Address:	1571 MacArthur Blvd
Discharge City:	Costa Mesa
Discharge State:	California
Discharge Zip:	92626
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	AVIATION EQUIPMENT PROCESSING
Address:	1571 MACARTHUR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 30I022813
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	09/01/2010
Operator Name:	Aviation Equipment Processing
Operator Address:	1571 MacArthur Blvd
Operator City:	Costa Mesa
Operator State:	California
Operator Zip:	92626

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	406827
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30I022813
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Discharge Zip:	Not reported
Received Date:	09/01/2010
Processed Date:	09/01/2010
Status:	Active
Status Date:	09/01/2010
Place Size:	95500
Place Size Unit:	SqFt
Contact:	Dennis Heider
Contact Title:	Not reported
Contact Phone:	714-850-2080
Contact Phone Ext:	Not reported
Contact Email:	dennis@aveprocessing.com
Operator Name:	Aviation Equipment Processing
Operator Address:	1571 MacArthur Blvd
Operator City:	Costa Mesa
Operator State:	California
Operator Zip:	92626
Operator Contact:	Alverto Vasquez
Operator Contact Title:	Compliance Officer
Operator Contact Phone:	714-850-2080
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Alverto@aveprocessing.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Alverto Vasquez
Certifier Title:	Wastewater Manager
Certification Date:	06-AUG-15
Primary Sic:	3471-Electroplating, Plating, Polishing, Anodizing, and Coloring
Secondary Sic:	3728-Aircraft Parts and Auxiliary Equipment, NEC
Tertiary Sic:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	406827
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 30I022813
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/01/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Aviation Equipment Processing
Discharge Address:	1571 MacArthur Blvd
Discharge City:	Costa Mesa
Discharge State:	California
Discharge Zip:	92626
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Address:	1571 MACARTHUR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 30IN600483
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Undetermined
Status Date:	08/11/2010
Operator Name:	Flaregroup dba Aviation Equipment Processing
Operator Address:	1571 MacArthur Blvd
Operator City:	Costa Mesa
Operator State:	California
Operator Zip:	92626

CIWQS:

Name:	AVIATION EQUIPMENT PROCESSING
Address:	1571 MACARTHUR BLVD
City,State,Zip:	COSTA MESA, CA 92626
Agency:	Aviation Equipment Processing
Agency Address:	1571 MacArthur Blvd, Costa Mesa, CA 92626
Place/Project Type:	Industrial - Electroplating, Plating, Polishing, Anodizing, and

AVIATION EQUIPMENT (Continued) **S110493658**

	Coloring
SIC/NAICS:	3471(+)
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 30I022813
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	09/01/2010
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	7
Violations within 5 years:	6
Latitude:	33.70196
Longitude:	-117.9239

CERS:

Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Address:	1571 MACARTHUR BLVD
City,State,Zip:	COSTA MESA, CA 92626-1407
Site ID:	387360
CERS ID:	10153249
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date:	04-16-2014
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description:	Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 06/05/2014. Facility is operating a waste water treatment system. All Tiered Permit units must be properly indicated on the Notification forms. Inspection this date reveals that you currently have on-site treatment units in your waste water treatment system. In order to complete your notification, you must submit the following information: - Business Activities Form - Business Owner/Operator Identification Form - On-site Hazardous Waste Treatment Notification - Facility Page - On-site Hazardous Waste Treatment Notification - Unit Page - On-site Tiered Permitting - Process Page (PBR/CA/CE) Page for each unit.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS

Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date:	07-19-2018
Citation:	22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description:	Failure to meet the following container management requirements: (a) A

AVIATION EQUIPMENT (Continued) **S110493658**

container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Violation Notes: Returned to compliance on 07/19/2018. OBSERVATION: A 250-gallon tote containing phosphoric acid was observed open when not actively adding or removing waste. Containers shall be closed when not actively adding or removing waste. CORRECTIVE ACTION: The container lid was placed and secured while on site. No further corrective action necessary.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 10/30/2017. See comments that detail each individual waste container that is not labeled and/or is improperly labeled.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 01-16-2014
Citation: HSC 6.67 Multiple Sections - California Health and Safety Code, Chapter 6.67, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 07/23/2015. Training record does not list job titles and job descriptions for all employees. Training records must include the following: - The job title for each position at the facility related to hazardous waste management - The name of each employee filling each job - A written job description for each job title mentioned above and must include the required skills, education, or other qualification and duties of personnel assigned to each position.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2018
Citation: 22 CCR 45 67450.3(c)(8) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(8)
Violation Description: Failure to maintain the required documents, including waste analysis plan, contingency plan, training documents, Phase I Environmental Assessment, written inspections schedules, etc. at the facility where the FTU is operating and upon request make these documents available

AVIATION EQUIPMENT (Continued) **S110493658**

to the authorized agency, DTSC, the CUPA, or EPA, or local government agency.

Violation Notes: Returned to compliance on 08/17/2018. OBSERVATION: The following documents were reviewed: 1) Waste Analysis Plan, 2) Closure Plan, 3) Contingency Plan, 4) Weekly container inspections in 2018. Daily tank inspections have not been completed. Mr. Vincent provided a copy of a daily tank and secondary containment inspection log template that was created. No training documentation, permit, or acknowledgment letter were available for review. CORRECTIVE ACTION: Please submit proof that the treatment tanks are being inspected by submitting a copy of the completed daily inspection log within 30 days. Also, please submit your training records to this agency within 30 days.

Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 10-19-2017
Citation: 22 CCR 15 66265.31 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.31
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
Violation Notes: Returned to compliance on 10/19/2017. During the routine hazardous waste inspection conducted on 7/19/17, it was previously noted that "during a check of the two dumpsters near the waste drum storage area, several 5-gallon containers were observed with pourable quantities of liquids inside." On that date inspector Tim Grogan obtained samples of the liquids in question and had them analyzed by a state-approved laboratory, Truesdail Laboratories Inc. Laboratory analysis has shown that two of the samples taken were determined to be ignitable, by definition. CORRECTED
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 04-16-2014
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Each container holding hazardous waste must be kept closed at all times, except to add or remove waste. Filter cake bin, lined box storing filter cake, boxes storing spent spray booth filters and solids/debris contaminated with water based products, tank used to store waste rinse waters pumped out of the "pit" floor, Gold rinse water waste drum and waste fluorescent tubes boxes are not stored closed. All waste containers must be stored closed.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-16-2019
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: OBSERVATION: The facility needs to update their material inventory with the following changes: 1) Disclose all materials (new chemicals and hazardous wastes separately) above the reporting threshold of 55 gallons for a liquid, 500 pounds for a solid, and 200 cubic feet for a compressed gas. 2) Remove the State Waste Code and Annual Waste Amount from all new chemicals, unless the material disclosed is a hazardous waste. 3) Update the Days on Site to "365" for all materials. 4) Include the Storage Pressure and Storage Temperature for all materials. CORRECTIVE ACTION: Please update your inventory with all the chemicals listed in the comment section of this report. Submit your updated inventory via the California Environmental Reporting System (CERS) within 30 days for review.
Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-16-2019
Citation: 22 CCR 45 67450.3(c)(9)(A) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(9)(A)
Violation Description: Failure to prepare a treatment system inspection program and the log of inspections conducted, and maintain onsite for three years.
Violation Notes: OBSERVATION: Facility has not completed their daily treatment system inspections. CORRECTIVE ACTION: Please complete your daily treatment system inspections and provide a copy of your inspection log to this agency for review within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2018
Citation: 22 CCR 45 67450.3(c)(9)(F) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(9)(F)
Violation Description: Failure to include all required information in the tank system assessment.
Violation Notes: Returned to compliance on 07/16/2019. OBSERVATION: Per Mr. Vincent, the treatment tanks that were part of the original PE certification dated 9/9/15 have since been replaced with newer tanks. A PE assessment must be conducted for the tank system and secondary containment. CORRECTIVE ACTION: Please provide a copy of the PE assessment for your tank system and secondary containment within 60 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2018
Citation: 22 CCR 15 66262.41 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66262.41
Violation Description: Failure of a large quantity RCRA generator to prepare the Biennial report (Form 8700), and submit to DTSC by March 1st on even numbered years ; and maintain it onsite for three years.
Violation Notes: Returned to compliance on 08/10/2018. OBSERVATION: The biennial report for 2018 was not completed or available for review. A generator who ships any hazardous waste offsite to a TSDF within the United States shall prepare and submit a Biennial Report, U.S. EPA Form 8700, to the DTSC by March 1 of each even-numbered year, and shall cover generator activities during the previous calendar year. CORRECTIVE ACTION: Immediately prepare the biennial report for the 2018 calendar year and submit it to the DTSC. Please also submit a copy to this agency within 30 days to correct this violation.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 04-16-2014
Citation: 22 CCR 15 66265.31 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.31
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment.
Violation Notes: Returned to compliance on 07/23/2015. Filtercake was observed outside of the treatment system bermed area. Filtercake must be managed in a manner to prevent spills.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: HSC 6.5 25244.21 - California Health and Safety Code, Chapter 6.5, Section(s) 25244.21
Violation Description: Failure to adequately complete, and maintain for review, all requirements of the source reduction evaluation review and plan (SB-14).
Violation Notes: Returned to compliance on 02/21/2018. The SB-14 documents were not available.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 01-16-2014
Citation: 22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16

AVIATION EQUIPMENT (Continued) **S110493658**

Violation Description: Failure to provide employees within the first six months after the date of their employment, or assignment to the facility, or to work unsupervised, or to a new position at a facility with hazardous waste training to ensure employees are competent in the following areas: hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed, emergency response and emergency equipment, and procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment. In addition, the owner/operator shall ensure facility personnel take part in an annual review of the initial training and training records training records on current personnel shall be kept until closure of the facility. Training records on former employees shall be kept for at least three years from the date the employee last worked at the facility. The records shall include the following: the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; a written job description for each position, duties of facility personnel assigned to each position, and a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.
Violation Notes: Not reported
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 15 66265.174 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.174
Violation Description: Failure to inspect weekly areas where hazardous waste containers are stored. The owner or operator must look for leaking containers and for deterioration of containers caused by corrosion or other factors.
Violation Notes: Returned to compliance on 10/30/2017. Per Mr. Vincent, there is no established hazardous waste storage container/area inspection program. Develop a program in which hazardous waste storage areas are inspected at least weekly.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: HSC 6.5 25200.14(b)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25200.14(b)(1)
Violation Description: Failure to submit a Phase I Checklist to DTSC within one year of commencing operations.
Violation Notes: Returned to compliance on 10/30/2017. The Phase I Environmental Checklist was not available for review.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-23-2015

AVIATION EQUIPMENT (Continued) **S110493658**

Citation:	22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description:	Failure to properly close hazardous waste containers when not in active use.
Violation Notes:	Returned to compliance on 07/27/2015. Paint debris/rags (1), spent spray booth filter (1) and solids/debris contaminated with water based products (1) in plastic lined boxes in painting area and used fluorescent tubes boxes are not stored closed. All waste containers must be stored closed unless in active use.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS

Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date:	07-19-2018
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 07/19/2018. OBSERVATION: The following waste containers were missing the hazardous property: -Three Filter Press Cake cubic yard boxes -One Air Curing Coating cubic yard box -Twelve Rags/PPE cubic yard boxes CORRECTIVE ACTION: These containers were properly corrected on site with the missing elements. No further corrective action necessary.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS

Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date:	07-19-2017
Citation:	22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16
Violation Description:	Failure to provide employees with hazardous waste training within the first six months after the date of their employment or assignment to a facility, or to a new position at a facility and annually thereafter. Training records on current personnel shall be kept until closure of the facility and for former employees the record shall be kept for at least three years from the date the employee last worked at the facility.
Violation Notes:	Returned to compliance on 07/19/2018. The hazardous waste training program did not contain adequate details such as job titles, written descriptions of each position, descriptions of the types and amounts of training given to each employee, and training records.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS

Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date:	07-23-2015
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

AVIATION EQUIPMENT (Continued) **S110493658**

Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 07/27/2015. Waste paint drum in paint mixing area/shed does not have ?start accumulation date? on the hazardous waste label and used fluorescent tubes (universal waste) boxes are not labeled. All hazardous and/or universal waste containers must be properly labeled with start accumulation dates.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2018
Citation: 22 CCR 15 66265.52 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.52
Violation Description: Failure to include all of the following in the Contingency Plan: description of actions personnel will take in response to a release or emergency, arrangements with local authorities, list of emergency coordinators including name, addresses & phone numbers, list of emergency equipment and their physical description, location and capabilities,?evacuation plan, and OES phone number. (If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions.)
Violation Notes: Returned to compliance on 08/17/2018. OBSERVATION: The contingency plan is missing the location of spill kits. It is also missing the list of names, addresses, and phone numbers (office and home) of all the persons qualified to act as emergency coordinator(s). One person should be the primary emergency coordinator and others as alternates. CORRECTIVE ACTION: Please update your contingency plan to include these elements and provide a copy of the changes to this agency within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 05-23-2016
Citation: 22 CCR 45 67450.13(a)(1) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.13(a)(1)
Violation Description: Failure to prepare a written estimate of the cost of closing each unit which includes the cost that would be incurred for closing a treatment unit when using the owner or operator or generator’s own staff and/or personal equipment taking into account any salvage value that may be realized from the sale of wastes, facility structure or equipment, land or other facility assets. This estimate shall be submitted as an attachment to the Certification of Financial Assurance for Permit by Rule and Conditionally Authorized Operations/ Maintenance page(s) of the Unified Program Consolidated Form (x/99)).
Violation Notes: Returned to compliance on 07/03/2017. Required annual PBR renewal and Certification Of Financial Assurance forms that should have been submitted by 3/1/16 have not been submitted. Required documents must

AVIATION EQUIPMENT (Continued) **S110493658**

be submitted electronically to CERS by 5/26/16.

Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2018
Citation: 22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16
Violation Description: Failure to provide employees with hazardous waste training program of class room instructions or on-the-job training within the first six months after the date of their employment or assignment to a facility, or to a new position at a facility and annually thereafter. Training records on current personnel shall be kept until closure of the facility and for former employees the record shall be kept for at least three years from the date the employee last worked at the facility. The records shall include the following: the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; a written job description for each position, duties of facility personnel assigned to each position, and a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.
Violation Notes: Returned to compliance on 08/01/2018. OBSERVATION: Violation I126 cited on 7/19/17 remains outstanding. Immediately complete your RCRA training records with the following: 1) job titles, 2) written descriptions of each position, 3) descriptions of the types and amounts of training given to each employee, and 4) training records. CORRECTIVE ACTION: Immediately provide employees with initial or refresher hazardous waste training. Submit a copy of the roster and the full RCRA training record to the CUPA immediately.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-16-2019
Citation: 22 CCR 45 67450.3(c)(8)(A)(c)(9)(A) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(8)(A)(c)(9)(A)
Violation Description: Failure of an owner or operator to obtain a detailed chemical and physical analysis of a representative sample of the waste, which includes all information necessary to manage waste in accordance with the requirements, and to meet LDR requirements; Failure to analyze wastes according to the frequency specified in the plan and to retain waste analysis documentation for three years.
Violation Notes: OBSERVATION: Facility has not conducted all the required analysis per their waste analysis plan (CAM 17 Metals and pH) on all plating tanks. This includes tanks 2, 4, 21, 22, 24, 25, and 26, for CAM 17 Metals/pH. All other plating tanks need pH analysis. CORRECTIVE ACTION: Perform the required analysis per your waste analysis plan and provide test results to this agency within 60 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: HSC 6.5 25201(a) - California Health and Safety Code, Chapter 6.5, Section(s) 25201(a)
Violation Description: Failure to obtain a permit or grant of interim status to accumulate hazardous waste longer than 90 days.
Violation Notes: Returned to compliance on 10/30/2017. See comments that detail each individual waste that has exceeded the allowable accumulation time.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 45 67450.3(c)(8) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(8)
Violation Description: Failure to maintain the required documents at the facility where the FTU is operating and upon request make these documents available to authorized agency, DTSC, the CUPA, or EPA, or local government agency.
Violation Notes: Returned to compliance on 10/30/2017. The following documents were incomplete or insufficient: Closure Plan, Waste Analysis Plan, Employee training records.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.11
Violation Description: Failure to determine if the waste generated is a hazardous waste.
Violation Notes: Returned to compliance on 08/17/2017. During a check of the two dumpsters near the waste drum storage area, several 5-gallon containers were observed with pourable quantities of liquids inside.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 04-16-2014
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 06/24/2015. The waste holding tank in the "pit" and tanks in the waste treatment area must be certified by a professional engineer. Obtain and maintain available for review a written assessment/certification that has been reviewed and certified by an independent, qualified professional engineer, registered in California, that attests to the integrity of each on-site hazardous waste storage tank and associated secondary containment system. NOTE: All of the elements in Section 66265.192, subsections a and k, Title 22, CCR must be included/addressed in the tank and associated secondary containment system assessment/certification. Any

AVIATION EQUIPMENT (Continued) **S110493658**

modifications to the secondary containment system, including repairs; any addition to the number of tanks in the secondary containment system; any modifications to an on-site hazardous waste storage tank, including changes to the tank capacity will require the hazardous waste storage tanks and/or secondary containment system to be recertified.

Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes: Returned to compliance on 10/30/2017. Two cardboard totes of filter cake were observed stored open. One of the containers was marked with the words "Sun Dry." Containers must be maintained closed except when adding contents.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 15 66265.35 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.35
Violation Description: Failure to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
Violation Notes: Returned to compliance on 10/30/2017. The covered area between conex storage containers contained cardboard boxes of universal waste fluorescent bulbs, plastic lined cardboard totes of filter cake, ad coat, booth filters, and rags/PPE, and cardboard totes of spray booth debris. The storage containers were stacked and stored so closely that they prevented access to the majority of the hazardous waste storage area and waste storage containers. Store waste containers such that adequate aisle space is maintained.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-23-2015
Citation: HSC 6.5 25200.14(b)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25200.14(b)(1)
Violation Description: Failure to submit a Phase I Checklist.
Violation Notes: Returned to compliance on 10/15/2015. Facility owner/operator has not

AVIATION EQUIPMENT (Continued) **S110493658**

submitted a Tiered Permitting Phase I Environmental Assessment Checklist (DTSC Form 1151) to DTSC and CUPA one year from the date that the facility became authorized to operate. Tiered Permitting Phase I Environmental Assessment Checklist must be completed and be submitted within 30 days of this inspection.

Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-19-2017
Citation: 22 CCR 15 66262.41 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66262.41
Violation Description: Failure of a large quantity RCRA generator to prepare the Biennial report (Form 8700), and submit to DTSC by March 1st on even numbered years ; and maintain it onsite for three years.
Violation Notes: Returned to compliance on 10/30/2017. The Biennial Report was not available.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 04-16-2014
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Description: Failure to properly close hazardous waste containers when not in active use.
Violation Notes: Returned to compliance on 07/23/2015. Boxes storing spent spray booth filters and solids/debris contaminated with water based products are overfilled and cannot be closed. Each container holding hazardous waste must be opened, handled, transferred or stored in a manner which will not cause the waste to spill.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date: 07-23-2015
Citation: 22 CCR 45 67450.3(c)(8) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(8)
Violation Description: Failure to maintain, reproduce, and provide the following documents at the facility where the FTU is operating: 1) The waste analysis plan for the treatment operation; 2) The written inspection schedule; 3) All training documents; 4) The contingency plan; 5) A copy of the most recent treatment notification and a copy of the most recent acknowledgement received from the Department, CUPA or authorized agency; 6) A copy of any local Air District permit and other permits required for the operation of the FTU; 7) A copy of the closure plan; 8) A copy of documents related to the environmental investigation and any cleanup, abatement or other necessary remedial action taken; and 9) Documentation of any convictions, judgments, settlements, or orders resulting from any action by any local, State, or federal environmental or public health enforcement agency concerning the

AVIATION EQUIPMENT (Continued) **S110493658**

	operation of the facility within the last three years, as the documents would be available under the California Public Records Act.
Violation Notes:	Returned to compliance on 10/15/2015. facility has not prepared a waste analysis plan for the treatment system. Waste analysis plan must be prepared and a copy be submitted to this agency within 30 days of this inspection.
Violation Division:	Orange County Environmental Health
Violation Program:	PBR
Violation Source:	CERS
Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Violation Date:	04-16-2014
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Filter cake bin, lined box storing filter cake, boxes storing spent spray booth filters and solids/debris contaminated with water based products, tank used to store waste rinse waters pumped out of the "pit" floor, Gold rinse water waste drum and waste fluorescent tubes boxes are not properly labeled. All waste containers must labeled properly.
Violation Division:	Orange County Environmental Health
Violation Program:	HWLQG
Violation Source:	CERS

Evaluation:

Eval General Type:	Other/Unknown
Eval Date:	01-16-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed file.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-16-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	onsite walk thru w/ Arghavan
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-16-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-16-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	On site to conduct routine hazardous waste inspection. Dennis Heider granted consent to conduct inspection. I walked through the facility, perimeter, process areas and inspected waste storage areas. Evacuation routes, eye wash/shower stations and first aids kits were observed throughout the facility. Ensure that eye wash stations are maintained and tested periodically. The process floors are where small baths are located are maintained dry. Liquid was observed in the sloped area in the ?pit." The need to maintain the pit area dry was discussed. According to Mr. Heider, the pit is pumped out a least once a day. The hazardous waste tanks that were located in the ?pit? have been moved to a bermed area outside where waste water treatment is being built. Filtercake (being generated at the facility during the development of the treatment system), spent spray booth filters and solids/debris contaminated with water based products are in plastic lined boxes. All [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	02-06-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	The following violations were cited on 7/19/17 and remain UNCORRECTED: I444- Source Reduction Review and Plan (SB14) I126- Hazardous Waste Training Program, Training Records Submit the required documents immediately. Electronic copies may be emailed to dfreed@ochca.com A copy of this report will be sent to dennis@aveprocessing.com, dvincent@aveprocessing.com, alverto@aveprocessing.com
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	03-27-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received and review SB-14 documents for 2014. Violation I444 cited on 7/19/17 has been corrected.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	03-28-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Please be advised that this Agency has reviewed 2017 Tiered Permitting Financial Assurance Self Certification documents submitted to CERS on 2/28/17. Closure costs cannot be approved due to failure to submit closure cost breakdown for 2016 and costs not being approved. Closure cost breakdown tables for 2016 and 2017 must be submitted by 4/11/17, to correct the outstanding violation regarding failure to submit

AVIATION EQUIPMENT (Continued) **S110493658**

	financial assurance documents for 2016 and submit 2017 closure costs. Failure to submit requested documents will result in enforcement action.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-03-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	I called and left message for Dennis to call back to find out whether or not they have started operating the treatment unit.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	F/U visit w/ staff on violations
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-15-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Aviation Equipment Processing I received the following documents via email on 10/14/15: - Onsite Hazardous Waste Treatment Notification Facility Page listing one CESW unit - Onsite Hazardous Waste Treatment Notification Unit Page for CESW - Onsite Tiered Permitting Permit By Rule Page Waste And Treatment Process for CESW
Eval Division:	Orange County Environmental Health
Eval Program:	CE
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-15-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector Comments: I received the following documents via email on 10/14/15: - Onsite Hazardous Waste Treatment Notification Facility Page listing one CESW unit and one PBR unit - Onsite Hazardous Waste Treatment Notification Unit Page for each unit - Onsite Tiered Permitting Permit By Rule Page Waste And Treatment Process for each unit - Phase I Environmental Assessment Checklist - Violation I466 regarding failure to submit Phase I Environmental Assessment Checklist cited during routine inspection conducted on 7/23/15, has been corrected. The email stated that Waste Analysis Plan and revised PE Assessment are available on site. Violation I675 regarding failure to maintain Waste Analysis Plan cited during routine inspection conducted on 7/23/15, has been corrected.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR

AVIATION EQUIPMENT (Continued) **S110493658**

Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 10-19-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: During the routine hazardous waste inspection conducted on 7/19/17, it was previously noted that "during a check of the two dumpsters near the waste drum storage area, several 5-gallon containers were observed with pourable quantities of liquids inside." On that date inspector Tim Grogan obtained samples of the liquids in question and had them analyzed by a state-approved laboratory, Truesdail Laboratories Inc. Laboratory analysis has shown that two of the samples taken were determined to be ignitable, by definition. Test results are being provided for your records. A copy of this report will be sent to David Vincent and Alverto Vasquez.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 10-30-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Onsite to conduct a follow-up inspection of a Permit by Rule (PBR) and Conditionally Exempt- Special Waste (CESW) facility. Consent to inspect and take photos was granted by Alverto Vasquez, Compliance Officer. David Vincent, Hazardous Waste Supervisor, Sonja Balcazar, Quality Consultant & Environmental and Wayne Miller, Miller Environmental Services were also present during this inspection. The following documents were reviewed: Amendment to Waste Analysis Plan dated 8/12/15: CAM 17 Metals 9/20/17 Closure Plan submitted 4/10/17 (via CERS ID# 10153249) Phase I Environmental Checklist Inspection logs have been created for the waste water treatment area, and the inspections are being conducted daily. Per Mr. Vincent, waste treatment through-put logs are being created and tracked on a computer. Violations I466 and I675 cited on 7/19/17 has been corrected. Violation I278 cited on 5/23/16 remains outstanding: Closure costs cannot be approved due to failure to [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 10-30-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Onsite to conduct a follow-up inspection of a RCRA LQG. Consent to inspect and take photos was granted by Alverto Vasquez, Compliance Officer. David Vincent, Hazardous Waste Supervisor, Sonja Balcazar, Quality Consultant & Environmental and Wayne Miller, Miller Environmental Services were also present during this inspection. A walk-through of the hazardous waste storage area, waste treatment area, back parking lot, paint area (including 2 lined dumpsters for empty paint cans), and municipal dumpster area was conducted. There was no hazardous waste observed in the municipal dumpster on this date. Photos were taken. The following were observed: Treatment area-

AVIATION EQUIPMENT (Continued) **S110493658**

55-gallon drum of waste compressor oil (not properly labeled, drum contained the common name and accumulation start date) 1 cu. yd. tote of hazardous waste solids (labeled, missing hazardous property) Hazardous Waste Storage Area- 2x 1 cu. yd. totes of rags (labeled, missing hazardous property) 2x 1 cu. yd. [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-03-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Picked up the 2 samples and returned under Chain of Custody to Evidence Room. Logged into evidence book and placed in refrigerator. No sample remaining in sample jars.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-06-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: The salvage value of the treatment system reported for this facility is $5,000,000.00. Be sure to maintain documentation reflecting your estimated salvage value.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-07-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector Name: Jeff Nofal
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-13-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-14-2012
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	06-15-2010
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector Name: Jeff Nofal
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-17-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	CERS 2016 - BA/OW pg - Not Accepted - incorrect DBA & OW names
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-24-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed PE Certification for the tanks in process/"pit" area and treatment system area that was submitted on 3/2/15. Violation W022 regarding failure to have the secondary containment in process tank ("pit") area assessed and certified by a professional engineer, cited on 4/16/15 during onsite inspection, has been corrected.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-24-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed PE Certification for the tanks in process/"pit" area and treatment system area.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-27-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Tiered Permitting - Facility form (only document) submitted to CERS on 6/3/16 was reviewed and declined since the reported Tiers, 2 CE-CL, units are not correct based on last onsite inspection conducted on 7/23/15. Tier Permitting units were one Conditionally Authorized (CA) and one Permit By Rule (PBR). Treatment units must be verified and form corrected. In addition the following forms must also be submitted: - Tiered Permitting: Unit PBR for each unit - Tiered Permitting: Plot Plan/ Map - Tiered Permitting: Financial Assurance Certification - Tiered Permitting: Estimate of Closure Cost
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-16-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On site for a routine tiered permitting - conditionally exempt specified wastestream (CESW) inspection. Supervising Hazardous Materials Specialist, Dean Freed, was also on site. Met with David Vincent, hazardous waste supervisor with Aviation Equipment Processing. CESW Unit #2 empty container rinsing is conducted on site. Residuals are treated in the Permit by Rule (PBR) Unit. Please refer to PR0096100 for the full report. Please add your CESW Unit #2 for empty container rinsing on the California Environmental Reporting System (CERS) within 30 days. A copy of this report will be sent to dvincent@aveprocessing.com.
Eval Division:	Orange County Environmental Health
Eval Program:	CE
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-16-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	On site for a routine hazardous waste treatment tiered permitting permit by rule (PBR) inspection. Supervising Hazardous Materials Specialist, Dean Freed, was also on site. Met with David Vincent, hazardous waste supervisor with Aviation Equipment Processing. The facility has the following units on site: -PBR Unit #1 Batch Treatment - Treats aqueous wastes containing chrome through reduction, pH neutralization, precipitation, and phase separation. Tanks: 7, Containers/Areas: 1 -Conditionally Exempt Specified Wastestream (CESW) Unit #2 Empty Container Rinsing The exterior of each unit was marked with the required information. The secondary containment beneath each unit is maintained dry. Documentation maintained on site and available for review included: ? Wastewater discharge permit #1-071037, ? Discharge records and standard operating instructions, ? Written log of weekly hazardous waste storage container inspections, ? Manifest documentation for [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-16-2019
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	On site for routine hazardous materials and business emergency plan inspection. Met with David Vincent, hazardous waste supervisor. Supervising Hazardous Materials Specialist, Dean Freed, was also on site. Observed the following disclosable materials: -Paints, Adhesives -WWT 300 -WWT 426 -WWT 676 -Sulfuric Acid -Nitric Acid -Hydrochloric Acid -Phosphoric Acid -Alodine -Oakite 160 -Bonderite -Epoxycoat -Sodium Dichromate -Sodium Hydroxide -MEK -Toluene -Acetone -Thinner -Adcoat Small Plating Line: -Tank 27 Dichromate -Tank 25 Phosphoric Acid -Tank 24 Sulfuric Acid -Tank 23 Oakite 160 Etch -Tank 22 Deoxidizer -Tank 21 Nitric Acid -Tank 20 Turco Big Plating Line: -Tank 1 Caustic Etch -Tank 2 Turco 4215 -Tank 3 FPL Etch -Tank 4 Phosphoric Acid (Anodize) Hazardous Wastes: -Filter Press Cake -Paint Thinner

AVIATION EQUIPMENT (Continued) **S110493658**

-Used Oil -Rags/PPE Debris -Paint Booth Filters -Sulfuric [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Onsite to conduct a routine tiered permitting inspection of a Permit by Rule (PBR) and Conditionally Exempt- Special Waste (CESW) facility. Consent to inspect and take photos was granted by the Hazardous Waste Supervisor, David Vincent. A walk-through of the facility, process areas, treatment area, waste storage areas and dumpster areas was conducted. Photos were taken on this date. Refer to PR0103732 for full inspection report.
Eval Division: Orange County Environmental Health
Eval Program: CE
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-19-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Onsite to conduct a routine hazardous waste inspection of a RCRA Large Quantity Generator. Consent to inspect and take photos was granted by the Hazardous Waste Supervisor, David Vincent. Susan Berg, Supervising Hazardous Materials Specialist and Dennis Heider, President were also present during this inspection. A walk-through of the facility, process areas, treatment area, waste storage areas and dumpster areas was conducted. Photos were taken on this date. The following wastes were observed: Covered area between conex storage containers- Cardboard boxes of universal waste fluorescent bulbs, plastic lined cardboard totes of filter cake, ad coat, booth filters, and rags/PPE, cardboard totes of spray booth debris. The storage containers were stacked and stored so closely that they prevented access to the majority of the hazardous waste storage area. Treatment area- Poly totes of Turco and phosphoric acid, plastic bin of chem milling build-up/scale, steel drum of waste [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-19-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Onsite to conduct a routine tiered permitting inspection of a Permit by Rule (PBR) and Conditionally Exempt- Special Waste (CESW) facility. Consent to inspect and take photos was granted by the Hazardous Waste Supervisor, David Vincent. A walk-through of the facility, process areas, treatment area, waste storage areas and dumpster areas was conducted. Photos were taken on this date. The following documents were reviewed: 1. Waste Analysis Plan- The plan did not contain any analytical data or test results 2. PE Certification dated 1/16/15 and updated 9/9/15 3. Closure Plan dated 7/1/16 4. Orange County Sanitation District discharge permit 5. Employee training program

AVIATION EQUIPMENT (Continued) **S110493658**

records The following documents were not available for review: 1. Written inspection schedule 2. Treatment logs 3. Phase I Environmental Checklist The treatment units were observed labeled. Acids with metals are transferred from the process area to the treatment area in 250-gallon poly totes, [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-19-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site for a routine hazardous waste treatment tiered permitting permit by rule (PBR) inspection. Supervising Hazardous Materials Specialist, Dean Freed, was also on site. Met with hazardous waste supervisor David Vincent of Aviation Equipment Processing. Consent to enter and conduct inspection activities was granted. The PBR unit consisted of chrome reduction, pH adjustment, precipitation, and phase separation. The exterior of each unit was marked with the required information. The secondary containment beneath each unit is maintained dry. Documentation maintained on site and available for review included: ? Wastewater discharge permit #1-071037, discharge records, ? Written log of weekly hazardous waste storage container inspections, ? Waste Analysis Plan with analysis records, ? Manifest documentation for disposal of residuals ? Closure plan ? PE tank and secondary assessment report dated 9/9/15 ? Phase I environmental assessment report The [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-19-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site to conduct a routine hazardous waste inspection. Supervising Hazardous Materials Specialist, Dean Freed, was also on site. The following CLASS II violations have not been corrected and have now been ELEVATED TO CLASS I: -I126 - The hazardous waste training program did not contain adequate details such as job titles, written descriptions of each position, descriptions of the types and amounts of training given to each employee, and training records. This violation will require formal enforcement by OC CUPA in the form of an Administrative Enforcement Order (AEO) or referral to the District Attorney?s Office, which will include the assessment of administrative penalties outlined in H&SC section 25404.1.1. Continue to correct all outstanding violations. A copy of this report will be sent to dvincent@aveprocessing.com

Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-22-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency

AVIATION EQUIPMENT (Continued) **S110493658**

Eval Notes:	Reviewed file and discussed site with supervisor.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-23-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspection was conducted for this program was conducted during PBR inspection at this facility today. Report is under PR0096100.
Eval Division:	Orange County Environmental Health
Eval Program:	CE
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-23-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector Comments : On site to conduct routine hazardous waste inspection. Dennis Heider and David Vincent granted consent and assisted in conducting inspection. I walked through the facility, perimeter, process areas and inspected waste storage areas. Evacuation routes, eye wash/shower stations and first aids kits were observed throughout the facility. I did not observe any hazardous waste in municipal trash. Process floors in the ?pit? (where large baths are located) and area where small baths are located are maintained dry. The pit area floor is pumped continuously. Lab pack drums and spent spray booth filters in plastic lined boxes, close to waste treatment area, and waste paint/thinner drums (on secondary a containment), next to painting area are stored closed and labeled with accumulation dates. Paint debris/rags (1), spent spray booth filter (1) and solids/debris contaminated with water based products (1) in plastic lined boxes in painting area [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-23-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector Comments: On site to conduct routine Tiered Permit inspection. Dennis Heider and David Vincent granted consent and assisted in conducting inspection. I walked through the process and treatment areas. Treatment and process floor areas are maintained dry. Batch treatment tanks are properly labeled/identified. The following documents are available for review: - PBR forms - Certification Of Financial Assurance - Closure Plan - Plot plan of treatment system - Daily and weekly inspection logs or treatment system area - Written procedure for treatment system - Written operating records for dates, volumes, residual management for batch treatment - Orange County Sanitation Discharge permit (expires in 1/30/17) - PE Assessment dated 1/16/14, for secondary containment for both the ?pit? and treatment system areas. Number to tanks/units in treatment system has changed since preparation of this report. PE Assessment must be updated to reflect current [Truncated]

AVIATION EQUIPMENT (Continued) **S110493658**

Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	07-24-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Discussed treatment system with supervisor.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	07-24-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector Comments: The following documents were received on 3/2/15: - Tank Integrity & Secondary Containment Assessment Indoor Process Area dated 1/16/14. Comments in the report indicate that the report was prepared during the installation of process tanks. Process Tank names and numbers do not match name and numbering system observed during onsite inspection conducted on 7/23/15. Revised tables and maps must be prepared to reflect process tank name and numbers after completion of installation activities. - Tank Integrity & Secondary Containment Assessment Treatment Area dated 1/16/14. Process Tank and Treatment System Units/Tanks names and numbers do not match names and numbers observed during onsite inspection conducted on 7/23/15. Treatment process at the facility has changed since the report was prepared with reduced tank/container numbers. Revised tables and maps must be prepared to reflect current treatment system tanks/units and process tank names and [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	07-27-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspection Comments: The following documents received on 3/2/15 were reviewed and information verified during onsite inspections conducted on 7/23/15 and 7/28/15: - Business Activities form - Business Owner/Identification form - Onsite Hazardous Waste Treatment Notification Facility Page listing one Conditionally Authorized (CA) and one Permit By Rule (PBR) unit. Based on onsite observations and discussions, facility has one PBR unit for treating spent acids and spent acids with chrome (spent acids and spent acids with chrome go into one holding tank and then treated) and one Conditionally Exempt ? Specified Wastestream (CESW) for rinsing drums. The following revised forms to reflect waste treatment activities must be submitted to this agency within 30 days of this inspection: - Onsite Hazardous Waste Treatment Notification Facility Page listing one CESW unit and one PBR unit. - Onsite Hazardous Waste Treatment Notification Unit Page for each unit - [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	PBR

AVIATION EQUIPMENT (Continued) **S110493658**

Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-27-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector Comments: On site for follow up inspection to correct the following outstanding violations: - I145, regarding failure to properly close hazardous waste containers when not in active use, cited during routine inspection conducted on 7/23/15. Paint debris/rags (1), spent spray booth filter (1) and solids/debris contaminated with water based products (1) boxes in painting area are stored closed. Used fluorescent tubes boxes are inside a wood crate that is stored closed. This violation has been corrected. - I562, regarding failure to label hazardous waste containers properly cited during routine inspection conducted on 7/23/15. Waste paint drum in paint mixing area has ?start accumulation date? on the hazardous waste label and the wood crate storing used fluorescent tubes is properly labeled. This violation has been corrected.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-29-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-19-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: I received call from Wesley of Associated Environmental Management, consultant working on Phase I Checklist and Waste Analysis Plan. He stated that he is working on both documents and they will be ready within three weeks.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-22-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Documents submitted to CERS on 7/5/16 were reviewed and declined with the following considerations: Based on onsite observations made during inspection conducted on 7/23/15, this facility has one PBR unit for treating spent acids with chrome and one Conditionally Exempt ? Specified Wastestream for drum rinsing. If treatment process has not changed since the last onsite inspection, Financial Assurance form must be revised. Tank A: - Monthly Treatment Volume was previously reported at 100,000 gallons. Please verify amount and update if necessary. - ?Yes? reported for ?d? and ?h? under ?Basis for Not

AVIATION EQUIPMENT (Continued) **S110493658**

Needing Federal Permit? section must be deleted. - ?Yes? reported for ?c? under ?Residual Management Description? section must be deleted. Also, documentation showing that filter cake is recycled must be provided since ?Yes? is listed for ?d? (Offsite Recycling). Waste and Treatment Process Combinations section: - ?Yes? should be listed for ?Phase Separation? [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-22-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Financial assurance documents submitted to CERS on 8/20/18 were reviewed and accepted. Violation I278 regarding failure to prepare a written estimate of the cost of closing each unit, has been corrected.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 10-11-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Received and reviewed Contingency Plan, Training Records dated 8/1/18, and Biennial Report dated 8/10/18. Violations I206, I126, and I403, have been corrected. All violations have been corrected. No further corrective action necessary. A copy of this report will be sent to dvincent@aveprocessing.com
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 10-11-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Training records have been received dated 8/1/18. Daily inspection log was received on 8/17/18. Violation I675 has been corrected. Received and reviewed PE assessment dated 10/1/18. Your PE assessment has been declined. Please have your PE assessment revised to include an assessment per CCR Title 22, 66265.192. This section includes a seismic evaluation that needs to be conducted on the tank system. Violation I634 remains outstanding. A copy of this report will be sent to dvincent@aveprocessing.com
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 04-16-2014
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: On site for follow up inspection to correct outstanding violation (W035) regarding facility not maintaining adequate training records, cited during routine inspection conducted on 1/16/14 and determine

AVIATION EQUIPMENT (Continued) **S110493658**

whether or not the treatment system is in operation since Tiered Permitting (TP) forms have not been submitted. Dennis Heider granted consent to conduct inspection and take photos. Training records are not available for review, therefore, violation cannot be corrected. According to Mr. Heider, they are still in the process of finalizing the treatment system. I walked through the facility to inspect the waste treatment system area. Filter cake is being generated. Therefore, TP forms and PE Assessment for the treatment system area must be submitted to this Agency. The following waste containers are not properly stored and/or covered: - Filter cake bin and the lined box storing filter cake are not covered or labeled. - Seven lined boxes storing spent spray booth [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-14-2009
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector Name: Orange CUPA
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-23-2016
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector Comments: Your business is required to submit an Annual Permit Renewal Package Certification Of Financial Assurance for the onsite treatment of hazardous waste. A letter dated January 15, 2016, was mailed to your facility along with instructions on how to electronically submit the required documents by the due date of March 1, 2016. To date, your documents have not been electronically submitted to the California Environmental Reporting System (CERS). Required documents must be submitted to CERS via http://cers.calepa.ca.gov/ by 6/6/16. Failure to submit the required documents may result in a fine of twenty-five thousand dollars ($25,000) for each day of the violation pursuant to Section 25189 of the California Health and Safety Code (H&SC).
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-01-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Received email from David Vincent at the facility in response to the inspection report with violation regarding failure to submit annual TP Renewal and FA documents. I emailed a copy of letter that was sent to facility in January and included CERS information in the emil.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

AVIATION EQUIPMENT (Continued) **S110493658**

Eval General Type: Other/Unknown
Eval Date: 06-04-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Violation I126 cited on 7/19/19 remains outstanding: The hazardous waste training program did not contain adequate details such as job titles, written descriptions of each position, descriptions of the types and amounts of training given to each employee, and training records. Correct the violation noted below immediately. Submit proof of compliance to Alonso Mejia ALMejia@ochca.com I126 - Owner/Operator has properly trained all required employees and maintained the traning records Failure to provide employees within the first six months after the date of their employment, or assignment to the facility, or to work unsupervised, or to a new position at a facility with hazardous waste training to ensure employees are competent in the following areas: hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed, emergency response and emergency equipment, and procedures for using, inspecting, [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-05-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: The following documents were reviewed by this Agency: - Business Activities Form - Business Owner/Operator Identification Form - Onsite Hazardous Waste Treatment Notification Facility Page reporting 2 units. The number of units will be verified during on site inspection. - Onsite Hazardous Waste Treatment Notification Unit Pages for Batch Treatment Tank and Primary Treatment. The number of tanks reported for each unit will be verified during on site inspection. - Onsite Tiered Permitting Permit By Rule Page Waste And Treatment Process Combinations for the Batch Treatment Unit. - Certification Of Financial Assurance - Closure Plan Onsite Tiered Permitting Permit By Rule Page Waste And Treatment Process Combinations for the Primary Treatment Unit and a site map showing the process lines and the waste stream going into the treatment system must be submitted to this Agency within 30 days of this inspection report. Violation W036 regarding failure to properly [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Enforcement Action:
Site ID: 387360
Site Name: FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Site Address: 1571 MACARTHUR BLVD
Site City: COSTA MESA
Site Zip: 92626-1407
Enf Action Date: 10-15-2018
Enf Action Type: AEO - Unified Program
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes: Fines/Penalties Assessed: $60,000.00.
Enf Action Division: Orange County Environmental Health

AVIATION EQUIPMENT (Continued) **S110493658**

Enf Action Program:	HWLQG
Enf Action Source:	CERS
Site ID:	387360
Site Name:	FLAREGROUP DBA AVIATION EQUIPMENT PROCESSING
Site Address:	1571 MACARTHUR BLVD
Site City:	COSTA MESA
Site Zip:	92626-1407
Enf Action Date:	10-15-2018
Enf Action Type:	AEO - Unified Program
Enf Action Description:	Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes:	Fines/Penalties Assessed: $60,000.00.
Enf Action Division:	Orange County Environmental Health
Enf Action Program:	PBR
Enf Action Source:	CERS

Affiliation:

Affiliation Type Desc:	Legal Owner
Entity Name:	Flare Group
Entity Title:	Not reported
Affiliation Address:	1571 MACARTHUR BLVD
Affiliation City:	COSTA MESA
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92626-1407
Affiliation Phone:	(714) 850-2080
Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	Dennis Heider
Entity Title:	President
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	AVIATION EQUIPMENT INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1571 MACARTHUR BLVD
Affiliation City:	COSTA MESA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626-1407
Affiliation Phone:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Affiliation Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	Not reported
Affiliation Address:	1241 East Dyer RoadSuite 120
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92705-5611
Affiliation Phone:	(714) 433-6000

Affiliation Type Desc:	Document Preparer
Entity Name:	David Vincent
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	DAVID VINCENT
Entity Title:	Not reported
Affiliation Address:	1571 MACARTHUR BLVD
Affiliation City:	COSTA MESA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92626-1407
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	David Vincent
Entity Title:	Hazardous Waste Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	David Vincent
Entity Title:	Haz Waste Supervisor
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Dennis Heider
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Affiliation Zip: Not reported
Affiliation Phone: (714) 850-2080

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70 ENE 1/2-1 0.716 mi. 3781 ft.

SEGERSTROM & SONS
3529 GREENVILLE ST
SANTA ANA, CA 92704

ENVIROSTOR **S101300007**
LUST **N/A**
SCH
HIST CORTESE

Relative: Higher

Actual: 36 ft.

ENVIROSTOR:

Name:	ARMSTRONG RANCH HIGH SCHOOL
Address:	3529 SOUTH GREENVILLE STREET
City,State,Zip:	SANTA ANA, CA 92704-7019
Facility ID:	30010009
Status:	No Further Action
Status Date:	02/04/2002
Site Code:	404203
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	40
NPL:	NO
Regulatory Agencies:	DTSC
Lead Agency:	DTSC
Program Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	69
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	33.70222
Longitude:	-117.8997
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	NONE SPECIFIED No Contaminants found
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	ARMSTRONG RANCH HIGH SCHOOL #6
Alias Type:	Alternate Name
Alias Name:	SANTA ANA UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	SANTA ANA USD-NEW H.S. #6 @ARMSTRONG RCH
Alias Type:	Alternate Name
Alias Name:	404203
Alias Type:	Project Code (Site Code)
Alias Name:	30010009
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	04/10/2001
Comments:	Not reported

SEGERSTROM & SONS (Continued) **S101300007**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 02/15/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 03/15/2001
Comments: Environmental Oversight Agreement

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/04/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/22/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/16/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST REG 8:

Name: SEGERSTROM & SONS
Address: 3529 GREENVILLE ST
City: SANTA ANA
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083002421T
Local Case Num: Not reported
Case Type: Soil only
Substance: Gasoline
Qty Leaked: Not reported
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street: MACARTHUR
Enf Type: Not reported

SEGERSTROM & SONS (Continued) **S101300007**

Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0605901732
How Stopped Date:	Not reported
Enter Date:	4/13/1994
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/7/1994
Enforcement Date:	Not reported
Close Date:	7/5/1995
Date Prelim Assessment Workplan Submitted:	3/7/1994
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	4/13/1994
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7014987
Longitude:	-117.9037516
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	WILL INVESTIGATE GROUNDWATER

SCH:

Name:	ARMSTRONG RANCH HIGH SCHOOL
Address:	3529 SOUTH GREENVILLE STREET
City,State,Zip:	SANTA ANA, CA 92704-7019
Facility ID:	30010009
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	40
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC

SEGERSTROM & SONS (Continued) **S101300007**

Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404203
Assembly:	69
Senate:	34
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	02/04/2002
Restricted Use:	NO
Funding:	School District
Latitude:	33.70222
Longitude:	-117.8997
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	NONE SPECIFIED, No Contaminants found
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	ARMSTRONG RANCH HIGH SCHOOL #6
Alias Type:	Alternate Name
Alias Name:	SANTA ANA UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	SANTA ANA USD-NEW H.S. #6 @ARMSTRONG RCH
Alias Type:	Alternate Name
Alias Name:	404203
Alias Type:	Project Code (Site Code)
Alias Name:	30010009
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	04/10/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	02/15/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	03/15/2001
Comments:	Environmental Oversight Agreement
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/04/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

SEGERSTROM & SONS (Continued) **S101300007**

Completed Document Type:	Other Report
Completed Date:	01/22/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	07/16/2001
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

HIST CORTESE:

edr_fname:	SEGERSTROM & SONS
edr_fadd1:	3529 GREENVILLE
City,State,Zip:	SANTA ANA, CA 92704
Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002421T

71
NNW
1/2-1
0.840 mi.
4433 ft.

PIONEER CIRCUITS, INC
3000 S. SHANNON STREET
SANTA ANA, CA 92704

RCRA-LQG **1000886191**
ENVIROSTOR **CA0000132613**
CERS HAZ WASTE
CERS

Relative:
Higher

Actual:
39 ft.

RCRA-LQG:

Date form received by agency:	01/18/2016
Facility name:	PIONEER CIRCUITS, INC
Facility address:	3000 S. SHANNON STREET SANTA ANA, CA 92704
EPA ID:	CA0000132613
Mailing address:	S. SHANNON STREET SANTA ANA, CA 92704
Contact:	GLENN STEVENS
Contact address:	S. SHANNON STREET SANTA ANA, CA 92704
Contact country:	US
Contact telephone:	714-641-3132
Telephone ext.:	226
Contact email:	GSTEVENS@PIONEERCIRCUITS.COM
EPA Region:	09
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the

PIONEER CIRCUITS, INC (Continued) **1000886191**

cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	JAMES LEE
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1988
Owner/Op end date:	Not reported

Owner/operator name:	JAMES LEE
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	11/15/1981
Owner/Op end date:	Not reported

Owner/operator name:	JAMES LEE
Owner/operator address:	S. SHANNON STREET
	SANTA ANA, CA 92704
Owner/operator country:	US
Owner/operator telephone:	714-641-3132
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1988
Owner/Op end date:	Not reported

Owner/operator name:	JAMES LEE
Owner/operator address:	3000 S. SHANNON ST.
	SANTA ANA, CA 92704
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported

PIONEER CIRCUITS, INC (Continued) **1000886191**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/15/1981
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2014
Site name: PIONEER CIRCUITS INCORPORATED
Classification: Large Quantity Generator

Date form received by agency: 03/14/2012
Site name: PIONEER CIRCUITS, INC
Classification: Large Quantity Generator

Date form received by agency: 06/01/2010
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/21/2008
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/21/2005
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/20/2004
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/22/2002
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999

PIONEER CIRCUITS, INC (Continued) **1000886191**

Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: PIONEER CIRCUITS INC
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: 131
. Waste name: Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 171
. Waste name: Metal sludge (see 121)

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

PIONEER CIRCUITS, INC (Continued) **1000886191**

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

. Waste code: F007
. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

PIONEER CIRCUITS, INC (Continued) **1000886191**

Amount (Lbs): 1855

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 227626

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 208723

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 18903

Waste code: D008
Waste name: LEAD
Amount (Lbs): 101675

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 1645

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 1645

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 1645

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM

PIONEER CIRCUITS, INC (Continued) **1000886191**

PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
Amount (Lbs): 39760

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/14/2010
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/28/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/28/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/26/2006
Date achieved compliance: 07/14/2006
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/26/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

PIONEER CIRCUITS, INC (Continued) **1000886191**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/09/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/04/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/13/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/18/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/17/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/13/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/11/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/09/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/06/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

PIONEER CIRCUITS, INC (Continued) **1000886191**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/05/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/25/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/18/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/14/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/12/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/10/2013
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/06/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/11/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/14/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: State

PIONEER CIRCUITS, INC (Continued) **1000886191**

Evaluation date: 04/21/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/28/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 06/26/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/14/2006
Evaluation lead agency: Local

Evaluation date: 01/10/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/14/2006
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 08/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

ENVIROSTOR:
Name: PIONEER CIRCUITS, INC.
Address: 3010 S. SHANNON STREET
City,State,Zip: SANTA ANA, CA 92704
Facility ID: 71003564
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 69
Senate: 34
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.70723
Longitude: -117.9232
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED

PIONEER CIRCUITS, INC (Continued) **1000886191**

Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CA0000132613
Alias Type: EPA Identification Number
Alias Name: 71003564
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS HAZ WASTE:
Name: PIONEER CIRCUITS INC
Address: 3010 S SHANNON ST
City,State,Zip: SANTA ANA, CA 92704
Site ID: 57669
CERS ID: 10153293
CERS Description: Hazardous Waste Generator

Name: PIONEER CIRCUITS INC
Address: 3010 S SHANNON ST
City,State,Zip: SANTA ANA, CA 92704
Site ID: 57669
CERS ID: 10153293
CERS Description: Hazardous Waste Onsite Treatment

CERS:
Name: PIONEER CIRCUITS INC
Address: 3010 S SHANNON ST
City,State,Zip: SANTA ANA, CA 92704
Site ID: 57669
CERS ID: 10153293
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-10-2013
Citation: HSC 6.95 25504(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)
Violation Description: Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.
Violation Notes: Returned to compliance on 11/18/2014. The chemical inventory that was submitted via the eSubmit Portal does not accurately reflect the

PIONEER CIRCUITS, INC (Continued) **1000886191**

chemicals that were observed onsite. Please review the chemical inventory and make the necessary updates within 30 days.

Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-10-2013
Citation: 22 CCR 45 67450.11(d)(7)(E) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.11(d)(7)(E)
Violation Description: Failure to maintain the following records at the facility for a minimum of three years from the last date of any activity and made available to authorized representatives of the Department, the CUPA, or the U.S. EPA upon request: 1) Written approval from the agency operating the POTW receiving the facility's discharges; 2) Written method documented in the waste analysis plan for ensuring that the concentration of total cyanide does not exceed 5000 milligrams per liter in the aqueous waste resulting from the mixing; and 3) Documentation that the residual solids generated by the treatment have been either: A) Sent offsite for metals recovery or reclamation; or B) Determined to be not amenable for recycling.
Violation Notes: Returned to compliance on 09/29/2015. Please locate or make a new waste analysis plan for the faciliity. A reinspection will be conducted within approximately 30 days to assess facility compliance.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-10-2013
Citation: HSC 6.5 25200.14(b)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25200.14(b)(1)
Violation Description: Failure to submit a Phase I Checklist.
Violation Notes: Returned to compliance on 09/29/2015. Please locate the Phase I Environmental Checklist and make it available for review. A reinspection will be conducted within approximately 30 days to assess facility compliance.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 01-23-2017
Citation: 22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16
Violation Description: Failure to provide employees with hazardous waste training within the first six months after the date of their employment or assignment to a facility, or to a new position at a facility and annually thereafter. Training records on current personnel shall be kept until closure of the facility and for former employees the record shall be kept for at least three years from the date the employee last worked at the facility.
Violation Notes: Returned to compliance on 01/24/2017. Each generator must maintain the following documents and records at the facility: a) The job title for

PIONEER CIRCUITS, INC (Continued) **1000886191**

each position at the facility related to hazardous waste management, and the name of each employee filling each job. b) A written job description for each job title mentioned above and must include the required skills, education, or other qualification, and duties of personnel assigned to each position. Please locate or create a training plan that meets the requirements specified above. A reinspection will be conducted in approximately 30 days to assess facility compliance. Training records will also be reviewed to determine that this being implemented.

Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-10-2013
Citation: 19 CCR 4 2729.2(a)(3) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(3)
Violation Description: Failure to complete and/or submit an annotated site map if required by CUPA.
Violation Notes: Returned to compliance on 11/18/2014. Please update the facility diagram so that it shows the location of all hazardous material storage areas within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-04-2015
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 09/04/2015. The accumulation start date on several of the containers of filter cake was not visible for inspection due to obstruction by additional containers of filter cake. The containers that were obstructing the labels were moved during the inspection. The violation was corrected during the inspection. No further corrective action is required.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 03-08-2019
Citation: 22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16
Violation Description: Failure to provide employees with hazardous waste training program of class room instructions or on-the-job training within the first six months after the date of their employment or assignment to a facility, or to a new position at a facility and annually thereafter. Training records on current personnel shall be kept until closure of the facility and for former employees the record shall be kept for at

PIONEER CIRCUITS, INC (Continued) **1000886191**

least three years from the date the employee last worked at the facility. The records shall include the following: the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; a written job description for each position, duties of facility personnel assigned to each position, and a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.

Violation Notes: Returned to compliance on 04/04/2019. Annual training documentation could not be found while on site for inspection. Please conduct annual training and send the proper documentation to this agency within 30 days to abate the violation.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-04-2015
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Tiered Permitting Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/03/2017. I547- PE CERTIFICATION VIOLATION [22 CCR 66265.192(a), 66265.192(h)] The following components must be included in the tank assessment: - Hazardous waste characteristic: options are toxic, corrosive, reactive, and/or ignitable. Alkaline or acidic is not sufficient. - Corrosion protection- 66265.192(k)(5) - Spill prevention and/or overfill- 66265.192(k)(6) - Hazardous characteristic- 66265.192(k)(8) NOTE: certification is contingent on the tank anchoring and other requirements stated in the seismic calculation attachment. Please make sure these components have been installed according to the plan. Please revise the document to include the required information and submit it to this Agency within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-04-2015
Citation: 22 CCR 45 67450.3(c)(8) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.3(c)(8)
Violation Description: Failure to maintain, reproduce, and provide the following documents at the facility where the FTU is operating: 1) The waste analysis plan for the treatment operation; 2) The written inspection schedule; 3) All training documents; 4) The contingency plan; 5) A copy of the most recent treatment notification and a copy of the most recent acknowledgement received from the Department, CUPA or authorized agency; 6) A copy of any local Air District permit and other permits required for the operation of the FTU; 7) A copy of the closure plan; 8) A copy of documents related to the environmental investigation and any cleanup, abatement or other necessary remedial action taken; and 9) Documentation of any convictions, judgments, settlements, or orders resulting from any action by any local, State, or federal environmental or public health enforcement agency concerning the operation of the facility within the last three years, as the documents would be available under the California Public Records Act.

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Violation Notes: Returned to compliance on 09/29/2015. Closure plan requires the following information: - Estimate of the expected year of closure and a schedule for final closure Please revise the document to include the required information and submit it to this Agency within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-10-2013
Citation: HSC 6.67 Multiple Sections - California Health and Safety Code, Chapter 6.67, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Training - General
Violation Notes: Returned to compliance on 11/25/2013. Each generator must maintain the following documents and records at the facility: a) The job title for each position at the facility related to hazardous waste management, and the name of each employee filling each job. b) A written job description for each job title mentioned above and must include the required skills, education, or other qualification, and duties of personnel assigned to each position. Please locate or create a training plan that meets the requirements specified above. A reinspection will be conducted in approximately 30 days to assess facility compliance. Training records will also be reviewed to determine that the is being implemented.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 09-10-2013
Citation: 22 CCR 15 66265.52 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.52
Violation Description: Failure to include all of the following in the Contingency Plan: 1) A description of actions the facility personnel shall take response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility; 2) A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services; 3) All names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates; 4) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities; 5) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan is to describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked

PIONEER CIRCUITS, INC (Continued) **1000886191**

by releases of hazardous waste or fires); 6) The current telephone number of the California Emergency Management Agency; and 7) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter.

Violation Notes: Returned to compliance on 11/25/2013. Please locate or the waste analysis records for the facility. New analysis records that are consistent with the waste analysis plan will be required if the previous records are unable to be located. A reinspection will be conducted within approximately 30 days to assess facility compliance.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 06-14-2010
Citation: HSC 6.67 Multiple Sections - California Health and Safety Code, Chapter 6.67, Section(s) Multiple Sections
Violation Description: RCRA Large Quantity Generator Program - Administration/Documentation - General
Violation Notes: Not reported
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 03-08-2019
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 03/14/2019. Hazardous waste container containing filter cake was missing the accumulation start date on the hazardous waste label. Please fill in the correct accumulation start date and send a picture to this agency to abate the violation.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 05-31-2017
Citation: 22 CCR 45 67450.13(a)(1) - California Code of Regulations, Title 22, Chapter 45, Section(s) 67450.13(a)(1)
Violation Description: Failure to prepare a written estimate of the cost of closing each unit which includes the cost that would be incurred for closing a treatment unit when using the owner or operator or generator’s own staff and/or personal equipment taking into account any salvage value that may be realized from the sale of wastes, facility structure or equipment, land or other facility assets. This estimate shall be submitted as an attachment to the Certification of Financial Assurance for Permit by

PIONEER CIRCUITS, INC (Continued) **1000886191**

Rule and Conditionally Authorized Operations/ Maintenance page(s) of the Unified Program Consolidated Form (x/99)).
Violation Notes: Returned to compliance on 02/22/2018. Required annual Certification Of Financial Assurance forms that should have been submitted by 3/1/17, have not been submitted. Required documents must be submitted electronically to CERS by 6/23/17.
Violation Division: Orange County Environmental Health
Violation Program: PBR
Violation Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Violation Date: 03-13-2018
Citation: 22 CCR 15 66262.41 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66262.41
Violation Description: Failure of a large quantity RCRA generator to prepare the Biennial report (Form 8700), and submit to DTSC by March 1st on even numbered years ; and maintain it onsite for three years.
Violation Notes: Current Biennial Report was not available on site for review. Please provide this agency with a copy of your current biennial report within 30 days.
Violation Division: Orange County Environmental Health
Violation Program: HWLQG
Violation Source: CERS

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 02-11-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: AEO review and prep
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-11-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Upload facility information to the HMSS AEO Spreadsheet
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-11-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Facility has complied with 2016 HMBEP reporting requirement. Reviewed HMBEP submittal on E-submit. Package was declined and an email sent to the facility contact. The following corrections are still needed: CHEMICAL INVENTORY For the following materials, please uncheck the box for EHS under the Chemical Identification section and only check the EHS box for EHS materials on the components chart- there is not enough of the EHS component to make the entire mixture and EHS : Glass Etch solution for electroless Cobra Bond Pre-dip Dilute Cobra Bond Solution Dilute Electro-Brite Electroless Copper 270A Solder Stripper Solution

PIONEER CIRCUITS, INC (Continued) **1000886191**

Waste Acidic Rinse Water Holding Tank Waste Batch Treatment Tank for Alkaline and Acidic Wastewater Waste Rack Strip Solution Waste Solder Strip

Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-13-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-13-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: This Agency has received and reviewed the training plan and records that were submitted by Pioneer Circuits. The training plan contains the following deficiencies: - The training requirements for specific positions are not consistent with the remainder of the document. The position and training page does not correspond to the training page. The Emergency Response Training page, with the names, titles, and job descriptions, does not directly correspond to the training page. - The skills and education for each position have not been provided. - The frequency of training has not been provided for most training elements. Training must be provided within 6 months of employment and annually thereafter. - The training must be conducted by someone who has been trained in hazardous waste management procedures. The training described for the environmental coordinator does not reflect this training. - The training records that were provided to show compliance with the plan [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 02-17-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector Comments: Please be advised that this Agency has reviewed Tiered Permitting Financial Assurance Self Certification for this facility. The "Estimated Closure Cost 2015" was not calculated correctly. Based on reported values the "Cost Of Closure" with the salvage value should be -$118,262 rather than -$118,292. Also, the breakdown of costs is from 2013 and does not reflect 2015 costs. A corrected Certification Of Financial Assurance form, "Cost of Closure" (enclosed) and updated breakdown of costs (enclosed) to reflect 2015 breakdown of costs must be submitted to this Agency 3/3/15.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown

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Eval Date:	02-19-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Annual Tiered Permitting notification documents were received via CERS for 2016. The notification indicates 1 PBR unit. The waste minimization and tiered permitting certification are included in the notification. Submittal package was accepted in CERS as FA documents were previously accepted by A. Rashidi-Fard.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-20-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed HMBEP submittal on E-submit. Package was declined and an email sent to the facility contacts. The following corrections are needed: CHEMICAL INVENTORY Waste Oil ? please change Hazardous Material Type to Waste and complete the Hazardous Components chart as follows: %WT = 100, Hazardous Component = various petroleum oils, CAS # = 64742-65-0//Fire Code Hazard Class = Combustible Class 3B Waste Flux Off - change Hazardous Material Type to Waste
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-22-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Accepted CERS submission
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	02-26-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	The following documents were received and ACCEPTED on E-submit: Business Activities Form Business Owner/Operator Form Chemical Inventory for 64 chemicals Facility Site Map
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-07-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Please be advised that this Agency has received and reviewed Tiered Permitting Financial Assurance Self Certification for this facility. The closure cost estimate is the actual cost of closure. The actual closure cost for 2014 listed on the breakdown of costs is $225,319.00, rather than $225,318.91, since it was rounded off to the nearest dollar. The calculated amount should be recorded to the nearest penny

PIONEER CIRCUITS, INC (Continued) **1000886191**

and not rounded to the nearest dollar. In addition, the salvage value of the assets has not been changed from the value reported in 2012. The salvage value of your assets must be reviewed on an annual basis to be sure that depreciation and changes made to your inventory of equipment are reflected in the salvage value estimate. If you believe that your salvage value has remained the same since 2012, be sure to maintain documentation reflecting your estimated salvage value. A corrected Certification Of Financial Assurance Form and Estimated Closure Cost form [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine tiered permitting inspection with Michael Palazzola (OCHCA). Consent to enter, inspect, and take photographs was given by Brian Park (Pioneer). Other Pioneer personnel were also present. The facility has one PBR treatment unit used for neutralization and precipitation of process solutions. The process lines and treatment unit were inspected. The treatment unit was properly labeled with the required information. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist - PE certification dated 6/8/15
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-07-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: INSPECTOR COMMENTS On site for routine hazardous waste inspection with Michael Palazzola. Consent to enter, inspect, and take photographs was given by Brian Park (Pioneer). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and adequate aisle space is maintained. Hazardous waste container containing filter cake was missing an accumulation start date. See violation. Most recent annual employee training documentation could not be found during the inspection. See violation. The following documents are available for review: - Hazardous waste manifests - Contingency Plan - Hazardous waste area inspection log - SB 14 Source Reduction documents - Training plan and records
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 03-09-2017
Violations Found: No

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received photos and a copy of the manifest showing the Copper was disposed of properly and is no longer on the premises. Violated abated.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-13-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine tiered permitting inspection with Lance Malis. Consent to enter, inspect, and take photographs was given by Brett Bond, EHS Specialist. The facility has one PBR treatment unit used for neutralization and precipitation of process solutions. The process lines and treatment unit were inspected. The treatment unit was properly labeled with the required information. Please confirm in CERS that the correct number of process tanks are listed for the treatment unit. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist - PE certification dated 6/8/15
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	03-13-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine hazardous waste inspection with Lance Malis. Consent to enter, inspect, and take photographs was given by Brett Bond, EHS Specialist. The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and properly labeled. Adequate aisle space is maintained. Several latex gloves and paper towels saturated in a brown, possibly hazardous, material were discovered in the trash during the inspection of the dumpster. A split sample was taken to be analyzed for confirmation of hazardous properties. See attached for photos taken of the sampling. Discussed formal enforcement with Mr. Bond. The following documents are available for review: - Hazardous waste manifests - Contingency Plan - Hazardous waste area [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-17-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	On site follow up inspection. All violations specified in AEO consent order have been corrected. Close CO53132.
Eval Division:	Orange County Environmental Health

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Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-17-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	On site for follow-up inspection to assess facility compliance. Also present is James Lee, Exequial Tostado, and additional Pioneer Circuits personnel. The following documents were available on site and reviewed during the inspection: - Waste analysis plan - Waste analysis records - Employee training and records Violations (W035), (X016) and (X017) have been corrected. The waste analysis records indicate that the rinse waters being treated in the Remco unit and the regeneration liquid are not hazardous for pH or heavy metals. This Agency will review the treatment notification for this unit and determine if the facility is notifying for the correct number of PBR units.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-17-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	On site for follow-up inspection to assess facility compliance. Also present is James Lee, Exequial Tostado, and additional Pioneer Circuits personnel. The following documents were available on site and reviewed during the inspection: - Waste analysis plan - Waste analysis records - Employee training plan and records Violations (W035), (X016), and (X017) have been corrected.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-17-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Facility in compliance--received inspection reports from Susan. Developed compliance letter and gave to Pearl for review and signature.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-18-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Compliance letter signed, copied, scanned and mailed; EN information updated.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown

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Eval Date:	03-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency received the following documents: - UPC Form Business Activities - UPC Form Owner/Operator Identification - UPC Form Treatment Notification Facility Page (x2) - UPC Form Treatment Notification Unit Page (x2) - UPC Form Onsite TP PBR Page (x2) The Facility page indicates two PBR units: - FTU1, batch treatment, 10 tanks, 1,470,000 gallons/month - FTU2, REMCO treatment, 3 tanks, 105,000 gallons/month This Agency is currently reviewing whether the REMCO unit is actually regulated at the PBR tier and will notify the business if any changes to the notification are required. Thank you. -
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	03-30-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	I received call from Glenn Stevens of facility. He said that the 2/17/15 inspection report regarding correcting and resubmitting FA documents was misplaced within the company and he received it on 3/27/15. He had some questions and requested that I email the entire packet so he can resubmit it. I emailed entire packet to him.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-21-2009
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector Name: Orange CUPA
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	05-01-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Submittal under review
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	05-05-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed HMBEP submittal on Esubmit. Package was DECLINED and an email sent to the facility contact. The following corrections are needed: CHEMICAL INVENTORY The following materials do not appear to meet the minimum threshold reporting quantity of 55 gallons of a liquid, 500 pounds of a solid or 200 cubic feet of compressed gas and should be removed from your disclosure unless the total volume stored on site

PIONEER CIRCUITS, INC (Continued) **1000886191**

meets or exceeds the minimum reporting threshold: Microtech Soluton at plating, electroless; Predip PD 472 You have listed all materials as being stored at ambient temperature. If materials are located in heated baths, please change the ambient temperature to Above Ambient. Please review all materials listed and change storage temperature where needed. Acid Clean 500 ? please mark all Federal Hazard Categories that apply; check the box for EHS for Sulfuric Acid and Nitric Acid on the Hazardous Components chart Acid Clean 5 (dilute) ? add Acute Health to [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-11-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector Name: Dave Dixon
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-27-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Reciewed HMBEP submittal on E-submit. Package was declined and an email sent to the facility contact. The following corrections are needed: CHEMICAL INVENTORY The Microtech Soluton at plating, electroless does not appear to meet the minimum threshold reporting quantity of 55 gallons of a liquid and should be removed from your disclosure unless the total volume stored on site meets or exceeds the minimum reporting threshold. Therminol 59 heat Transfer fluid - add Acute Health to the Fed Haz Categories Thermo-flo ? list all Fed Hazard Categories Several materials previously disclosed were noted as having been removed from your disclosure. These materials should be included unless these materials are no longer stored on site or they are chemically identical to other materials listed. Waste products are not considered to be chemically identical to raw or new products. Please add the following material back to your disclosure unless they meet one of the above [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-31-2017
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Your business is required to submit an Annual Permit Renewal Package Certification Of Financial Assurance for the onsite treatment of hazardous waste. A letter dated January 6, 2017, was mailed to your facility along with instructions on how to electronically submit the required documents by the due date of March 1, 2017. To date, your documents have not been electronically submitted to the California Environmental Reporting System (CERS). Required documents must be submitted to CERS via http://cers.calepa.ca.gov/ by June 23, 2017.

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Failure to submit the required documents may result in a fine of twenty-five thousand dollars ($25,000) for each day of the violation pursuant to Section 25189 of the California Health and Safety Code (H&SC).

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-06-2012
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-06-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Fix violation status of previously corrected violations.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-06-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: CERS submission accepted.
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-14-2010
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector Name: Dave Dixon
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-26-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Closure costs were submitted in CERS. Forms in CERS were accepted 2/22/18. Violation I278 has been abated. Thank you.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 07-11-2017
Violations Found: No

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	HMBEP Submission Reviewed and Accepted
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-04-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-04-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-04-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine hazardous waste inspection. Consent to enter, inspect, and take photographs was given by Reynaldo Sinaguinan (Pioneer). Also present was Brian Park (Pioneer), and Lisa Wales (OCHCA). The facility generates sufficient quantities of RCRA hazardous wastes to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and properly labeled. The accumulation start date on several of the containers of filter cake was not visible for inspection due to obstruction by additional containers of filter cake. Adequate aisle space is maintained. No hazardous waste was observed in the dumpster. No evidence of hazardous waste spillage or runoff was observed. The following documents are available for review: Hazardous waste manifests Emergency plan Hazardous waste area inspection log SB 14 [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-04-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine tiered permitting inspection. Consent to enter, inspect, and take photographs was given by Reynaldo Sinaguinan. Also present was Brian Park (Pioneer) and Lisa Wales (OCHCA). The facility has two one PBR treatment units used for neutralization and precipitation of process solutions. The ion exchange system and treatment of resist stripper are not subject to

PIONEER CIRCUITS, INC (Continued) **1000886191**

tiered permitting regulation as the wastes that are treated in these systems are not hazardous according to laboratory test reports and onsite pH testing. There have been no changes to the treatment system and no releases in the last 3 years. The process lines and treatment unit was were inspected. The treatment unit was properly labeled with the required information. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I [Truncated]

Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-09-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Referral to Dave Montgomery of OCFA: observed drums of unsegregated acids and bases in same storage containment area during on site inspection on 9/4/15. Sulfuric acid bulk tank is located at the low point of this storage area. Discussed with Darwin.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-10-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Follow-up inspection conducted 11/14/2013; Class 2 violation elevated to Class 1. AEO issued.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-10-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site for routine hazardous waste inspection. Consent to enter, inspect, and take photographs was given by Young Luu. Also present is Reynaldo Sinaguinan. The facility generates sufficient quantities of RCRA hazardous wastes to be regulated as a large quantity generator (LQG). It is regulated for treatment under the permit by rule (PBR) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and properly labeled. Adequate aisle space is maintained. No hazardous waste was observed in the dumpster. No evidence of hazardous waste spillage or runoff was observed. The following documents are available for review: - Hazardous waste manifests - Emergency plan - Hazardous waste area inspection log - SB-14 Source Reduction documents - Biennial report
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-10-2013

PIONEER CIRCUITS, INC (Continued) **1000886191**

Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site for routine hazardous materials and business emergency plan inspection. Consent to enter, inspect, and take photographs was given by Young Luu. Also present is Reynaldo Sinaguinan. The facility has submitted annual disclosure documents through the eSubmit Portal. Observed the facility and inspected hazardous materials storage. The following hazardous materials were observed in amounts that exceed the required disclosure quantities: The facility disclosed the following chemicals in amounts that are below reporting thresholds: PROCESS AREAS - Alkali Cleaner, Cobrabond line - Pre Dip Cobrabond line - Cobrabond solution - Cupric etch, dilute, cupric etch line - Resist strip cupric etch line - Cupric etch, concentrated - Oily water, OEM area - Flux, Therminol 59, OEM area - Solder mask developer, concentrated - Solder make developer, dilute - Acid cleaner, dilute, inner layer machine - Acid cleaner, concentrated, inner layer machine - Glass etch, [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-10-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site for routine tiered permitting inspection. Consent to enter, inspect, and take photographs was given by Young Luu. Also present is Reynaldo Sinaguinan. The facility has two PBR treatment units. 1) Neutralization and precipitation of process solutions 2) Ion exchange for copper solution The process lines and treatment units were inspected. The treatment units are properly labeled with the required information. The following documents are available for review: treatment log, inspection schedule and log, annual notification documents and acknowledgment letter, closure plan, sewer agency discharge records, Phase I checklist, and PE certification dated 7/8/10. The ion exchange treatment process for the copper-bearing rinse waters was discussed. All of the waste waters that are entering the Remco are reportedly below hazardous concentrations for heavy metals (copper) and the pH is non-hazardous. This Agency will review the process to determine whether [Truncated]
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-18-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Received email inquiry from Young Luu regarding the outstanding TP violations. Sent explanations for the waste analysis plan, records, and Phase 1 checklist, and compliance time.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 09-19-2013

PIONEER CIRCUITS, INC (Continued) **1000886191**

Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received inquiry regarding the waste analysis plan from Young Luu. Sent email response below: The complete waste analysis plan will also help determine if the ion exchange unit should be regulated under PBR. If the dilute copper solution entering the unit is non-hazardous, then it would not be considered treatment of hazardous waste. As I discussed with Reynaldo and Brian on Friday, if the unit is used only to meet sanitation discharge requirements and the wastes (every one of them) entering the unit are not hazardous, then regulation under PBR is not appropriate. Please be aware that testing should be conducted at the point of generation of each solution that is to be treated, and not after the solutions have been mixed together.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-22-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	File prep for inspection
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received and reviewed PE cert and closure plan. PE cert is still incomplete for hazardous property of waste treated and leak detection. Closure plan is acceptable. Notifed Glenn Stevens of Pioneer regarding the evaluation of these documents.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-28-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Preparation for Pioneer Inspection
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-29-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Discussed waste characteristics of treated wastes and PE assessment with Glenn Stevens of Pioneer. He said he would have the PE cert revised to include toxic (metals) and corrosive (acids/bases).
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval General Type:	Other/Unknown
Eval Date:	09-29-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	This Agency has received and reviewed the following documents: - PE certification for hazardous waste tanks and containment dated 6/8/15 - Closure plan Violations (I547) and (I675) have been corrected. Thank you.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	10-11-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed HMBEP submission package on eSubmit Portal, DENIED. Request for re-submittal this date.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	10-15-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Start review of Hazmat disclosure
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	10-16-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Continue HazMat inventory review (80-90 chemicals)
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	10-18-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed HMBEP submission package on eSubmit Portal, DENIED. Request for re-submittal this date.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	10-22-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Received Biennial Report from Brett Bond. Violation has been abated. Thank you.
Eval Division:	Orange County Environmental Health

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-12-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Reviewed facility history with respect to employee training. Scheduled reinspection for 11/14 at 1:30.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-14-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On site for follow-up inspection. Consent to enter was given by Reynaldo Sinaguinan and Young Luu. Document binders were reviewed. The Phase I Environmental Checklist was located. A brief waste analysis plan was available but it did not include any of the elements required by 22CCR 67450.3(C)(8)(A). Violations (X016) and (X017) remain outstanding. Please develop a waste analysis plan and arrange for the required testing to be conducted immediately.
Eval Division: Orange County Environmental Health
Eval Program: PBR
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-14-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: On site for follow-up inspection. Consent to enter was granted by Reynaldo Sinaguinan and Young Luu. Two training plans were located and reviewed. All of the required plan information is not present in the either of the plans, either individually or combined together. Please develop a training plan that contains all of the required elements specified in 22CCR 66265.16(d) and (e). Please complete the plan immediately and make sure any required training is current. Emergency response training records for select personnel dated 9/30/13 was available for review. Prior training records for this topic were not available. Please provide a copy of the revised training plan to this Agency within 10 business days. Please be aware that annual generator fees cover one routine inspection and one follow-up inspection per year. Additional compliance inspections may be billed at an hourly rate according to the current fee schedule.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-15-2014
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Read/review HMBEP in E-submit. Rejected. Please update the information and re submit via E-submit. The boric acid and ammonium biflouride appear to be under the reportable quantities (<55 gallons). If so,

PIONEER CIRCUITS, INC (Continued) **1000886191**

	removed from the HMBEP. Final finish needs a fire hazard box checked. Sodium hydroxide needs to have the corrosive box checked. Waste flux needs the annual waste amount added.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-16-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-18-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Open CO for insufficient training plan and waste analysis plan
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-18-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Reviewed HMBEP submission package on eSubmit Portal, DENIED. Request for re-submittal this date.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-18-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Abate violations listed on the 10-1-3-13 inspection report.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-18-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Read/review HMBEP in E-submit. Accepted.
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	11-25-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval Notes:	Write AEO for outstanding violations, send to Christine
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	12-05-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Enter EN information into EC to get number; book room for meeting and send out invite; reprint inspection reports.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	12-06-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Make folders and labels, develop Show Cause letter and send for review; schedule meeting.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	12-09-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Show Cause letter reviewed and received back--edits made and letter printed and ready for Pearl's signature; calculate penalty; develop consent order and payment voucher.
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-23-2017
Violations Found:	No

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine tiered permitting inspection with Terry Carrier. Consent to enter, inspect, and take photographs was given by Max Cabrera (Pioneer). Other Pioneer personnel were also present. The facility has one PBR treatment unit used for neutralization and precipitation of process solutions. The process lines and treatment unit were inspected. The treatment unit was properly labeled with the required information. The following documents were available for review: - Inspection schedule and log - Annual notification documents and acknowledgment letter - Closure plan - Sewer agency discharge records - Phase I checklist - PE certification dated 6/8/15
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-23-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site with Terry Carrier for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Max Cabrera (Pioneer). Observed the facility and inspected hazardous materials storage. The material observed on site closely compares with what is represented in your online submission of Chemical Inventory. Caustic Soda is no longer stored on site. Please remove Caustic Soda from online submission. Business emergency plan is maintained on site. Annual employee training is conducted. Employee training records are current and available for review. Glenn Stevens is listed as this facility?s Billing and Environmental Contact. Please update contact information in CERS as Mr. Stevens no longer works at Pioneer Circuits Inc. The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds (200cuft compressed gas, 55 gal liquid, 500 lbs [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-23-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	01-23-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

PIONEER CIRCUITS, INC (Continued) **1000886191**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-23-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	INSPECTOR COMMENTS On site for routine hazardous waste inspection with Terry Carrier. Consent to enter, inspect, and take photographs was given by Max Cabrera (Pioneer). The facility generates sufficient quantities of RCRA hazardous waste to be regulated as a large quantity generator (LQG). It is also regulated for treatment under the permit by rule (PBR) tier. Observed facility and inspected hazardous waste storage. Containers are stored closed and properly labeled. Adequate aisle space is maintained. A blue substance, presumed to be hazardous, was discovered in the trash during inspection of the dumpster. A split sample was taken by Terry Carrier to be analyzed for confirmation of hazardous properties. See attached for photos taken of the sampling. Discussed formal enforcement with Mr. Cabrera. Training records were reviewed and are missing information. Please see violation below. The following documents are current available for review: - Hazardous [Truncated]
Eval Division:	Orange County Environmental Health
Eval Program:	HWLQG
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	02-01-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector Comments: Please be advised that this Agency has reviewed the 2016 Tiered Permitting Financial Assurance Self Certification for this facility submitted to CERS on 2/1/16. Submittal is not accepted with the following considerations: - Information listed in "Closure Financial Assurance Mechanism" is not complete and does not need to be submitted since the adjusted closure cost is less than $10,000. Please remove this information. - Also, the "2013 Closure Cost" was $222,208.00 not $217,000.00 as listed on the breakdown of closure costs. The adjusted closure cost for 2012 was $217,000.00. Please correct this documents and resubmit it within 30 days of this inspection.
Eval Division:	Orange County Environmental Health
Eval Program:	PBR
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	02-02-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Previously observed correct training materials and documentation on site. Reviewed and closed violation for training records
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	02-11-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Discuss site w/Christine prior to AEO on Thursday. Brief review of

PIONEER CIRCUITS, INC (Continued) **1000886191**

training plan submitted on 12/2/13. Conduct full review prior to AEO to determine if it meets standards.
Eval Division: Orange County Environmental Health
Eval Program: HWLQG
Eval Source: CERS

Enforcement Action:
Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Site Address: 3010 S SHANNON ST
Site City: SANTA ANA
Site Zip: 92704
Enf Action Date: 01-31-2018
Enf Action Type: AEO - Unified Program
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes: Fines/Penalties Assessed: $20,000.00. SEPs Value: $20,000.00.
Enf Action Division: Orange County Environmental Health
Enf Action Program: UNSPEC
Enf Action Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Site Address: 3010 S SHANNON ST
Site City: SANTA ANA
Site Zip: 92704
Enf Action Date: 12-17-2013
Enf Action Type: AEO - Unified Program
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes: Fines/Penalties Assessed: $8,000.00.
Enf Action Division: Orange County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Site Address: 3010 S SHANNON ST
Site City: SANTA ANA
Site Zip: 92704
Enf Action Date: 12-17-2013
Enf Action Type: AEO - Unified Program
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes: Fines/Penalties Assessed: $8,000.00.
Enf Action Division: Orange County Environmental Health
Enf Action Program: HWLQG
Enf Action Source: CERS

Site ID: 57669
Site Name: PIONEER CIRCUITS INC
Site Address: 3010 S SHANNON ST
Site City: SANTA ANA
Site Zip: 92704
Enf Action Date: 12-17-2013
Enf Action Type: AEO - Unified Program
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes: Fines/Penalties Assessed: $8,000.00.
Enf Action Division: Orange County Environmental Health
Enf Action Program: PBR

PIONEER CIRCUITS, INC (Continued) **1000886191**

Enf Action Source: CERS

Coordinates:
Site ID: 57669
Facility Name: PIONEER CIRCUITS INC
Env Int Type Code: HWG
Program ID: 10153293
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 33.706680
Longitude: -117.923580

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title: Not reported
Affiliation Address: 1241 East Dyer RoadSuite 120
Affiliation City: Santa Ana
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92705-5611
Affiliation Phone: (714) 433-6000

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 3000 S SHANNON ST
Affiliation City: SANTA ANA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92704
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer
Entity Name: Brian Park
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Brian Park
Entity Title: Chemical Engineer
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
Entity Name: PIONEER CIRCUITS INC
Entity Title: Not reported

PIONEER CIRCUITS, INC (Continued) **1000886191**

Affiliation Address:	3000 S SHANNON ST
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92704
Affiliation Phone:	(714) 641-3132

Affiliation Type Desc:	Onsite Treatment Unit Owner Operator
Entity Name:	Max Cabrera
Entity Title:	EHS
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	Brian Park
Entity Title:	Not reported
Affiliation Address:	3000 S. Shannon St.
Affiliation City:	Santa Ana
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Robert Lee
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 641-3132

Affiliation Type Desc:	Parent Corporation
Entity Name:	PIONEER CIRCUITS INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

72 North 1/2-1 0.875 mi. 4618 ft.

PRINTED CIRCUIT SOLUTIONS INC
3700 W SERGESTROM AVENUE
SANTA ANA, CA 92704

RCRA-SQG
ENVIROSTOR

1001959869
CAR000065573

Relative: Higher

Actual: 43 ft.

RCRA-SQG:

Date form received by agency:	11/02/2015
Facility name:	PRINTED CIRCUIT SOLUTIONS INC
Facility address:	3700 W SERGESTROM AVENUE SANTA ANA, CA 92704
EPA ID:	CAR000065573
Mailing address:	W SERGESTROM AVENUE SANTA ANA, CA 92704
Contact:	OFELIA LARA
Contact address:	W SERGESTROM AVENUE SANTA ANA, CA 92704
Contact country:	US
Contact telephone:	714-825-1090
Contact email:	OFE@PCSIPCB.COM
EPA Region:	09
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PRINTED CIRCUIT SOLUTIONS INC
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	04/04/2011
Owner/Op end date:	Not reported

Owner/operator name:	PRINTED CIRCUIT SOLUTIONS INC
Owner/operator address:	W SERGESTROM AVE SANTA ANA, CA 92704
Owner/operator country:	US
Owner/operator telephone:	714-825-1090
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/04/2011
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

PRINTED CIRCUIT SOLUTIONS INC (Continued) **1001959869**

Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/24/2010
Site name: SELECT CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 03/12/2008
Site name: SELECT CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 03/12/2006
Site name: SELECT CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Site name: SELECT CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 02/02/2000
Site name: SELECT CIRCUITS
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352
. Waste name: Other organic solids

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM

PRINTED CIRCUIT SOLUTIONS INC (Continued) **1001959869**

PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/07/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/07/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/04/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/02/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/10/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/19/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/03/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/07/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 04/19/2005

PRINTED CIRCUIT SOLUTIONS INC (Continued) **1001959869**

Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 04/18/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

ENVIROSTOR:
Name: SELECT CIRCUITS
Address: 3700 W SEGERSTROM AVENUE
City,State,Zip: SANTA ANA, CA 92704
Facility ID: 71003772
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 69
Senate: 34
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.70819
Longitude: -117.9186
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAL000190862
Alias Type: EPA Identification Number
Alias Name: 71003772
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported

PRINTED CIRCUIT SOLUTIONS INC (Continued) **1001959869**

Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

73
WNW
1/2-1
0.900 mi.
4752 ft.

TRICO (FMR. UNITED CIRCUIT TECHNOLOGIES) **ENVIROSTOR** **S117038713**
18101-18111 MOUNT WASHINGTON STREET **N/A**
FOUNTAIN VALLEY, CA 92708

Relative:
Higher

Actual:
34 ft.

ENVIROSTOR:

Name:	TRICO (FMR. UNITED CIRCUIT TECHNOLOGIES)
Address:	18101-18111 MOUNT WASHINGTON STREET
City,State,Zip:	FOUNTAIN VALLEY, CA 92708
Facility ID:	60002073
Status:	Certified
Status Date:	06/09/2016
Site Code:	540086
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	2.18
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Willard Garrett
Supervisor:	Manny Alonzo
Division Branch:	Cleanup Cypress
Assembly:	72
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.69897
Longitude:	-117.9355
APN:	NONE SPECIFIED
Past Use:	HAZARDOUS WASTE STORAGE - TANKS/CONTAINERS, HAZARDOUS WASTE TREATMENT, MANUFACTURING - ELECTRONIC, METAL FINISHING, WASTE - INDUSTRIAL WASTE LINE
Potential COC:	Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Lead Tetrachloroethylene (PCE Barium and compounds Chromium III Cobalt Copper and compounds Nickel Selenium Tetrahydrofuran
Confirmed COC:	Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Lead Tetrachloroethylene (PCE Barium and compounds Chromium III Cobalt Copper and compounds Nickel Selenium Tetrahydrofuran
Potential Description:	SOIL, UE
Alias Name:	540086
Alias Type:	Project Code (Site Code)
Alias Name:	60002073
Alias Type:	Envirostor ID Number
Alias Name:	71002741
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Agreement

TRICO (FMR. UNITED CIRCUIT TECHNOLOGIES) (Continued) **S117038713**

Completed Date:	12/09/2014
Comments:	CACA completed and signed on 12/9/2014
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	12/04/2015
Comments:	Annual Cost Estimate
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	06/07/2016
Comments:	Closure Certification Finalized on 20160607
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	06/26/2015
Comments:	Final CCR received on 6/15/2015 & Final FI Workplan Received on 6/26/2015
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Report
Completed Date:	11/16/2015
Comments:	Final FI Report Received/Approved on 10-29-2015
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

74
NNE
1/2-1
0.946 mi.
4994 ft.

Relative:
Higher

Actual:
40 ft.

RBC TRANSPORT DYNAMICS
3131 W SEGERSTROM AVE
SANTA ANA, CA 92704

ENVIROSTOR **S103651980**
EMI **N/A**
NPDES
WDS
CIWQS
CERS

ENVIROSTOR:

Name:	R B C TRANSPORT DYNAMICS
Address:	3131 W. SEGERSTROM AVENUE
City,State,Zip:	SANTA ANA, CA 92704
Facility ID:	71002407
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 69
Senate: 34
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.70944
Longitude: -117.9117
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD046057063
Alias Type: EPA Identification Number
Alias Name: 110002646245
Alias Type: EPA (FRS #)
Alias Name: 71002407
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

EMI:
Name: RBC TRANSPORT DYNAMICS CORP
Address: 3131 W SEGERSTROM AVE
City,State,Zip: SANTA ANA, CA 927040000
Year: 1997
County Code: 30
Air Basin: SC
Facility ID: 95189
Air District Name: SC
SIC Code: 3799
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 1
Carbon Monoxide Emissions Tons/Yr: 0

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	RBC TRANSPORT DYNAMICS CORP
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 927040000
Year:	1998
County Code:	30
Air Basin:	SC
Facility ID:	95189
Air District Name:	SC
SIC Code:	3799
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	RBC TRANSPORT DYNAMICS CORP
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 927040000
Year:	1999
County Code:	30
Air Basin:	SC
Facility ID:	95189
Air District Name:	SC
SIC Code:	3799
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	RBC TRANSPORT DYNAMICS CORP
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 927040000
Year:	2000
County Code:	30
Air Basin:	SC
Facility ID:	95189
Air District Name:	SC
SIC Code:	3799
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	RBC TRANSPORT DYNAMICS CORP
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 927040000
Year:	2001
County Code:	30
Air Basin:	SC
Facility ID:	95189
Air District Name:	SC
SIC Code:	3799
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

NPDES:

Name:	RBC TRANSPORT DYNAMICS
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 92704
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	8 30I003347
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	04/03/1992
Operator Name:	RBC Transport Dynamics
Operator Address:	3131 W Segerstrom Ave
Operator City:	Santa Ana
Operator State:	California

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Operator Zip:	92704

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	208356
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 30I003347
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/03/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	RBC Transport Dynamics
Discharge Address:	3131 W Segerstrom Ave
Discharge City:	Santa Ana
Discharge State:	California
Discharge Zip:	92704
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	208356
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30I003347
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/03/1992
Status:	Active
Status Date:	04/03/1992
Place Size:	7
Place Size Unit:	Acres
Contact:	Daryl Cousins
Contact Title:	Not reported
Contact Phone:	714-546-3131
Contact Phone Ext:	Not reported
Contact Email:	dcousins@rbcbearings.com
Operator Name:	RBC Transport Dynamics
Operator Address:	3131 W Segerstrom Ave
Operator City:	Santa Ana
Operator State:	California
Operator Zip:	92704
Operator Contact:	Daryl Cousins

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Operator Contact Title:	Engineer
Operator Contact Phone:	714-546-3131
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	dcousins@rbcbearings.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Connecticut
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	714-546-3131
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Daryl Cousins
Certifier Title:	Mgr. Environmental
Certification Date:	06-MAY-15
Primary Sic:	3499-Fabricated Metal Products, NEC
Secondary Sic:	3799-Transportation Equipment, NEC
Tertiary Sic:	3444-Sheet Metal Work

Name:	RBC TRANSPORT DYNAMICS
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 92704
Facility Status:	Active
NPDES Number:	CAS000001
Region:	8
Agency Number:	0
Regulatory Measure ID:	208356
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	8 30I003347
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/03/1992
Termination Date Of Regulatory Measure:	Not reported

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	3131 W Segerstrom Ave
Discharge Name:	RBC Transport Dynamics
Discharge City:	Santa Ana
Discharge State:	California
Discharge Zip:	92704
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	8
Regulatory Measure ID:	208356
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	8 30I003347
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/03/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	RBC Transport Dynamics
Discharge Address:	3131 W Segerstrom Ave
Discharge City:	Santa Ana
Discharge State:	California
Discharge Zip:	92704
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	8
Regulatory Measure ID:	208356
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	8 30I003347
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/03/1992
Status:	Active
Status Date:	04/03/1992
Place Size:	7

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Place Size Unit:	Acres
Contact:	Daryl Cousins
Contact Title:	Not reported
Contact Phone:	714-546-3131
Contact Phone Ext:	Not reported
Contact Email:	dcousins@rbcbearings.com
Operator Name:	RBC Transport Dynamics
Operator Address:	3131 W Segerstrom Ave
Operator City:	Santa Ana
Operator State:	California
Operator Zip:	92704
Operator Contact:	Daryl Cousins
Operator Contact Title:	Engineer
Operator Contact Phone:	714-546-3131
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	dcousins@rbcbearings.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Connecticut
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	714-546-3131
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Santa Ana River
Certifier:	Daryl Cousins
Certifier Title:	Mgr. Environmental
Certification Date:	06-MAY-15
Primary Sic:	3499-Fabricated Metal Products, NEC
Secondary Sic:	3799-Transportation Equipment, NEC
Tertiary Sic:	3444-Sheet Metal Work

WDS:

Name:	RBC TRANSPORT DYNAMICS CORP.
Address:	3131 W SEGERSTROM AVE
City:	SANTA ANA

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Facility ID:	Santa Ana River 30I003347
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	Not reported
Facility Contact:	Not reported
Agency Name:	RBC TRANSPORT DYNAMICS CORP.
Agency Address:	3131 W. SEGERSTROM
Agency City,St,Zip:	SANTA ANA 92704
Agency Contact:	M. J. HARTNETT
Agency Telephone:	Not reported
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Name:	RBC TRANSPORT DYNAMICS
Address:	3131 W SEGERSTROM AVENUE
City,State,Zip:	SANTA ANA, CA 92704
Agency:	RBC Transport Dynamics Corporation
Agency Address:	3131 Segerstrom Avenue, Santa Ana, CA 92704
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported
Region:	8
Program:	CONSTW
Regulatory Measure Status:	Terminated

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	8 30C364794
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	10/12/2012
Termination Date:	07/31/2013
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.42335
Longitude:	-117.54423

CERS:

Name:	RBC TRANSPORT DYNAMICS CORP
Address:	3131 WEST SEGERSTROM AVENUE
City,State,Zip:	SANTA ANA, CA 92704-5862
Site ID:	489392
CERS ID:	110002646245
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Public Contact
Entity Name:	Daryl Cousins
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	DARYL J COUSINS
Entity Title:	ENGINEER
Affiliation Address:	3131 W SEGERSTROM AVE
Affiliation City:	SANTAANA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Name:	RBC TRANSPORT DYNAMICS CORP
Address:	3131 W SEGERSTROM AVE
City,State,Zip:	SANTA ANA, CA 92704
Site ID:	146832
CERS ID:	92704RBCTR3131W
CERS Description:	Toxic Release Inventory

Affiliation:

Affiliation Type Desc:	Public Contact
Entity Name:	Daryl Cousins
Entity Title:	Not reported

RBC TRANSPORT DYNAMICS (Continued) **S103651980**

Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	7145463131

Affiliation Type Desc:	Technical Contact
Entity Name:	Daryl Cousins
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	7145463131

Affiliation Type Desc:	Company Official
Entity Name:	Daryl Cousins
Entity Title:	manager engineering
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported

Affiliation Type Desc:	Parent Company
Entity Name:	RBC BEARINGS INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	92704
Affiliation Phone:	Not reported

L75 **VELIE CIRCUITS, INC.** **ENVIROSTOR** **S118757416**
SSE **1267 LOGAN AVENUE** **N/A**
1/2-1 **COSTA MESA, CA 92626**
0.948 mi.
5005 ft. **Site 1 of 2 in cluster L**

Relative:
Higher

Actual:
46 ft.

ENVIROSTOR:

Name:	VELIE CIRCUITS, INC.
Address:	1267 LOGAN AVENUE
City,State,Zip:	COSTA MESA, CA 92626
Facility ID:	71002691
Status:	No Action Required
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED

VELIE CIRCUITS, INC. (Continued) **S118757416**

Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	74
Senate:	37
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.67829
Longitude:	-117.9107
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD980816763
Alias Type:	EPA Identification Number
Alias Name:	110000479848
Alias Type:	EPA (FRS #)
Alias Name:	71002691
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	03/28/2007
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

L76 **METROPOLITAN CIRCUITS** **RESPONSE** **S100833316**
SSE **1267 LOGAN AVENUE** **ENVIROSTOR** **N/A**
1/2-1 **COSTA MESA, CA 92626** **HIST Cal-Sites**
0.948 mi. **CA BOND EXP. PLAN**
5005 ft. **Site 2 of 2 in cluster L** **HIST CORTESE**

Relative:
Higher

Actual:
46 ft.

RESPONSE:

Name:	METROPOLITAN CIRCUITS
Address:	1267 LOGAN AVENUE
City,State,Zip:	COSTA MESA, CA 92626
Facility ID:	30360008
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	2.5
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported

METROPOLITAN CIRCUITS (Continued) **S100833316**

Supervisor:	Emad Yemut
Division Branch:	Cleanup Cypress
Site Code:	400096
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	74
Senate:	37
Special Program Status:	Not reported
Status:	Certified
Status Date:	11/20/2000
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	33.67829
Longitude:	-117.9103
APN:	141-202-15
Past Use:	MANUFACTURING - ELECTRONIC
Potential COC :	Arsenic Lead Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Cadmium and compounds Chromium VI Copper and compounds 1,2-Dichloroethane (EDC 1,1-Dichloroethylene Mercury and compounds 1,1,2-Trichloroethane Zinc
Confirmed COC:	1,1,2-Trichloroethane Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Cadmium and compounds Chromium VI Copper and compounds 1,2-Dichloroethane (EDC 1,1-Dichloroethylene Mercury and compounds Arsenic Lead Zinc
Potential Description:	OTH, SOIL, SV, IA, SURFW
Alias Name:	METROPOLITAN WEST (IN 1971)
Alias Type:	Alternate Name
Alias Name:	VELIE CIRCUITS INC
Alias Type:	Alternate Name
Alias Name:	141-202-15
Alias Type:	APN
Alias Name:	CAD982360232
Alias Type:	EPA Identification Number
Alias Name:	110033610634
Alias Type:	EPA (FRS #)
Alias Name:	SLT8R0273912
Alias Type:	GeoTracker Global ID
Alias Name:	CAD980816763
Alias Type:	HWTS Identification Code
Alias Name:	P41025
Alias Type:	PCode
Alias Name:	300096
Alias Type:	Project Code (Site Code)
Alias Name:	400096
Alias Type:	Project Code (Site Code)
Alias Name:	30360008
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Final Determination of Non-Compliance
Completed Date:	11/30/1990
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	04/11/1988

METROPOLITAN CIRCUITS (Continued) **S100833316**

Comments: RAO

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/01/1981
Comments: Facility Identified: Phone Co Search. Records Search: 07/01/76 NPDES #477B8872, IWP #7-217. 03/19/79 EMA - chemical waste onto Logan Avenue. 04/24/79 EMA-WPC - IWDP #202. 05/11/79 County Sanitation - discharge to sewer at night.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 10/12/1999
Comments: A settlement agreement was reached with Velie Circuits in which final remediation has been approved. O&M will continue until the second quarter of the year 2000.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 10/10/1996
Comments: The CEQA and RAW were completed and approved. Onsite pump and treat system (2-phase vapor extraction) to remediate 2 perched aquifers contaminated with various VOCs. Remediation is just starting - so total removed water is not projected at this time. Operating 11/96.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/20/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 05/23/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Imminent and/or Substantial Endangerment Order
Completed Date: 12/09/1994
Comments: DTSC issued an Imminent and/or Substantial Endangerment Order and Consent Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 11/22/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 08/20/2015

METROPOLITAN CIRCUITS (Continued) **S100833316**

Comments: Triage meeting completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Escrow Agreement
Completed Date: 07/25/1994
Comments: Escrow Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 10/10/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 05/10/1999
Comments: DTSC has determined that the remedial objectives of the ground- water and soil treatment system have been achieved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/06/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 02/20/1996
Comments: Additional contours of contaminated groundwater were provided. Pilot test results were also found acceptable. RI/FS complete.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Engineering Evaluation / Cost Analysis
Completed Date: 06/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 09/30/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 09/14/1989
Comments: Preliminary Assessment Done: On-going remedial investigation for this BEP site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/02/1987

METROPOLITAN CIRCUITS (Continued) **S100833316**

Comments: Site Screening Done.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/30/1986
Comments: Removal Action: Soil excavation.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Name: METROPOLITAN CIRCUITS
Address: 1267 LOGAN AVENUE
City,State,Zip: COSTA MESA, CA 92626
Facility ID: 30360008
Status: Certified
Status Date: 11/20/2000
Site Code: 400096
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 2.5
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Emad Yemut
Division Branch: Cleanup Cypress
Assembly: 74
Senate: 37
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 33.67829
Longitude: -117.9103
APN: 141-202-15
Past Use: MANUFACTURING - ELECTRONIC
Potential COC: Arsenic Lead Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Cadmium and compounds Chromium VI Copper and compounds 1,2-Dichloroethane (EDC 1,1-Dichloroethylene Mercury and compounds 1,1,2-Trichloroethane Zinc
Confirmed COC: 1,1,2-Trichloroethane Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Cadmium and compounds Chromium VI Copper and compounds 1,2-Dichloroethane (EDC 1,1-Dichloroethylene Mercury and compounds Arsenic Lead Zinc
Potential Description: OTH, SOIL, SV, IA, SURFW
Alias Name: METROPOLITAN WEST (IN 1971)
Alias Type: Alternate Name
Alias Name: VELIE CIRCUITS INC

METROPOLITAN CIRCUITS (Continued) **S100833316**

Alias Type: Alternate Name
Alias Name: 141-202-15
Alias Type: APN
Alias Name: CAD982360232
Alias Type: EPA Identification Number
Alias Name: 110033610634
Alias Type: EPA (FRS #)
Alias Name: SLT8R0273912
Alias Type: GeoTracker Global ID
Alias Name: CAD980816763
Alias Type: HWTS Identification Code
Alias Name: P41025
Alias Type: PCode
Alias Name: 300096
Alias Type: Project Code (Site Code)
Alias Name: 400096
Alias Type: Project Code (Site Code)
Alias Name: 30360008
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Final Determination of Non-Compliance
Completed Date: 11/30/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 04/11/1988
Comments: RAO

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/01/1981
Comments: Facility Identified: Phone Co Search. Records Search: 07/01/76 NPDES #477B8872, IWP #7-217. 03/19/79 EMA - chemical waste onto Logan Avenue. 04/24/79 EMA-WPC - IWDP #202. 05/11/79 County Sanitation - discharge to sewer at night.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 10/12/1999
Comments: A settlement agreement was reached with Velie Circuits in which final remediation has been approved. O&M will continue until the second quarter of the year 2000.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 10/10/1996
Comments: The CEQA and RAW were completed and approved. Onsite pump and treat system (2-phase vapor extraction) to remediate 2 perched aquifers contaminated with various VOCs. Remediation is just starting - so total removed water is not projected at this time. Operating 11/96.

METROPOLITAN CIRCUITS (Continued) **S100833316**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/20/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 05/23/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Imminent and/or Substantial Endangerment Order
Completed Date: 12/09/1994
Comments: DTSC issued an Imminent and/or Substantial Endangerment Order and Consent Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 11/22/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 08/20/2015
Comments: Triage meeting completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Escrow Agreement
Completed Date: 07/25/1994
Comments: Escrow Agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 10/10/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 05/10/1999
Comments: DTSC has determined that the remedial objectives of the ground- water and soil treatment system have been achieved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/06/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE

METROPOLITAN CIRCUITS (Continued) **S100833316**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 02/20/1996
Comments: Additional contours of contaminated groundwater were provided. Pilot test results were also found acceptable. RI/FS complete.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Engineering Evaluation / Cost Analysis
Completed Date: 06/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 09/30/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 09/14/1989
Comments: Preliminary Assessment Done: On-going remedial investigation for this BEP site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/02/1987
Comments: Site Screening Done.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/30/1986
Comments: Removal Action: Soil excavation.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Name: METROPOLITAN CIRCUITS
Address: 1267 LOGAN AVENUE
City: COSTA MESA
Region: CYPRESS
Facility ID: 30360008
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: SB
Branch Name: SO CAL - CYPRESS

METROPOLITAN CIRCUITS (Continued) **S100833316**

File Name:	Not reported
State Senate District:	11202000
Status:	CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name:	CERTIFIED
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
NPL:	Not Listed
SIC Code:	36
SIC Name:	MANU - ELECTRONIC & OTHER ELECTRIC EQUIP
Access:	Controlled
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Suspected
Staff Member Responsible for Site:	Not reported
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SA
Region Water Control Board Name:	SANTA ANA
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	68
State Senate District Code:	35
Facility ID:	30360008
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08011981
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09301986
Est Person-Yrs to complete:	0
Estimated Size:	Not reported

METROPOLITAN CIRCUITS (Continued) **S100833316**

Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01021987
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	RAO
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04301988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported

METROPOLITAN CIRCUITS (Continued) **S100833316**

Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09301990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	FDNC
Activity Name:	FINAL DETERMINATION OF NON-COMPLIANCE
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11301990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	GW

METROPOLITAN CIRCUITS (Continued) **S100833316**

Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	AMEND
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11221993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	I&SE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12091994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED

METROPOLITAN CIRCUITS (Continued) **S100833316**

Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	NOD
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05231995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03251996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0

METROPOLITAN CIRCUITS (Continued) **S100833316**

For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09061995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	435
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	EXCAVATION AND DISPOSAL OF NON-RCRA WASTE.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	S/GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05101999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	750 LBS. VOCS REMOVED (GALLONS)6.6 MILLION GALLONS TREATED
For Commercial Reuse:	0
For Industrial Reuse:	2.50000
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported

METROPOLITAN CIRCUITS (Continued) **S100833316**

Comments Date:	11202000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	650
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	X
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10101996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10101996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported

METROPOLITAN CIRCUITS (Continued) **S100833316**

Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30360008
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	SETTL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10121999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	1267 LOGAN AVENUE
Alternate City,St,Zip:	COSTA MESA, CA 92626
Alternate Address:	1261 LOGAN AVENUE (CERCLIS)
Alternate City,St,Zip:	COSTA MESA, CA
Alternate Address:	3232 FAIRVIEW (NEW LOCATION)
Alternate City,St,Zip:	COSTA MESA, CA

Background Info:

This site is a printed circuit board manufacturing plant which was operated by Metropolitan Circuits from 1969 to 1981. The facility is presently occupied by Velie Circuits, which has operated a similar manufacturing plant at the location since 1984. During the production of the printed circuit boards, a process was used that involved the plating of copper and other metals. The soils in the chemical handling and storage areas on the site have been contaminated by metals used in this manufacturing process.

The company completed a prior RI/FS in 1985, and developed a RAP for the excavation and removal of contaminated soil. The RAP was approved in February 1986, and the excavation and removal of soil was implemented in September 1986. However, post-excavation sampling revealed that metals were still present in the soils and that they appeared to be increasing in depth. Therefore, in April 1988, the Department issued an RAO to the RPs requiring them to perform additional site characterization and remediation. In 1990, an approved RI Workplan was implemented which included soil sampling and installing 2 groundwater monitoring wells.

METROPOLITAN CIRCUITS (Continued) **S100833316**

Results showed that the extent of copper-contaminated was undefined and volatile organic compound (VOCs) were present in the soil and groundwater.
In 1991, additional RI work was completed. The extent of copper-contaminated soil was still undefined, the source of VOCs in the soil and groundwater was not identified, and the groundwater flow direction was unclear.
In 1992, a condensed and conservative Health Risk Assessment (HRA) was prepared by the Department based on information provided in the draft RI Report. The HRA concluded that the soil contaminated with metals and concentrations of VOCs in groundwater, if used as a drinking water source, may pose a significant risk.
After the groundwater flow direction was re-determined, additional investigative work was performed. The purpose of the investigation was to define the copper-contaminated soil area and evaluate groundwater conditions at the site using a cone penetrometer testing (CPT) survey and placing a groundwater monitoring well offsite. The report on this work concluded that available soil and groundwater data for VOCs is insufficient to identify the source or extent of contamination.
Thus, a limited soil investigation was performed in April 1993 for the purpose of determining if site operation contributed to the groundwater contamination of VOCs.

Comments Date: 08011981
Comments: 03/19/79 EMA - chemical waste onto Logan Avenue.
Comments Date: 01021987
Comments: Site Screening Done.
Comments Date: 01311984
Comments: This is the date the site was first listed pursuant to
Comments Date: 01311984
Comments: section 25356.
Comments Date: 02151995
Comments: The focused RI/FS workplan was approved.
Comments Date: 03251996
Comments: Additional contours of contaminated groundwater were
Comments Date: 03251996
Comments: provided. Pilot test results were also found acceptable.
Comments Date: 03251996
Comments: RI/FS complete.
Comments Date: 04041995
Comments: The Removal Action Workplan was tentatively approved.
Comments Date: 04221999
Comments: DTSC meets with Velie Circuits, agrees that contaminants in
Comments Date: 04221999
Comments: groundwater have reached asymptotic levels and active
Comments Date: 04221999
Comments: remediation can be discontinued. Follow-up monitoring is
Comments Date: 04221999
Comments: needed, both on and off property.
Comments Date: 05101999
Comments: DTSC has determined that the remedial objectives of the ground-
Comments Date: 05101999
Comments: water and soil treatment system have been achieved.
Comments Date: 05221995
Comments: CEQA documents for the Metrolpolitan Circuits site were
Comments Date: 05221995

METROPOLITAN CIRCUITS (Continued) **S100833316**

Comments:	submitted/approved for the planned removal action. The
Comments Date:	05221995
Comments:	proposed activities include excavation and removal of
Comments Date:	05221995
Comments:	metal-contaminated soils.
Comments Date:	05261982
Comments:	Final disposition through LA County Enforcement.
Comments Date:	08011981
Comments:	04/24/79 EMA-WPC - IWDP #202. 05/11/79 County Sanitation -
Comments Date:	08011981
Comments:	discharge to sewer at night.
Comments Date:	08101981
Comments:	Records Search: County Sanitation - problems with discharge
Comments Date:	08101981
Comments:	clean-up.
Comments Date:	09141989
Comments:	Preliminary Assessment Done: On-going remedial investigation
Comments Date:	09141989
Comments:	for this BEP site.
Comments Date:	09181995
Comments:	A Removal Action was conducted at the Metropolitan Circuits
Comments Date:	09181995
Comments:	site consisting of the excavation and disposal of approx-
Comments Date:	09181995
Comments:	imately 435 tons of non-RCRA waste. Clean soil was
Comments Date:	09181995
Comments:	compacted over the excavated areas and certified to at
Comments Date:	09181995
Comments:	least 90% compacted.
Comments Date:	09261989
Comments:	Preliminary Assessment submitted to EPA. No further action
Comments Date:	09261989
Comments:	by EPA.
Comments Date:	09291981
Comments:	Facility Drive-By: Operations moved to 3232 Fairview, also
Comments Date:	09291981
Comments:	in Costa Mesa. Bluegreen stain from lot to street drain.
Comments Date:	09301986
Comments:	Removal Action: Soil excavation.
Comments Date:	10051981
Comments:	Questionnaire sent.
Comments Date:	10101996
Comments:	The CEQA and RAW were completed and approved.
Comments Date:	10101996
Comments:	Onsite pump and treat system (2-phase vapor extraction) to
Comments Date:	10101996
Comments:	remediate 2 perched aquifers contaminated with various VOCs.
Comments Date:	10101996
Comments:	Remediation is just starting - so total removed water is
Comments Date:	10101996
Comments:	not projected at this time. Operating 11/96.
Comments Date:	10121999
Comments:	A settlement agreement was reached with Velie Circuits in which
Comments Date:	10121999
Comments:	final remediation has been approved. O&M will continue until
Comments Date:	10121999
Comments:	the second quarter of the year 2000.

METROPOLITAN CIRCUITS (Continued) **S100833316**

Comments Date:	10221981
Comments:	Questionnaire received.
Comments Date:	11051981
Comments:	Phone Follow-up: Refined solvents onsite. Clarifier has ink
Comments Date:	11051981
Comments:	and plating wastes. Clarifier was full - no plan to empty.
Comments Date:	11051981
Comments:	Stains from sulfuric peroxide.
Comments Date:	11091981
Comments:	State Inspection: Clarified on east side of building. Non-
Comments Date:	11091981
Comments:	odorous material in clarifier. DA torque fluid in
Comments Date:	11091981
Comments:	containers. One 55-gallon drum and 5-gallon bucket. Cement
Comments Date:	11091981
Comments:	block in back nearly dissolved. Stains (blue, yellow,
Comments Date:	11091981
Comments:	orange) around crumbling block. Acid tank was over cement
Comments Date:	11091981
Comments:	block. Reddish stain at back of building; may be rust.
Comments Date:	11091981
Comments:	Security guard on premises.
Comments Date:	11171981
Comments:	Recommend testing of clarifier.
Comments Date:	11231999
Comments:	Velie Circuits submits a proposal to abandon seven monitoring
Comments Date:	11231999
Comments:	wells in the Adams Place (former Our Town Apartments) and one
Comments Date:	11231999
Comments:	on the Lyon Mesa Property. DTSC approves the proposal.
Comments Date:	11292000
Comments:	SOIL AND GROUNDWATER REMEDIATION AT THE SITE HAS BEEN CERTIFIED
Comments Date:	11292000
Comments:	REMEDIATED TO HEALTH-BASED STANDARDS.
Comments Date:	12071981
Comments:	State Inspection: Storage cabinet had solvents, paints, and
Comments Date:	12071981
Comments:	adhesives. Five samples taken. Site photos taken.
Comments Date:	12071994
Comments:	The Department is currently negotiating a Cleanup
Comments Date:	12071994
Comments:	Agreement with Ascon Landfill.
Comments Date:	12091994
Comments:	DTSC issued an Imminent and/or Substantial Endangerment
Comments Date:	12091994
Comments:	Order and Consent Agreement.
Comments Date:	08011981
Comments:	Facility Identified: Phone Co Search.
Comments Date:	08011981
Comments:	Records Search: 07/01/76 NPDES #477B8872, IWP #7-217.
ID Name:	CALSTARS CODE
ID Value:	400096
ID Name:	HWIS IDENTIFICATION CODE
ID Value:	CAD980816763
ID Name:	BEP DATABASE PCODE
ID Value:	P41025
ID Name:	EPA IDENTIFICATION NUMBER

METROPOLITAN CIRCUITS (Continued) **S100833316**

ID Value: CAD982360232
Alternate Name: METROPOLITAN WEST (IN 1971)
Alternate Name: METROPOLITAN CIRCUITS
Alternate Name: VELIE CIRCUITS INC
Alternate Name: Not reported
Special Programs Code: CERC2
Special Programs Name: CERCLA II

CA BOND EXP. PLAN:
Reponsible Party: RESPONSIBLE PARTY LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company: Not reported
Project Revenue Source Addr: Not reported
Project Revenue Source City,St,Zip: Not reported
Project Revenue Source Desc: The responsible parties are in compliance with an order issued by the Department for oversight/monitoring of their cleanup efforts. DHS has budgeted $50,000 for direct costs related to the project. DHS will recover 100 percent of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with cleanup.
Site Description: This site is a former printed circuit board manufacturing plant which operated from 1969 to 1981. The facility is now occupied by Velie Circuits, which has operated a similar manufacturing plant since 1984.
Hazardous Waste Desc: The soils in chemical handling and storage areas on the site have been contaminated by heavy metals utilized in The manufacturing process. These substances include copper, lead, and zinc.
Threat To Public Health & Env: The levels of heavy metals in soil may be increasing with depth, which could represent a potential threat to the ground water. The site is located next to the Paularino Channel which eventually drains to the Upper Newport Bay, a wildlife refuge. There is no known exposure of chemicals to workers at this time because of preventive measures taken at the facility.
Site Activity Status: The company completed a RI/FS and developed a RAP that was approved by the Department if February, 1986. The RAP was implemented in September, 1986 which entailed excavation and removal of contaminated soil. Post-excavation sampling revealed that metals were still present in soils and may be increasing with depth. In April, 1988, DHS issued a RAO to Metropolitan Circuits and Velie Circuits requiring them to characterize the remaining contamination and develop a second RAP. The characterization work will include ground water investigation to determine if usable aquifers are impacted. This work will commence in Fall 1988.

HIST CORTESE:
edr_fname: METROPOLITAN CIRCUITS
edr_fadd1: 1267 LOGAN
City,State,Zip: COSTA MESA, CA 92626
Region: CORTESE
Facility County Code: 30
Reg By: CALSI
Reg Id: 30360008

Count: 3 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COSTA MESA	S120834877	SAKIOKA FARMS (FORMER MOBIL)	0 NW MACARTHUR @ MAIN ST	92626	LUST
COSTA MESA	S108985881	SAKIOKA FARMS	3183-A SW SUNFLOWER		CPS-SLIC
SANTA ANA	S108985904	SUNFLOWER PLAZA METRO CLEANERS	SUNFLOWER		CPS-SLIC

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/03/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 41

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 36

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/13/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/10/2018
Date Data Arrived at EDR: 03/08/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/13/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/12/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 41

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 42

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/10/2018
Date Data Arrived at EDR: 03/08/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 54

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/03/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/20/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 34

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 34

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/28/2019
Date Data Arrived at EDR: 06/28/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 26

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 32

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 49

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/24/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 40

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 06/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 03/07/2019
Date Data Arrived at EDR: 04/03/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 50

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/07/2019
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/18/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/03/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/07/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/07/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019
Date Data Arrived at EDR: 03/28/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 34

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/05/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/07/2019
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 39

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 36

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 04/18/2019
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 11

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 35

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/19/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 04/09/2019
Number of Days to Update: 18

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/23/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/24/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 11/02/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 41

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/18/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/15/2019
Date Data Arrived at EDR: 05/16/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 63

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 05/29/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 54

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 51

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/13/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/05/2019
Number of Days to Update: 31

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/18/2019
Date Data Arrived at EDR: 03/19/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 41

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 34

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 64

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 70

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 06/28/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 26

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 27

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/24/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 05/17/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/22/2019
Date Data Arrived at EDR: 05/23/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 56

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 29

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 06/05/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 47

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/10/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/20/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 63

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 07/16/2019
Number of Days to Update: 70

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/16/2019
Date Data Arrived at EDR: 05/17/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 13

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 05/30/2019
Date Data Arrived at EDR: 05/31/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 53

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 05/13/2019
Date Data Arrived at EDR: 05/16/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 63

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/15/2019
Date Data Arrived at EDR: 04/16/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 66

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/17/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 04/16/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 66

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/04/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 13

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 53

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 05/23/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 53

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/23/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 9

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 07/16/2019
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/12/2019
Number of Days to Update: 42

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/12/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 18

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/12/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 69

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 06/18/2019
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/06/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 79

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/31/2019
Date Data Arrived at EDR: 05/31/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 63

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 11/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 38

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/16/2019
Date Data Arrived at EDR: 05/23/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 56

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/19/2019
Date Data Arrived at EDR: 05/23/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 60

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 53

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 06/18/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 06/04/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 49

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/28/2019
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 05/09/2019
Date Data Arrived at EDR: 05/10/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 68

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 63

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 35

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/12/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 42

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 76

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 05/03/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 07/16/2019
Number of Days to Update: 70

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/01/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/17/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

FORMER LA TIMES SITE
1375 SUNFLOWER AVE
COSTA MESA, CA 92626

TARGET PROPERTY COORDINATES

Latitude (North):	33.693872 - 33˚ 41' 37.94''
Longitude (West):	117.916125 - 117˚ 54' 58.05''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	415092.2
UTM Y (Meters):	3728397.0
Elevation:	31 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640950 NEWPORT BEACH, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

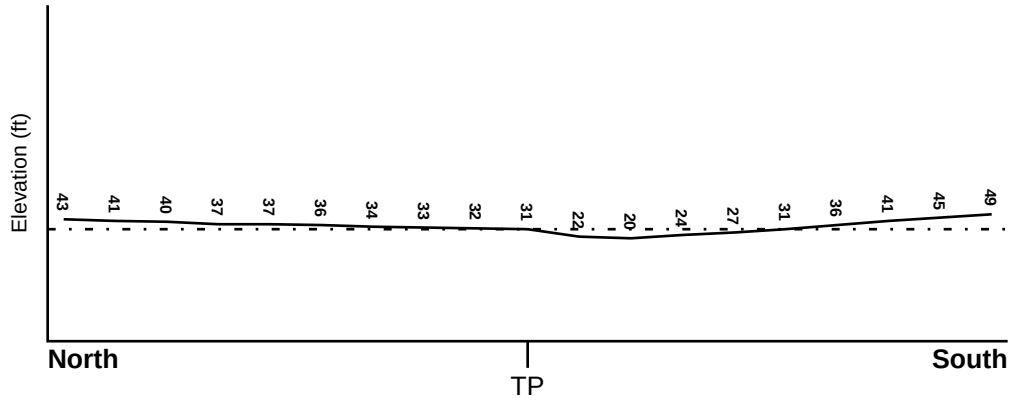
TOPOGRAPHIC INFORMATION

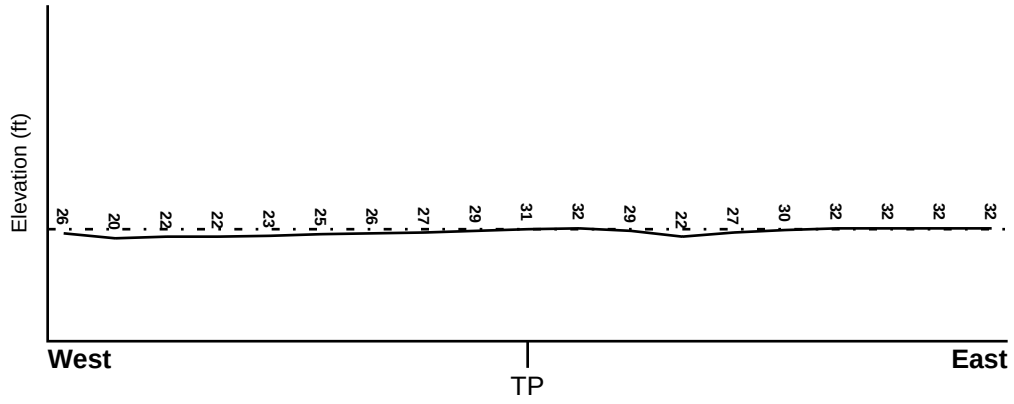
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 31 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06059C0258J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06059C0259J	FEMA FIRM Flood data
06059C0266J	FEMA FIRM Flood data
06059C0267J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
COSTA MESA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
9	1/4 - 1/2 Mile East	Varies,SW-SE
11	1/2 - 1 Mile SSW	SW
D14	1/2 - 1 Mile NNW	Not Reported
D15	1/2 - 1 Mile NNW	Not Reported
22	1/2 - 1 Mile NW	NE
30	1/2 - 1 Mile WNW	SE

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
36	1/2 - 1 Mile North	SW
1G	1/2 - 1 Mile North	SW
2G	1/2 - 1 Mile NNW	Not Reported
3G	1/2 - 1 Mile NNW	Not Reported
5G	1/2 - 1 Mile NW	NE
6G	1/2 - 1 Mile WNW	SE
7G	1/4 - 1/2 Mile East	Varies,SW-SE
8G	1/2 - 1 Mile SSW	SW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

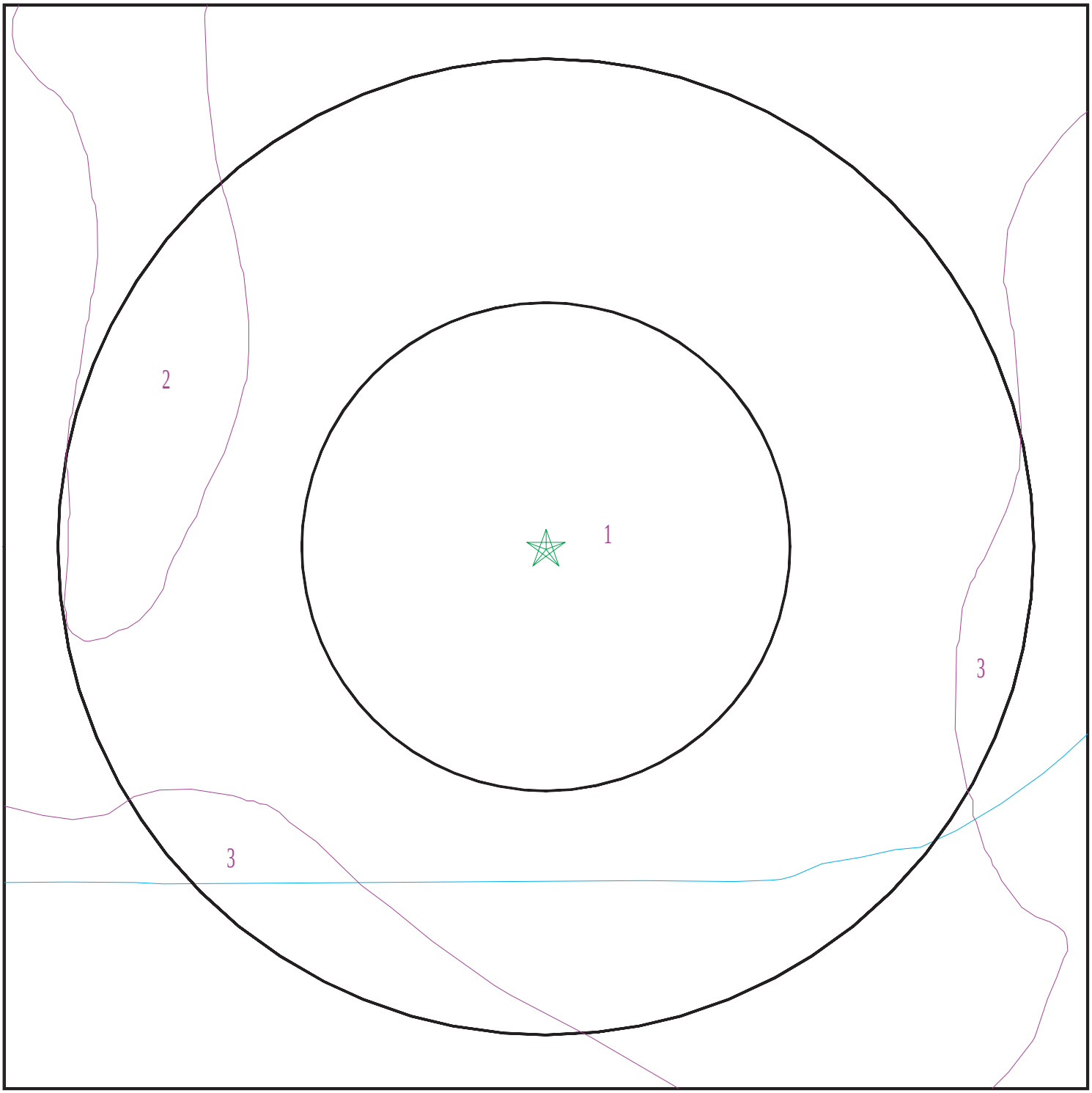
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5761845.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Former LA Times Site	CLIENT:	Psomas
ADDRESS:	1375 Sunflower Ave Costa Mesa CA 92626	CONTACT:	Jan Powell
		INQUIRY #:	5761845.2s
LAT/LONG:	33.693872 / 117.916125	DATE:	August 22, 2019 10:03 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: BOLSA

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	68 inches	silty clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: HUENEME

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	27 inches	fine sandy loam	Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.4
2	27 inches	59 inches	stratified sand to silt loam	Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: OMNI

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	clay	Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 9 Min: 7.9
2	16 inches	59 inches	silty clay	Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 9 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000136854	0 - 1/8 Mile NNE
3	USGS40000136867	1/8 - 1/4 Mile NW
B8	USGS40000136762	1/4 - 1/2 Mile South
10	USGS40000136761	1/4 - 1/2 Mile SSE
12	USGS40000136782	1/2 - 1 Mile ESE
17	USGS40000136888	1/2 - 1 Mile ENE
D18	USGS40000137019	1/2 - 1 Mile NNW
20	USGS40000136866	1/2 - 1 Mile ENE
24	USGS40000136763	1/2 - 1 Mile SW
32	USGS40000136700	1/2 - 1 Mile SSW
E33	USGS40000137020	1/2 - 1 Mile NW
E34	USGS40000137039	1/2 - 1 Mile NW
37	USGS40000136807	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	6290	1/8 - 1/4 Mile SSW
4	6286	1/4 - 1/2 Mile WSW
A5	6275	1/4 - 1/2 Mile NNW
A6	6283	1/4 - 1/2 Mile NNW
B7	CADWR8000004906	1/4 - 1/2 Mile South
C13	CADWR8000004942	1/2 - 1 Mile ENE
16	5179	1/2 - 1 Mile SE
C19	CADWR8000004941	1/2 - 1 Mile ENE
21	6284	1/2 - 1 Mile NW
25	6287	1/2 - 1 Mile North
26	CADWR8000004949	1/2 - 1 Mile ENE
27	CADWR8000005015	1/2 - 1 Mile NNE
28	CADWR8000004875	1/2 - 1 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

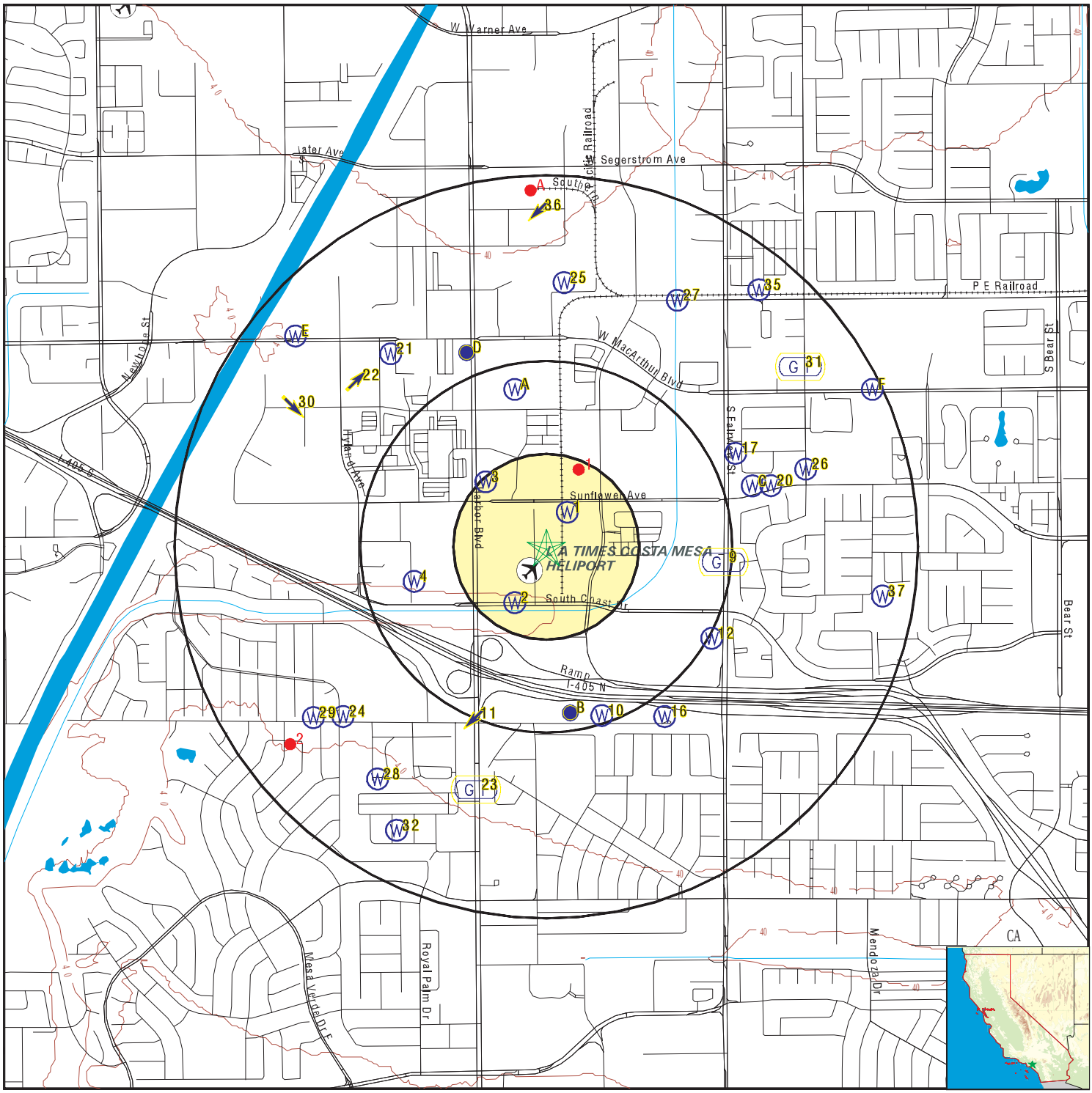
MAP ID	WELL ID	LOCATION FROM TP
29	CADWR8000004905	1/2 - 1 Mile SW
35	6262	1/2 - 1 Mile NE
F38	6289	1/2 - 1 Mile ENE
F39	6288	1/2 - 1 Mile ENE
F40	6293	1/2 - 1 Mile ENE
F41	6292	1/2 - 1 Mile ENE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG13000006289	1/8 - 1/4 Mile NNE
2	CAOG13000006186	1/2 - 1 Mile SW
A3	CAOG13000006187	1/2 - 1 Mile North
A4	CAOG13000006017	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 5761845.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

SITE NAME:	Former LA Times Site	CLIENT:	Psomas
ADDRESS:	1375 Sunflower Ave Costa Mesa CA 92626	CONTACT:	Jan Powell
		INQUIRY #:	5761845.2s
LAT/LONG:	33.693872 / 117.916125	DATE:	August 22, 2019 10:03 am

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Map ID Direction Distance Elevation	Database	EDR ID Number
1 **NNE** **0 - 1/8 Mile** **Higher**	**FED USGS**	**USGS40000136854**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34F003S	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	600
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

---

2 **SSW** **1/8 - 1/4 Mile** **Lower**		**CA WELLS**	**6290**

Seq:	6290	Prim sta c:	05S/10W-34L01 S
Frds no:	3010004009	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 08	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334130.0	Longitude:	1175500.0
Precision:	3	Status:	AR
Comment 1:	30’ NORTH OF SOUTH COAST DRIVE, 40’ WEST OF AUTO CENTER DR.		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		
Sample date:	08-FEB-16	Finding:	12.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-FEB-16	Finding:	1000.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	3.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	39.5
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	05-MAY-14	Finding:	1060.

Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	16.7
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	74.5
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	2.3
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	102.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	109.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-FEB-14	Finding:	0.31
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	24-FEB-14	Finding:	2.8
Chemical:	ARSENIC	Report units:	UG/L
Dlr:	2.		
Sample date:	24-FEB-14	Finding:	180.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-FEB-14	Finding:	34.6
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	24-FEB-14	Finding:	506.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.47
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	1.19
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	3.3e-002
Chemical:	RADIUM 228	Report units:	PCI/L
Dlr:	1.		
Sample date:	24-FEB-14	Finding:	0.584
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	1.96
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		

Sample date:	24-FEB-14	Finding:	0.949
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.223
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	24-FEB-14	Finding:	7.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	868.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	175.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	73.1
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	175.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	1.38
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	24-FEB-14	Finding:	251.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Map ID Direction Distance Elevation	Database	EDR ID Number
3 **NW** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000136867**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34E001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

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4 **WSW** **1/4 - 1/2 Mile** **Lower**		**CA WELLS**	**6286**

Seq:	6286	Prim sta c:	05S/10W-33J02 S
Frds no:	3010004007	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 07	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	334133.4	Longitude:	1175517.8
Precision:	3	Status:	AR
Comment 1:	800’ S OF SUNFLOWER & 815’ W OF HARBOR BLVD.		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		
Sample date:	07-MAR-18	Finding:	0.88
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-MAR-18	Finding:	0.87
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-DEC-17	Finding:	0.8
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	21-DEC-17	Finding:	0.7
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	0.92

Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-NOV-17	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	127.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	127.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	0.92
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-NOV-17	Finding:	144.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	43.9
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	8.3
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	46.5
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	45.3
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	54.7
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-NOV-17	Finding:	0.34
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	09-NOV-17	Finding:	170.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	09-NOV-17	Finding:	3.7
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	09-NOV-17	Finding:	306.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		

Sample date:	09-NOV-17	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	09-NOV-17	Finding:	0.12
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	502.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	475.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	124.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	124.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	0.99
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-OCT-17	Finding:	142.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	43.5
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	8.2
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	45.5
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	40.2
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	49.5
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	12-OCT-17	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L

Dlr:	0.1		
Sample date:	12-OCT-17	Finding:	180.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	12-OCT-17	Finding:	4.6
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	12-OCT-17	Finding:	290.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	0.8
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	0.11
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	12-OCT-17	Finding:	0.99
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-OCT-17	Finding:	3.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	07-FEB-17	Finding:	2.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	14-NOV-16	Finding:	3.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-AUG-16	Finding:	2.1
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	09-MAY-16	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	0.88
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-MAY-16	Finding:	2.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	09-MAY-16	Finding:	0.88
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-FEB-16	Finding:	0.81
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	08-FEB-16	Finding:	2.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-FEB-16	Finding:	0.81
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	02-NOV-15	Finding:	3.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	10-AUG-15	Finding:	3.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	11-MAY-15	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	11-MAY-15	Finding:	3.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	3.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-FEB-15	Finding:	3.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	720.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-FEB-15	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	03-NOV-14	Finding:	2.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	03-NOV-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	55.1
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	52.4
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	9.9
Chemical:	MAGNESIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	04-AUG-14	Finding:	52.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	171.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	148.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	121.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	545.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	0.19
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	04-AUG-14	Finding:	3.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-AUG-14	Finding:	326.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	04-AUG-14	Finding:	4.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	04-AUG-14	Finding:	170.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	04-AUG-14	Finding:	3.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	04-AUG-14	Finding:	860.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	04-AUG-14	Finding:	0.29
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	04-AUG-14	Finding:	71.1
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	05-MAY-14	Finding:	4.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	05-MAY-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	330.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	140.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	05-MAY-14	Finding:	69.2
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	05-MAY-14	Finding:	52.6
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	1.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	51.2
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	9.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	48.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	159.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	126.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	126.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported

Dlr:	0.		
Sample date:	05-MAY-14	Finding:	577.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.12
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.263
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	5.1e-002
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	24-FEB-14	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.523
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	24-FEB-14	Finding:	4.3
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	24-FEB-14	Finding:	850.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-FEB-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	3.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-FEB-14	Finding:	9.8e-002
Chemical:	RADIUM 228	Report units:	PCI/L
Dlr:	1.		
Sample date:	28-OCT-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	28-OCT-13	Finding:	5.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-SEP-13	Finding:	4.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		

Sample date:	12-SEP-13	Finding:	4.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-AUG-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	6.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	20-MAY-13	Finding:	9.1
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	46.8
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	154.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	127.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	127.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	563.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	49.6
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	3.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	20-MAY-13	Finding:	0.17
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	326.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	140.
Chemical:	BORON	Report units:	UG/L

Dlr:	100.		
Sample date:	20-MAY-13	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	51.4
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	66.8
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	11-MAR-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	11-MAR-13	Finding:	850.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-MAR-13	Finding:	533.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	11-MAR-13	Finding:	3.9
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	11-MAR-13	Finding:	3.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAR-13	Finding:	5.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	05-NOV-12	Finding:	7.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-NOV-12	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	05-NOV-12	Finding:	3.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-AUG-12	Finding:	3.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-AUG-12	Finding:	334.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	4.5
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		

Sample date:	06-AUG-12	Finding:	150.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	06-AUG-12	Finding:	0.33
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	06-AUG-12	Finding:	72.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	06-AUG-12	Finding:	54.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	2.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	55.9
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	10.2
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	51.6
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	171.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	0.53
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	06-AUG-12	Finding:	164.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	134.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	574.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	7.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	7.
Chemical:	COLOR	Report units:	UNITS

Dlr:	0.		
Sample date:	06-AUG-12	Finding:	3.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-AUG-12	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	06-AUG-12	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	800.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-AUG-12	Finding:	0.12
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	870.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-MAY-12	Finding:	0.13
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	0.3
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	23-MAY-12	Finding:	3.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-MAY-12	Finding:	334.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	5.2
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	23-MAY-12	Finding:	140.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	23-MAY-12	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	23-MAY-12	Finding:	76.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	23-MAY-12	Finding:	54.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	2.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	51.9
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	9.9
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	51.3
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	169.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	0.39
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	23-MAY-12	Finding:	132.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	132.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	584.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	5.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	23-MAY-12	Finding:	3.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	01-FEB-12	Finding:	730.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-FEB-12	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	3.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	01-FEB-12	Finding:	3.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		

A5
NNW
1/4 - 1/2 Mile
Higher

CA WELLS 6275

Seq:	6275	Prim sta c:	05S/10W-27B01 S
Frds no:	3010092008	County:	30
District:	08	User id:	TEE
System no:	3010092	Water type:	G
Source nam:	WELL 14	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334200.0	Longitude:	1175500.0
Precision:	5	Status:	AU
Comment 1:	1/4 MI. W/O FAIRVIEW AVE.	Comment 2:	Not Reported
Comment 3:	THIS PRIMARY STATION CODE NUMBER WILL BE CORRECTED WHEN ALL		
Comment 4:	DATA STORED CAN BE TRANSFERRED.	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	3010092	System nam:	Irvine Ranch Water District
Hqname:	Not Reported	Address:	P.O. BOX 57000
City:	IRVINE	State:	CA
Zip:	92716	Zip ext:	Not Reported
Pop serv:	135000	Connection:	50321
Area serve:	IRVINE		
Sample date:	20-MAR-18	Finding:	2.65
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	27-FEB-18	Finding:	1.24
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-FEB-18	Finding:	2.43
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	01-FEB-18	Finding:	3.04
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-NOV-17	Finding:	3.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-NOV-17	Finding:	2.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	22-AUG-17	Finding:	3.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	22-AUG-17	Finding:	3.26
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		

Sample date:	11-JUL-17	Finding:	1.91
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	05-JUL-17	Finding:	1.91
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	27-JUN-17	Finding:	1.12
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	27-JUN-17	Finding:	9.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	13-JUN-17	Finding:	1.27
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	23-MAY-17	Finding:	2.02
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	16-MAY-17	Finding:	2.78
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-APR-17	Finding:	2.25
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	22-FEB-17	Finding:	1.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-NOV-16	Finding:	1.78
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	18-OCT-16	Finding:	2.62
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-OCT-16	Finding:	3.1
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	06-OCT-16	Finding:	2.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-OCT-16	Finding:	1.5
Chemical:	CHLOROFORM (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	27-SEP-16	Finding:	2.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	21-SEP-16	Finding:	2.3
Chemical:	1,4-DIOXANE	Report units:	UG/L

Dlr:	1.		
Sample date:	07-SEP-16	Finding:	2.1
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	31-AUG-16	Finding:	2.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	24-AUG-16	Finding:	2.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	17-AUG-16	Finding:	1.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	10-AUG-16	Finding:	1.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	10-AUG-16	Finding:	1.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	26-JUL-16	Finding:	0.7
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	26-JUL-16	Finding:	2.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	26-JUL-16	Finding:	1.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	26-JUL-16	Finding:	0.6
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	26-JUL-16	Finding:	2.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	07-JUL-16	Finding:	2.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	23-JUN-16	Finding:	10.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	427.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	23-JUN-16	Finding:	148.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	0.42
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	23-JUN-16	Finding:	110.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	33.3
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	6.7
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	48.5
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	1.6
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	21.9
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	40.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-JUN-16	Finding:	0.38
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	23-JUN-16	Finding:	1.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	23-JUN-16	Finding:	3.4
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	23-JUN-16	Finding:	2.3
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	23-JUN-16	Finding:	250.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JUN-16	Finding:	1.
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L

Dlr:	0.		
Sample date:	20-AUG-15	Finding:	1.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	03-JUN-15	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	03-JUN-15	Finding:	1.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	03-JUN-15	Finding:	8.3
Chemical:	PH, FIELD	Report units:	Not Reported
Dlr:	0.		
Sample date:	26-MAR-15	Finding:	1.1
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	19-MAR-15	Finding:	0.6
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	17-NOV-14	Finding:	0.6
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	12-NOV-14	Finding:	1.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	20-AUG-14	Finding:	1.1
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	07-MAY-14	Finding:	0.677
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	0.224
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	07-MAY-14	Finding:	0.188
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		

Sample date:	07-MAY-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	07-MAY-14	Finding:	0.503
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	0.886
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	1.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	26-JUN-13	Finding:	144.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	144.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	0.62
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	26-JUN-13	Finding:	91.6
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	28.2
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	5.2
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	48.4
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	1.3
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	17.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	37.4
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	26-JUN-13	Finding:	0.39
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	26-JUN-13	Finding:	3.5
Chemical:	VANADIUM	Report units:	UG/L

Dlr:	3.		
Sample date:	26-JUN-13	Finding:	252.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	7.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	398.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	10.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	26-JUN-13	Finding:	8.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	04-JUN-12	Finding:	0.7
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	04-JUN-12	Finding:	0.6
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	3.5
Chemical:	CHLOROFORM (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	07-MAY-12	Finding:	1.4
Chemical:	BROMODICHLOROMETHANE (THM)	Report units:	UG/L
Dlr:	1.		
Sample date:	07-MAY-12	Finding:	4.9
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		

A6
NNW
1/4 - 1/2 Mile
Higher

CA WELLS 6283

Seq:	6283	Prim sta c:	05S/10W-33A03 S
Frds no:	3010004004	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 03 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	334200.0	Longitude:	1175500.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008

City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		

B7
South
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR8000004906**

State Well #:	05S10W34P001S	Station ID:	47305
Well Name:	COSM-1/MP1	Well Use:	Observation
Well Type:	Part of a nested/multi-completion well		
Well Depth:	1810	Basin Name:	Coastal Plain Of Orange County
Well Completion Rpt #:	349218219		

B8
South
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000136762**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34P002S	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19990826	Well Depth:	1020
Well Depth Units:	ft	Well Hole Depth:	1030
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1999-08-26
Feet below surface:	122	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

9
East
1/4 - 1/2 Mile
Lower

AQUIFLOW **54970**

Site ID:	083002609T
Groundwater Flow:	Varies,SW-SE
Shallow Water Depth:	9
Deep Water Depth:	14
Average Water Depth:	Not Reported
Date:	03/12/1999

10
SSE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000136761**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34Q004S	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19830701	Well Depth:	1060
Well Depth Units:	ft	Well Hole Depth:	1093
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1983-07-01
Feet below surface:	43	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

11
SSW
1/2 - 1 Mile
Higher

AQUIFLOW **54968**

Site ID:	083000703T
Groundwater Flow:	SW
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	28.47
Date:	01/29/1999

12
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000136782**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34Q002S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

C13
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000004942**

State Well #:	05S10W34H010S	Station ID:	29011
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Coastal Plain Of Orange County		
Well Completion Rpt #:	Not Reported		

D14
NNW
1/2 - 1 Mile
Higher

AQUIFLOW **68215**

Site ID:	083001957T
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	9.25
Date:	06/08/1999

Map ID Direction Distance Elevation			Database	EDR ID Number
D15 **NNW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001957T Not Reported Not Reported Not Reported 9.25 06/08/1999	**AQUIFLOW**	**68216**

16
SE
1/2 - 1 Mile
Lower

CA WELLS **5179**

Seq:	5179	Prim sta c:	04S/10W-34Q04 S
Frds no:	3010004010	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 06	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334114.0	Longitude:	1175435.3
Precision:	3	Status:	AU
Comment 1:	TOTAL DEPTH 1025', PERFORATED INTERVAL 310 TO 1025' BGS; DATE DRILLED		
Comment 2:	07/01/83; 80' N OF GISLER, 3000' E OF HARBOR BLVD.		
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		

Sample date:	12-MAR-18	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	12-MAR-18	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	05-FEB-18	Finding:	100.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-FEB-18	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	30-JAN-18	Finding:	300.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	30-JAN-18	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	04-DEC-17	Finding:	100.
Chemical:	COLOR	Report units:	UNITS

Dlr:	0.		
Sample date:	04-DEC-17	Finding:	0.83
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	04-DEC-17	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	04-DEC-17	Finding:	0.48
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	27-NOV-17	Finding:	120.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	27-NOV-17	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	09-NOV-17	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	09-NOV-17	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	09-NOV-17	Finding:	0.48
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	09-NOV-17	Finding:	0.81
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	06-SEP-17	Finding:	0.43
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	06-SEP-17	Finding:	0.76
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	06-SEP-17	Finding:	120.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	14-AUG-17	Finding:	0.42
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	14-AUG-17	Finding:	300.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	10-JUL-17	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		

Sample date:	10-JUL-17	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	10-JUL-17	Finding:	0.84
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	10-JUL-17	Finding:	0.42
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	15-MAY-17	Finding:	160.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	01-MAY-17	Finding:	300.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	01-MAY-17	Finding:	0.71
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	01-MAY-17	Finding:	0.84
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	03-APR-17	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	03-APR-17	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-MAR-17	Finding:	0.42
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	08-MAR-17	Finding:	0.85
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	08-MAR-17	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	06-FEB-17	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	06-FEB-17	Finding:	50.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	11-JAN-17	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON

Dlr:	1.		
Sample date:	11-JAN-17	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	07-NOV-16	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	07-NOV-16	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	03-OCT-16	Finding:	17.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	03-OCT-16	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	01-AUG-16	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	01-AUG-16	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	05-JUL-16	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	05-JUL-16	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	0.6
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	745.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	8.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	186.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	172.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	14.3
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	09-MAY-16	Finding:	8.3
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	09-MAY-16	Finding:	26.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	9.3
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	0.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	143.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	1.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	119.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	3.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-MAY-16	Finding:	420.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	09-MAY-16	Finding:	442.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	02-MAY-16	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	02-MAY-16	Finding:	4.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	04-APR-16	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	04-APR-16	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	08-MAR-16	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-MAR-16	Finding:	4.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON

Dlr:	1.		
Sample date:	10-FEB-16	Finding:	0.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	150.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	0.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	122.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	2.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	10-FEB-16	Finding:	0.71
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	10-FEB-16	Finding:	440.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	10-FEB-16	Finding:	6.2
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	10-FEB-16	Finding:	444.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	0.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	10-FEB-16	Finding:	0.68
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	250.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	4.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	10-FEB-16	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	785.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

Sample date:	10-FEB-16	Finding:	8.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	184.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	205.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	16.
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	6.02
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	10-FEB-16	Finding:	26.8
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	10-FEB-16	Finding:	9.8
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-DEC-15	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	14-DEC-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	02-NOV-15	Finding:	250.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	02-NOV-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	07-OCT-15	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	07-OCT-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	08-SEP-15	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	03-AUG-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	03-AUG-15	Finding:	120.
Chemical:	COLOR	Report units:	UNITS

Dlr:	0.		
Sample date:	01-JUL-15	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	15-JUN-15	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	11-MAY-15	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	11-MAY-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	13-APR-15	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	02-MAR-15	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	02-MAR-15	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	120.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	12-JAN-15	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	12-JAN-15	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-DEC-14	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-DEC-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	13-NOV-14	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	13-NOV-14	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		

Sample date:	01-OCT-14	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	01-OCT-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	17-SEP-14	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	17-SEP-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	15-SEP-14	Finding:	26.8
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	5.19
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	15-SEP-14	Finding:	15.7
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	160.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	176.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	8.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	722.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	9.6
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	0.7
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	150.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	117.
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	15-SEP-14	Finding:	1.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	15-SEP-14	Finding:	420.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	15-SEP-14	Finding:	408.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	0.74
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	15-SEP-14	Finding:	1.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-AUG-14	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	07-AUG-14	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	02-JUL-14	Finding:	4.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	02-JUL-14	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	04-JUN-14	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	07-MAY-14	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.561
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.548
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.886
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		

Sample date:	05-MAY-14	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	3.2e-002
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	05-MAY-14	Finding:	0.107
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	05-MAR-14	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-MAR-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	05-FEB-14	Finding:	1.5
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	05-FEB-14	Finding:	0.76
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	05-FEB-14	Finding:	250.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-JAN-14	Finding:	1.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	08-JAN-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	08-JAN-14	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	11-DEC-13	Finding:	0.77
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	11-DEC-13	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	11-DEC-13	Finding:	120.
Chemical:	COLOR	Report units:	UNITS

Dlr:	0.		
Sample date:	11-DEC-13	Finding:	1.8
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	06-NOV-13	Finding:	120.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	06-NOV-13	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	06-NOV-13	Finding:	0.97
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	06-NOV-13	Finding:	0.73
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	02-OCT-13	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	02-OCT-13	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	02-OCT-13	Finding:	0.45
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	02-OCT-13	Finding:	0.77
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	09-SEP-13	Finding:	166.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	185.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	8.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	723.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	200.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	18.9
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	09-SEP-13	Finding:	5.22
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	09-SEP-13	Finding:	24.9
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	9.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	0.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	144.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	1.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	112.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	2.2
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-SEP-13	Finding:	7.2
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	09-SEP-13	Finding:	420.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	0.64
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-SEP-13	Finding:	400.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	05-SEP-13	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-SEP-13	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	05-SEP-13	Finding:	6.8
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	05-SEP-13	Finding:	0.78
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L

Dlr:	0.1		
Sample date:	08-AUG-13	Finding:	100.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-AUG-13	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	08-AUG-13	Finding:	0.77
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	08-AUG-13	Finding:	1.5
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	03-JUL-13	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	03-JUL-13	Finding:	180.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-APR-13	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	08-APR-13	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	26-FEB-13	Finding:	140.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	8.5
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	23.1
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	4.66
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	26-FEB-13	Finding:	20.4
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	199.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	183.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	26-FEB-13	Finding:	8.7
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	694.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	150.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	2.3
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	26-FEB-13	Finding:	0.74
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	26-FEB-13	Finding:	390.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	26-FEB-13	Finding:	7.1
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	26-FEB-13	Finding:	382.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	0.7
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	26-FEB-13	Finding:	0.61
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	26-FEB-13	Finding:	106.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JAN-13	Finding:	3.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	11-JAN-13	Finding:	250.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		

Map ID Direction Distance Elevation	Database	EDR ID Number
17 **ENE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000136888**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34G001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D18 **NNW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000137019**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W33A002S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

C19 **ENE** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADWR8000004941**

State Well #:	05S10W34H003S	Station ID:	5166
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Coastal Plain Of Orange County		
Well Completion Rpt #:	Not Reported		

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20 **ENE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000136866**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W34H010S	Type:	Well
Description:	Not Reported	HUC:	18070203

Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Alluvium	Aquifer Type:	Confined single aquifer
Construction Date:	19940418	Well Depth:	600
Well Depth Units:	ft	Well Hole Depth:	612
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	2004-06-01
Feet below surface:	126.5	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1999-05-03	Feet below surface:	59.90
Feet to sea level:	Not Reported	Note:	Not Reported

21
NW
1/2 - 1 Mile
Higher

CA WELLS 6284

Seq:	6284	Prim sta c:	05S/10W-33A04 S
Frds no:	3010004008	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 03B	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334205.0	Longitude:	1175521.0
Precision:	3	Status:	AR
Comment 1:	50’ WEST OF HARBOR BLVD, 600’ SOUTH OF MCARTHUR BLVD.		
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		
Sample date:	10-AUG-17	Finding:	2.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-MAY-17	Finding:	318.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	0.88
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-MAY-17	Finding:	3.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-MAY-17	Finding:	510.

Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	129.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	129.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	0.88
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-MAY-17	Finding:	145.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	43.1
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	9.2
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	43.9
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	35.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	08-MAY-17	Finding:	63.4
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	08-MAY-17	Finding:	0.41
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	08-MAY-17	Finding:	140.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	08-MAY-17	Finding:	3.3
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	07-FEB-17	Finding:	3.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		

Sample date:	14-NOV-16	Finding:	5.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	08-AUG-16	Finding:	3.3
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-JUN-16	Finding:	0.74
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-JUN-16	Finding:	0.74
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-MAY-16	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	3.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	01-FEB-16	Finding:	4.3
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	02-NOV-15	Finding:	5.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	10-AUG-15	Finding:	4.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	11-MAY-15	Finding:	3.07
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAY-15	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	11-MAY-15	Finding:	700.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-MAY-15	Finding:	4.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	549.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	144.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L

Dlr:	0.		
Sample date:	09-FEB-15	Finding:	144.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	170.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	50.4
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	10.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	49.3
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	1.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	41.3
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	73.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-FEB-15	Finding:	0.35
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	09-FEB-15	Finding:	2.2
Chemical:	ARSENIC	Report units:	UG/L
Dlr:	2.		
Sample date:	09-FEB-15	Finding:	150.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	09-FEB-15	Finding:	4.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	09-FEB-15	Finding:	284.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	3.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-FEB-15	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		

Sample date:	09-FEB-15	Finding:	0.17
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	670.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-FEB-15	Finding:	4.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	09-FEB-15	Finding:	1.07
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	0.725
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-FEB-15	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	03-NOV-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	03-NOV-14	Finding:	3.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	25-AUG-14	Finding:	5.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	25-AUG-14	Finding:	5.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	04-AUG-14	Finding:	4.1
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	04-AUG-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	2.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-MAY-14	Finding:	7.5
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	05-MAY-14	Finding:	610.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	05-MAY-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	3.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-FEB-14	Finding:	0.591
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	6.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	24-FEB-14	Finding:	690.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-FEB-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	24-FEB-14	Finding:	0.191
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	28-OCT-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	28-OCT-13	Finding:	5.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-SEP-13	Finding:	6.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-SEP-13	Finding:	6.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-AUG-13	Finding:	8.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-AUG-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		

Sample date:	20-MAY-13	Finding:	50.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	5.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	20-MAY-13	Finding:	0.13
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	354.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	130.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	20-MAY-13	Finding:	77.1
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	20-MAY-13	Finding:	598.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	149.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	149.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	180.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	53.6
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	11.1
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	1.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	44.4
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	17-APR-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	17-APR-13	Finding:	0.25
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	11-MAR-13	Finding:	5.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	11-MAR-13	Finding:	656.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	11-MAR-13	Finding:	2.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAR-13	Finding:	0.7
Chemical:	TOTAL TRIHALOMETHANES	Report units:	UG/L
Dlr:	0.		
Sample date:	11-MAR-13	Finding:	520.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-NOV-12	Finding:	6.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-AUG-12	Finding:	6.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	21-MAY-12	Finding:	84.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	21-MAY-12	Finding:	49.2
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	2.2
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	53.4
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	12.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	60.4
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	21-MAY-12	Finding:	202.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	0.4
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	21-MAY-12	Finding:	152.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	152.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	609.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	150.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	21-MAY-12	Finding:	354.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	5.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	01-FEB-12	Finding:	420.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-FEB-12	Finding:	6.2
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	01-FEB-12	Finding:	0.13
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	338.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	3.5
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	01-FEB-12	Finding:	130.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	01-FEB-12	Finding:	2.2
Chemical:	ARSENIC	Report units:	UG/L

Dlr:	2.		
Sample date:	01-FEB-12	Finding:	0.37
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	01-FEB-12	Finding:	95.8
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	01-FEB-12	Finding:	46.9
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	2.1
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	55.9
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	12.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	60.4
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	202.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	186.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	152.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	3.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	01-FEB-12	Finding:	578.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

22
NW
1/2 - 1 Mile
Higher

Site ID:	083001527T
Groundwater Flow:	NE
Shallow Water Depth:	16
Deep Water Depth:	21.6
Average Water Depth:	Not Reported
Date:	05/23/1996

AQUIFLOW **65005**

Map ID Direction Distance Elevation			Database	EDR ID Number
23 **SSW** **1/2 - 1 Mile** **Higher**	Site ID:	083000581T	**AQUIFLOW**	**65363**
	Groundwater Flow:	Not Reported		
	Shallow Water Depth:	Not Reported		
	Deep Water Depth:	Not Reported		
	Average Water Depth:	45		
	Date:	07/15/1993		

24
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40000136763**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W33Q001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	297
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	45	Level reading date:	1986-08-13
Feet below surface:	35.45	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1986-04-29	Feet below surface:	33.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-02-11	Feet below surface:	34.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-11-04	Feet below surface:	36.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-08-07	Feet below surface:	34.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-05-08	Feet below surface:	32.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-02-14	Feet below surface:	33.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-10-25	Feet below surface:	35.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-08-17	Feet below surface:	33.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-10	Feet below surface:	30.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-03	Feet below surface:	29.53
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1983-11-01	Feet below surface:	32.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-10	Feet below surface:	33.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-12	Feet below surface:	32.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-09	Feet below surface:	34.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-02	Feet below surface:	36.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-02	Feet below surface:	35.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-28	Feet below surface:	33.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-29	Feet below surface:	34.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-11-09	Feet below surface:	35.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-07-30	Feet below surface:	32.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-12	Feet below surface:	31.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-02-04	Feet below surface:	34.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-30	Feet below surface:	35.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-26	Feet below surface:	34.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-17	Feet below surface:	32.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-06	Feet below surface:	36.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-08	Feet below surface:	37.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-01	Feet below surface:	36.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-30	Feet below surface:	32.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-05	Feet below surface:	36.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-10-25	Feet below surface:	39.64
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-10-16	Feet below surface:	39.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-25	Feet below surface:	44.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-12	Feet below surface:	50.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-29	Feet below surface:	42.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-11	Feet below surface:	41.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-11	Feet below surface:	40.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-12	Feet below surface:	37.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-04	Feet below surface:	40.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-27	Feet below surface:	39.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-08	Feet below surface:	38.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-05	Feet below surface:	37.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-03-14	Feet below surface:	37.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-01-09	Feet below surface:	38.77
Feet to sea level:	Not Reported	Note:	Not Reported

25
North
1/2 - 1 Mile
Higher

CA WELLS 6287

Seq:	6287	Prim sta c:	05S/10W-34F03 S
Frds no:	3010004011	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 09	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334175.0	Longitude:	1175452.0
Precision:	3	Status:	AR
Comment 1:	Not Reported		
Comment 2:	LOCATED 1060’ E OF HARBOR BLVD. ON SOUTHSIDE OF SUNFLOWER AVE.		
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported

Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		
Sample date:	04-AUG-14	Finding:	1.8
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	05-MAY-14	Finding:	3.1
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	24-FEB-14	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	24-FEB-14	Finding:	0.198
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.684
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.552
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	1.41
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	2.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	24-FEB-14	Finding:	0.31
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	452.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	4.2
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		

Sample date:	24-FEB-14	Finding:	110.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-FEB-14	Finding:	0.24
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	24-FEB-14	Finding:	116.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-FEB-14	Finding:	70.2
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	2.3
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	61.3
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	14.9
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	69.8
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	235.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	0.6
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	24-FEB-14	Finding:	188.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	154.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-FEB-14	Finding:	760.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	28-OCT-13	Finding:	2.7
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	28-OCT-13	Finding:	2.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-AUG-13	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported

Dlr:	0.		
Sample date:	12-AUG-13	Finding:	789.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	3.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	12-AUG-13	Finding:	0.3
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	478.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	120.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	12-AUG-13	Finding:	122.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	12-AUG-13	Finding:	72.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	2.2
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	61.6
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	15.7
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	73.2
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	248.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	0.57
Chemical:	TOTAL ORGANIC CARBON (TOC)	Report units:	MG/L
Dlr:	0.3		
Sample date:	12-AUG-13	Finding:	159.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	12-AUG-13	Finding:	159.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	20-MAY-13	Finding:	2.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	11-MAR-13	Finding:	2.6
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	11-MAR-13	Finding:	3.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-NOV-12	Finding:	7.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	05-NOV-12	Finding:	1.9
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	06-AUG-12	Finding:	3.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	06-AUG-12	Finding:	2.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	23-MAY-12	Finding:	2.
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		
Sample date:	31-JAN-12	Finding:	2.4
Chemical:	1,4-DIOXANE	Report units:	UG/L
Dlr:	1.		

26
ENE **CA WELLS** **CADWR8000004949**
1/2 - 1 Mile
Higher

State Well #:	05S10W34D001S	Station ID:	5165
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Coastal Plain Of Orange County		
Well Completion Rpt #:	Not Reported		

27
NNE **CA WELLS** **CADWR8000005015**
1/2 - 1 Mile
Lower

State Well #:	05S10W27Q001S	Station ID:	5150
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Coastal Plain Of Orange County		
Well Completion Rpt #:	Not Reported		

Map ID Direction Distance Elevation			Database	EDR ID Number
28 **SW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CADWR8000004875**

State Well #:	06S10W04B002S	Station ID:	7311
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Coastal Plain Of Orange County		
Well Completion Rpt #:	Not Reported		

29 **SW** **1/2 - 1 Mile** **Higher**		**CA WELLS**	**CADWR8000004905**

State Well #:	05S10W33Q001S	Station ID:	28719
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Coastal Plain Of Orange County		
Well Completion Rpt #:	Not Reported		

30 **WNW** **1/2 - 1 Mile** **Higher**	Site ID:	083000016T	**AQUIFLOW**	**34041**
	Groundwater Flow:	SE		
	Shallow Water Depth:	Not Reported		
	Deep Water Depth:	Not Reported		
	Average Water Depth:	6.7		
	Date:	05/13/1994		

31 **NE** **1/2 - 1 Mile** **Higher**	Site ID:	083002421T	**AQUIFLOW**	**65332**
	Groundwater Flow:	Not Reported		
	Shallow Water Depth:	Not Reported		
	Deep Water Depth:	Not Reported		
	Average Water Depth:	10		
	Date:	07/05/1994		

32 **SSW** **1/2 - 1 Mile** **Higher**		**FED USGS**	**USGS40000136700**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006S010W04B001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
E33 **NW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000137020**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W33C002S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

E34 **NW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000137039**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W28Q001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

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35 **NE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**6262**

Seq:	6262	Prim sta c:	05S/10W-22P01 S
Frds no:	3010092017	County:	30
District:	08	User id:	TEE
System no:	3010092	Water type:	G
Source nam:	WELL 17	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334214.0	Longitude:	1175419.3
Precision:	2	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3010092	System nam:	Irvine Ranch Water District
Hqname:	Not Reported	Address:	P.O. BOX 57000
City:	IRVINE	State:	CA
Zip:	92716	Zip ext:	Not Reported
Pop serv:	135000	Connection:	50321

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Area serve: IRVINE

Sample date:	07-APR-16	Finding:	1.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	07-APR-15	Finding:	460.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	07-APR-15	Finding:	44.7
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	154.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	148.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	187.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	3.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	07-APR-15	Finding:	282.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	3.9
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	07-APR-15	Finding:	1.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	07-APR-15	Finding:	0.34
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	07-APR-15	Finding:	45.6
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	07-APR-15	Finding:	20.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	1.9
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	40.6
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	07-APR-15	Finding:	8.9
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-APR-15	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	1.13
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	0.605
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	07-OCT-14	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	0.166
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-OCT-14	Finding:	0.477
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	503.
Chemical:	TRITIUM	Report units:	PCI/L
Dlr:	1000.		
Sample date:	16-JUL-13	Finding:	4.e-002
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	0.58
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	0.38
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	347.
Chemical:	TRITIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	4.e-002
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L

Dlr:	0.		
Sample date:	16-JUL-13	Finding:	1.51
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	16-JUL-13	Finding:	0.44
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	0.87
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	318.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	0.5
Chemical:	STRONTIUM - 90 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	1.17
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	0.93
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	1.65
Chemical:	RADIUM 226 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	1.e-002
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-13	Finding:	0.72
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	0.45
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	1.5
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	09-APR-13	Finding:	207.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	0.88
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	0.3
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

Sample date:	09-APR-13	Finding:	0.258
Chemical:	COMBINED RA 226 + RA 228 COUNTING ERROR		
Report units:	PCI/L	Dlr:	0.
Sample date:	09-APR-13	Finding:	0.673
Chemical:	COMBINED RA 226 + RA 228	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	0.24
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	9.6e-002
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	09-APR-13	Finding:	1.62
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	2.13
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	14-JAN-13	Finding:	0.5
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	163.
Chemical:	TRITIUM	Report units:	PCI/L
Dlr:	1000.		
Sample date:	14-JAN-13	Finding:	1.76
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	1.09
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	0.56
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	0.271
Chemical:	COMBINED RA 226 + RA 228 COUNTING ERROR		
Report units:	PCI/L	Dlr:	0.
Sample date:	14-JAN-13	Finding:	8.9e-002
Chemical:	COMBINED RA 226 + RA 228	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	0.24
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-JAN-13	Finding:	5.1e-002
Chemical:	RADIUM 228	Report units:	PCI/L
Dlr:	1.		
Sample date:	14-JAN-13	Finding:	0.13
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L

Dlr:	0.		
Sample date:	14-JAN-13	Finding:	3.8e-002
Chemical:	RADIUM 226	Report units:	PCI/L
Dlr:	1.		
Sample date:	14-JAN-13	Finding:	211.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	0.93
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	1.53
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	211.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	1.63
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	08-OCT-12	Finding:	0.5
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	7.4e-002
Chemical:	RADIUM 226	Report units:	PCI/L
Dlr:	1.		
Sample date:	08-OCT-12	Finding:	6.4e-002
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	0.34
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	0.419
Chemical:	COMBINED RA 226 + RA 228	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	0.348
Chemical:	COMBINED RA 226 + RA 228 COUNTING ERROR		
Report units:	PCI/L	Dlr:	0.
Sample date:	08-OCT-12	Finding:	0.48
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	431.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	08-OCT-12	Finding:	147.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	186.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	130.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	39.2
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	7.8
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	38.1
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	18.8
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	08-OCT-12	Finding:	43.8
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	08-OCT-12	Finding:	0.33
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	08-OCT-12	Finding:	1.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	08-OCT-12	Finding:	4.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	08-OCT-12	Finding:	252.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	0.45
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	0.29
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	0.45
Chemical:	COMBINED RA 226 + RA 228	Report units:	PCI/L

Dlr:	0.		
Sample date:	16-JUL-12	Finding:	0.3
Chemical:	COMBINED RA 226 + RA 228 COUNTING ERROR		
Report units:	PCI/L	Dlr:	0.
Sample date:	16-JUL-12	Finding:	0.43
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	442.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	151.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	184.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	139.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	41.9
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	8.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	40.8
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	18.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	43.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	16-JUL-12	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	16-JUL-12	Finding:	1.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	16-JUL-12	Finding:	4.3
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	16-JUL-12	Finding:	248.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	16-JUL-12	Finding:	0.1
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	0.89
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	1.36
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	212.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JUL-12	Finding:	1.6
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	16-JUL-12	Finding:	9.e-002
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	0.49
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	0.27
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	0.598
Chemical:	COMBINED RA 226 + RA 228	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	0.294
Chemical:	COMBINED RA 226 + RA 228 COUNTING ERROR		
Report units:	PCI/L	Dlr:	0.
Sample date:	07-MAY-12	Finding:	6.5e-002
Chemical:	STRONTIUM - 90	Report units:	PCI/L
Dlr:	2.		
Sample date:	07-MAY-12	Finding:	0.41
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	435.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US

Dlr:	0.		
Sample date:	07-MAY-12	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	148.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	132.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	40.2
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	7.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	38.4
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	18.5
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	43.4
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	07-MAY-12	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	07-MAY-12	Finding:	1.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	07-MAY-12	Finding:	5.9
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	07-MAY-12	Finding:	246.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	0.84
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

Sample date:	07-MAY-12	Finding:	1.38
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	101.
Chemical:	TRITIUM	Report units:	PCI/L
Dlr:	1000.		
Sample date:	07-MAY-12	Finding:	205.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-MAY-12	Finding:	1.57
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	07-MAY-12	Finding:	0.12
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	7.e-002
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	0.49
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	0.25
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	0.392
Chemical:	COMBINED RA 226 + RA 228	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	0.26
Chemical:	COMBINED RA 226 + RA 228 COUNTING ERROR		
Report units:	PCI/L	Dlr:	0.
Sample date:	16-JAN-12	Finding:	0.47
Chemical:	STRONTIUM - 90 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	430.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	143.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	174.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	134.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L

Dlr:	0.		
Sample date:	16-JAN-12	Finding:	40.3
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	8.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	40.5
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	1.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	18.6
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	43.4
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	16-JAN-12	Finding:	0.33
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	16-JAN-12	Finding:	1.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	16-JAN-12	Finding:	4.3
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	16-JAN-12	Finding:	267.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	1.02
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	1.66
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	162.
Chemical:	TRITIUM	Report units:	PCI/L
Dlr:	1000.		
Sample date:	16-JAN-12	Finding:	211.
Chemical:	TRITIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	16-JAN-12	Finding:	1.8
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		

Map ID Direction Distance Elevation			Database	EDR ID Number
36 **North** **1/2 - 1 Mile** **Higher**	Site ID:	083000224T	**AQUIFLOW**	**38928**
	Groundwater Flow:	SW		
	Shallow Water Depth:	6.17		
	Deep Water Depth:	10		
	Average Water Depth:	Not Reported		
	Date:	01/10/1997		

37
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000136807**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S010W35M001S	Type:	Well
Description:	NAWQA DATA ENTRY COM + VER 06/15/2000 SDIONNE		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Quaternary Alluvium	Aquifer Type:	Unconfined single aquifer
Construction Date:	19991118	Well Depth:	28.5
Well Depth Units:	ft	Well Hole Depth:	28.5
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	2000-06-09
Feet below surface:	11.3	Feet to sea level:	Not Reported
Note:	Not Reported		

F38
ENE
1/2 - 1 Mile
Higher

CA WELLS **6289**

Seq:	6289	Prim sta c:	05S/10W-34H10 S
Frds no:	3010004012	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WELL 01B	Station ty:	WELL/AMBNT
Latitude:	334200.0	Longitude:	1175400.0
Precision:	3	Status:	AR
Comment 1:	LOCATED A 1150 SUNFLOWER BLVD - 500' E OF FAIRVIEW AVE ON SUNFLOWER BL		
Comment 2:	VD. NEXT TO WELL 01 WHICH IS DESTROYED.		
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		

Sample date:	09-MAY-16	Finding:	487.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

Sample date:	09-MAY-16	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	142.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	173.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	133.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	40.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	8.1
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	46.6
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	32.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	53.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	09-MAY-16	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	09-MAY-16	Finding:	5.3
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	09-MAY-16	Finding:	308.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	09-MAY-16	Finding:	0.11
Chemical:	BROMIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.886
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.527
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L

Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.655
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.418
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	05-MAY-14	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	0.222
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0		
Report units:	PCI/L	Dlr:	0.
Sample date:	05-MAY-14	Finding:	0.186
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-MAY-14	Finding:	1.11
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	491.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	142.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	173.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	131.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	39.5
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	288.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	46.7
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	20-MAY-13	Finding:	1.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	30.2
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	20-MAY-13	Finding:	53.3
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	20-MAY-13	Finding:	0.32
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	20-MAY-13	Finding:	6.7
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	20-MAY-13	Finding:	7.9
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	480.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	142.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	142.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	274.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	8.2
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	50.4
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-MAY-12	Finding:	31.2
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	21-MAY-12	Finding:	55.1
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	21-MAY-12	Finding:	42.5
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

F39
ENE
1/2 - 1 Mile
Higher

CA WELLS 6288

Seq:	6288	Prim sta c:	05S/10W-34H03 S
Frds no:	3010004001	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	SEGERSTROM WELL 01 - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334200.0	Longitude:	1175400.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		

F40
ENE
1/2 - 1 Mile
Higher

CA WELLS 6293

Seq:	6293	Prim sta c:	05S/10W-35F02 S
Frds no:	3010004002	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WAKEHAM - DESTROYED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	334200.0	Longitude:	1175400.0
Precision:	8	Status:	DS
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		

Map ID Direction Distance Elevation		Database	EDR ID Number
F41 **ENE** **1/2 - 1 Mile** **Higher**		**CA WELLS**	**6292**

Seq:	6292	Prim sta c:	05S/10W-35E01 S
Frds no:	3010004003	County:	30
District:	08	User id:	TEE
System no:	3010004	Water type:	G
Source nam:	WAKEHAM WELL 02 - INACTIVE	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	334200.0	Longitude:	1175400.0
Precision:	5	Status:	IR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3010004	System nam:	Mesa Consolidated WD
Hqname:	Not Reported	Address:	P.O. Box 5008
City:	Costa Mesa	State:	CA
Zip:	92628	Zip ext:	Not Reported
Pop serv:	97000	Connection:	22370
Area serve:	COSTA MESA		

1G **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000224T SW 6.17 10 Not Reported 01/10/1997	**AQUIFLOW**	**38928**

2G **NNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001957T Not Reported Not Reported Not Reported 9.25 06/08/1999	**AQUIFLOW**	**68215**

3G **NNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001957T Not Reported Not Reported Not Reported 9.25 06/08/1999	**AQUIFLOW**	**68216**

4G **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083002421T Not Reported Not Reported Not Reported 10 07/05/1994	**AQUIFLOW**	**65332**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
5G **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001527T NE 16 21.6 Not Reported 05/23/1996	**AQUIFLOW**	**65005**
6G **WNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000016T SE Not Reported Not Reported 6.7 05/13/1994	**AQUIFLOW**	**34041**
7G **East** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083002609T Varies,SW-SE 9 14 Not Reported 03/12/1999	**AQUIFLOW**	**54970**
8G **SSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000703T SW Not Reported Not Reported 28.47 01/29/1999	**AQUIFLOW**	**54968**
9G **SSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000581T Not Reported Not Reported Not Reported 45 07/15/1993	**AQUIFLOW**	**65363**

Map ID Direction Distance	Database	EDR ID Number

1
NNE
1/8 - 1/4 Mile

OIL_GAS **CAOG13000006289**

API #:	0405901285	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Westates Petroleum Co.	Lease Name:	Segerstrom
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	Not Reported

2
SW
1/2 - 1 Mile

OIL_GAS **CAOG13000006186**

API #:	0405901174	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Chevron U.S.A. Inc.	Lease Name:	S.O.-Twa-Turley
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	Not Reported

A3
North
1/2 - 1 Mile

OIL_GAS **CAOG13000006187**

API #:	0405901175	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Chevron U.S.A. Inc.	Lease Name:	Santa Ana Gardens
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	Not Reported

A4
North
1/2 - 1 Mile

OIL_GAS **CAOG13000006017**

API #:	0405900987	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	P. M. Girard	Lease Name:	Mark Fisher
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92626	70	5

Federal EPA Radon Zone for ORANGE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ORANGE COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.763 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

NOISE CALCULATIONS

Construction Generated Noise

Building Type	Office, Hotel, Hospital, School, Public Works	**Distance (ft)**
Construction Noise at 50 Feet (dBA Leq)		50
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	84	
Excavation	89	
Foundation Construction	78	
Building Construction	87	
Finishing and Site Cleanup	89	
Residential Use along Susan Street		
Maximum Construction Noise (dBA Leq)		630
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	62	
Excavation (Site Preparation)	67	
Foundation Construction	56	
Building Construction	65	
Paving	67	
Average Construction Noise (dBA Leq)		1,250
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	56	
Excavation (Site Preparation)	61	
Foundation Construction	50	
Building Construction	59	
Paving	61	
National University Building		
Maximum Construction Noise (dBA Leq)		615
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	62	
Excavation (Site Preparation)	67	
Foundation Construction	56	
Building Construction	65	
Paving	67	
Average Construction Noise (dBA Leq)		749
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	60	
Excavation (Site Preparation)	65	
Foundation Construction	54	
Building Construction	63	
Paving	65	
California Southern University Building		
Maximum Construction Noise (dBA Leq)		617
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	62	
Excavation (Site Preparation)	67	
Foundation Construction	56	
Building Construction	65	
Paving	67	
Average Construction Noise (dBA Leq)		803
Construction Phase	**All Applicable Equipment in Use**[1]	
Ground Clearing/Demolition	60	
Excavation (Site Preparation)	65	
Foundation Construction	54	
Building Construction	63	
Paving	65	

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.

Construction Generated Vibration

Office Use to the Northwest of the Project Site		Closest Distance (feet):	250
	Approximate RMS a 66	Approximate RMS 73.000	
Equipment	inch/second	inch/second	
Vibratory roller	0.21	0.007	
Large bulldozer	0.089	0.003	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.001	
Loaded trucks	0.076	0.002	
	Criteria	0.250	1700
National University Building		Closest Distance (feet):	200
	Approximate RMS a	Approximate RMS	
Equipment	Velocity at 25 ft, inch/second	Velocity Level, inch/second	
Vibratory roller	0.21	0.009	
Caisson Drill	0.089	0.004	
Large bulldozer	0.089	0.004	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.002	
Loaded trucks	0.076	0.003	
	Criteria	0.250	
California Southern University Building		Closest Distance (feet):	210
	Approximate RMS a	Approximate RMS	
Equipment	Velocity at 25 ft, inch/second	Velocity Level, inch/second	
Vibratory roller	0.21	0.009	
Caisson Drill	0.089	0.004	
Large bulldozer	0.089	0.004	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.001	
Loaded trucks	0.076	0.003	
	Criteria	0.250	
	Criteria	0.250	

Based on distance to nearest structure

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

APPENDIX D

REVISED TRAFFIC IMPACT ANALYSIS (TIA) REPORT FOR THE PRESS SITE PHASES 1, 2, AND 3

LINSCOTT
LAW &
GREENSPAN
engineers

REVISED TRAFFIC IMPACT ANALYSIS REPORT

THE PRESS SITE PHASES 1, 2 AND 3

Costa Mesa, California
January 7, 2020
(Original dated November 6, 2019)

Prepared for:

STEELWAVE CDS, LLC
4000 East Third Avenue, Suite #500
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and

CITY OF COSTA MESA
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REVISED TRAFFIC IMPACT ANALYSIS REPORT

THE PRESS SITE PHASES 1, 2 AND 3

Costa Mesa, California
January 7, 2020 (Original dated November 6, 2019)

1.0 INTRODUCTION

This traffic impact analysis addresses the potential traffic impacts associated with the proposed Press Site Project Phases 1, 2 and 3 (hereinafter referred to as Project) in the City of Costa Mesa, California. Project Phase 1 consists of renovating and occupying 346,300 SF of the former LA Times office building with office uses, Phase 2 consists of 50,909 SF commercial space and Phase 3 consists of 107,650 SF of additional office space.

This report documents the findings and recommendations of a *traffic* impact analysis conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine the potential impacts associated with the proposed Project. The traffic analysis evaluates the existing operating conditions at eighteen (18) key study intersections within the project vicinity, estimates the trip generation potential of the Project, and forecasts future operating conditions without and with the proposed Project. Where necessary, intersection improvements/mitigation measures are identified.

This traffic report satisfies the *City of Costa Mesa Traffic Impact Analysis Methodology,* dated February 2009 and is consistent with the requirements and procedures outlined in the most current *Congestion Management Program (CMP) for Orange County.* ***Appendix A*** contains the Scope of Work for this traffic study was developed in conjunction with City of Costa Mesa Public Works Department staff.

The project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing peak hour traffic information has been collected at eighteen (18) key study intersections for use in the preparation of level of service calculations. Information concerning cumulative projects (planned and/or approved) in the vicinity of the project has been researched at the Cities of Costa Mesa, Santa Ana and Fountain Valley. Based on our research, there are eight (8) related projects located in the City of Costa Mesa, six (6) related projects located in the City of Santa Ana, and two (2) related projects located in the City of Fountain Valley.

This traffic report analyzes existing and future weekday AM peak hour and PM peak hour traffic conditions for a near-term (Year 2021) traffic setting upon completion of the proposed Project Phases 1 and 2 and a long-term (Year 2035) traffic setting upon completion of the proposed Project Phases 1, 2 and 3. Near-term (Year 2021) cumulative peak hour traffic forecasts were projected by incorporating a one percent (1.0%) annual growth rate, the trip generation potential of the sixteen (16) related projects. Long-term (Year 2035) buildout peak hour traffic forecasts were based on Year 2035 volumes from the *Tribune Property Traffic Analysis,* prepared by Stantec in August 2016.

1.1 Study Area

The eighteen (18) key study intersections selected for evaluation in this report provide both regional and local access to the study area. They consist of the following:

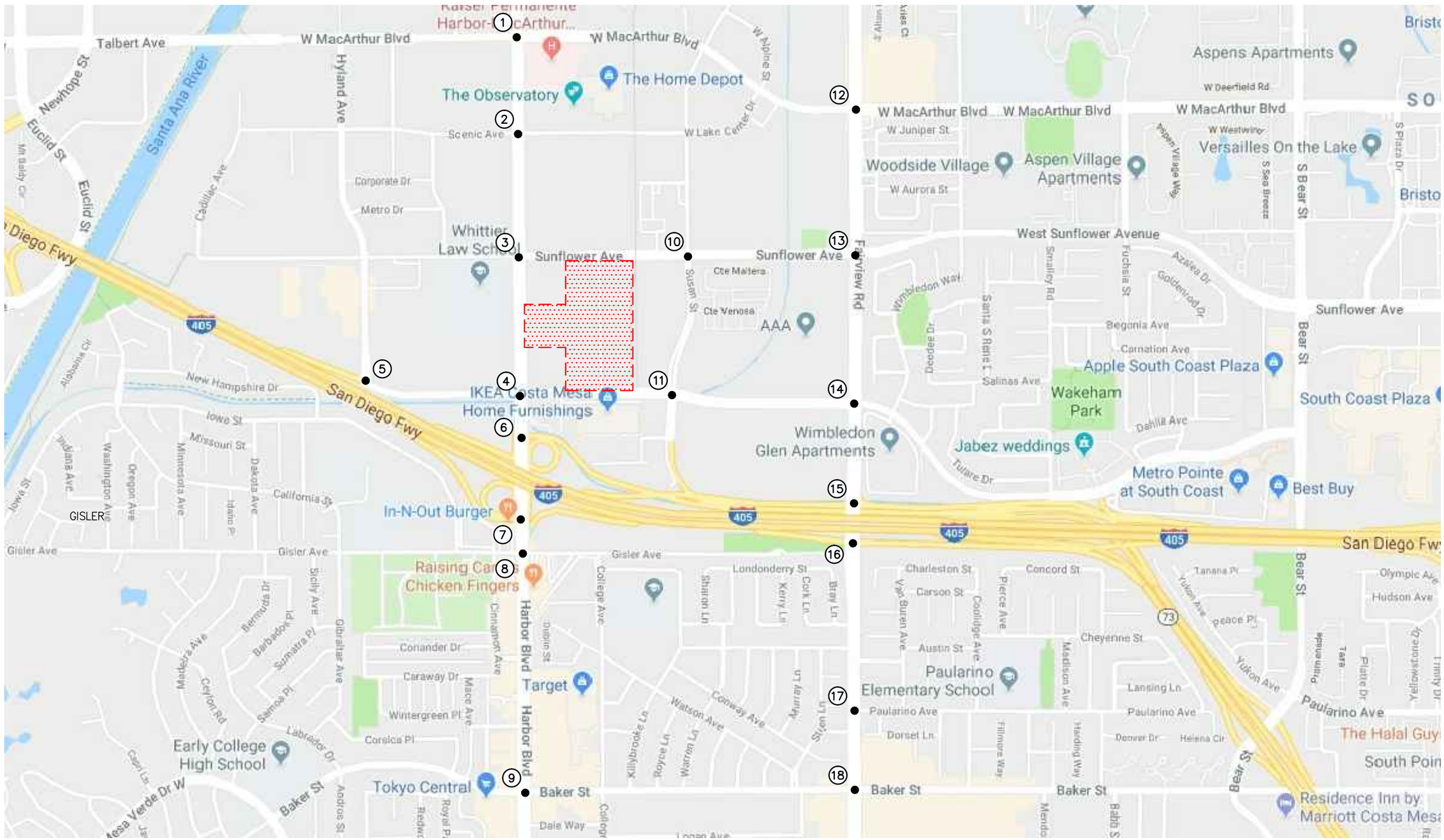
Study Intersections

1. Harbor Boulevard at MacArthur Boulevard (Costa Mesa/Santa Ana)
2. Harbor Boulevard at Scenic Avenue/Lake Center Drive (Costa Mesa)
3. Harbor Avenue at Sunflower Avenue (Costa Mesa/Santa Ana)
4. Harbor Avenue at South Coast Drive (Costa Mesa)
5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp (Costa Mesa/Caltrans)
6. Harbor Avenue at I-405 NB Ramps (Costa Mesa/Caltrans)
7. Harbor Avenue at I-405 SB Ramps (Costa Mesa/Caltrans)
8. Harbor Avenue at Gisler Avenue (Costa Mesa)
9. Harbor Avenue at Baker Street (Costa Mesa)
10. Susan Street at Sunflower Avenue (Costa Mesa)
11. Susan Street at South Coast Drive (Costa Mesa)
12. Fairview Road at MacArthur Boulevard (Santa Ana)
13. Fairview Road at Sunflower Avenue (Costa Mesa/Santa Ana)
14. Fairview Road at South Coast Drive (Costa Mesa)
15. Fairview Road at I-405 NB Ramps (Costa Mesa/Caltrans)
16. Fairview Road at I-405 SB Ramps (Costa Mesa/Caltrans)
17. Fairview Road at Paularino Avenue (Costa Mesa)
18. Fairview Road at Baker Street (Costa Mesa)

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the proposed Project and depicts the study locations and surrounding street system. The Level of Service (LOS) investigations at these key locations were used to evaluate the potential traffic-related impacts associated with area growth, cumulative projects and the proposed Project. When necessary, this report recommends intersection improvements that may be required to accommodate future traffic volumes and restore/maintain an acceptable Level of Service and/or mitigate the impact of the project.

Included in this Traffic Impact Analysis are:

- Existing traffic counts,
- Estimated project traffic generation/distribution/assignment,
- AM and PM peak hour capacity analyses for existing conditions,
- AM and PM peak hour capacity analyses for existing plus project Phases 1, 2 and 3 conditions,
- AM and PM peak hour capacity analyses for future near-term (Year 2021) traffic conditions without and with the proposed Project Phases 1 and 2,
- AM and PM peak hour capacity analyses for future long-term (Year 2035) traffic conditions without and with the proposed Project Phases 1, 2 and 3,
- Caltrans analysis,
- Site Access and Internal Circulation Evaluation, and
- Recommended improvements and CMP Assessment.



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 1-1

VICINITY MAP

THE PRESS SITE, COSTA MESA

2.0 PROJECT DESCRIPTION

The Project site is addressed at 1375 Sunflower Avenue, 1376 South Coast Drive, and 3370 Harbor Boulevard. It is generally located east of Harbor Avenue between South Coast Drive and Sunflower Avenue in the City of Costa Mesa, California. The existing building was formerly the LA Times site. ***Figure 2-1*** presents an aerial depiction of the existing site.

Table 2-1 presents the project development summary for Phases 1, 2 and 3. A review of *Table 2-1* indicates that Phase 1 consists of renovating and occupying 346,300 SF of the former LA Times office building with office uses, Phase 2 includes 50,909 SF of commercial space, and Phase 3 includes 107,650 SF office. The commercial space is comprised of 276 SF office space, 3,966 SF retail, 1,808 SF meeting space, 7,182 SF drinking place, 34,149 SF high turnover sit-down restaurant, and 3,528 SF fast food restaurant without drive-through.

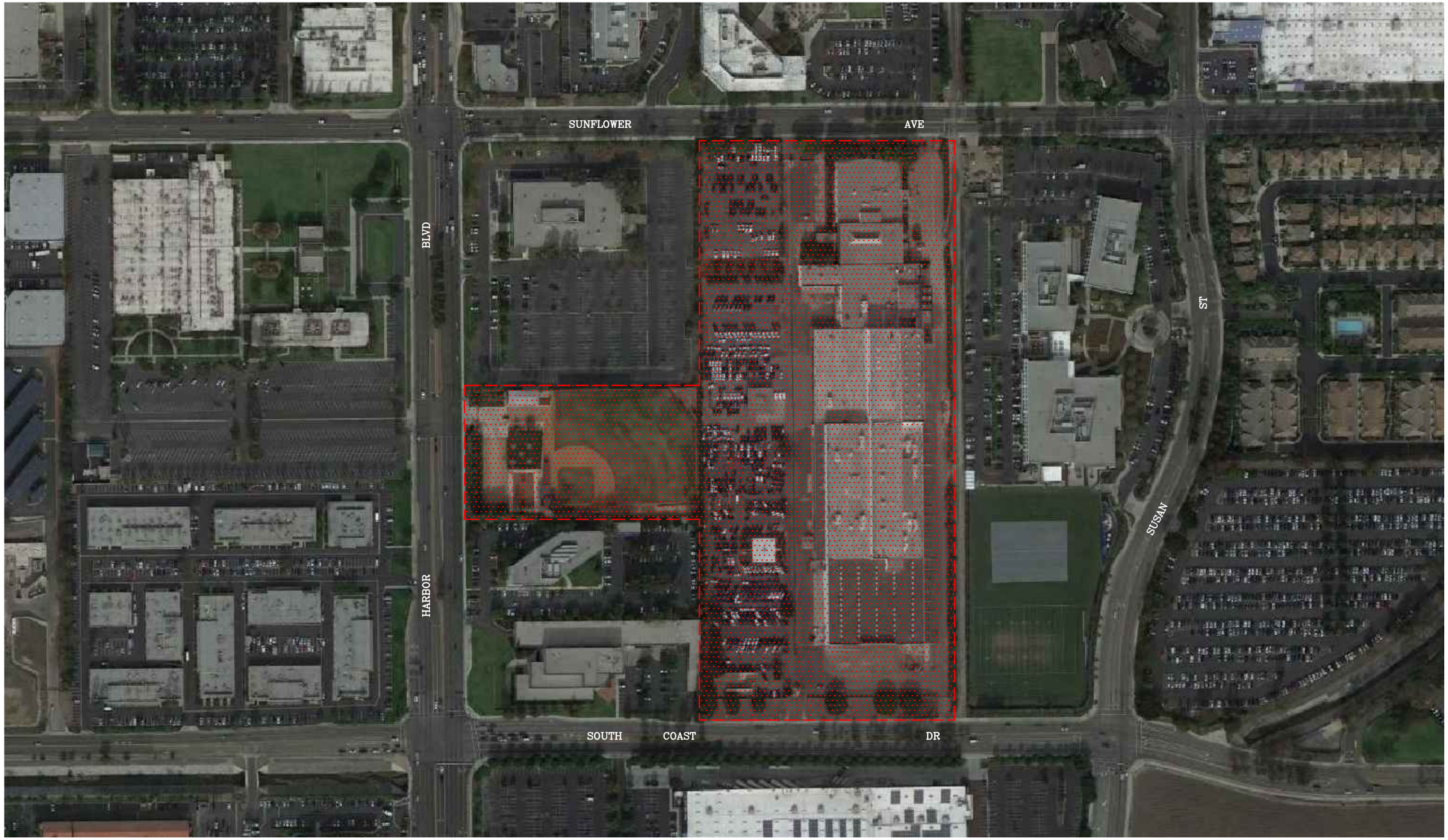
Phase 1 of the proposed Project is expected to be completed and occupied by Year 2020. Phase 2 of the Project is expected to be constructed over the next couple of years or so by late 2020. However, to provide a conservative assessment, Year 2021 has been utilized assess the Project's potential opening year (full buildout/occupancy) traffic impacts within a near-term cumulative traffic setting. Phase 3 of the Project is expected to be completed within the long-term (Year 2035) general plan buildout traffic setting. ***Figure 2-2*** presents the site plan for the proposed Project Phases 1, 2 and 3 prepared by Ehrlich Yanai Rhee Chaney Architects.

2.1 Site Access

As shown in *Figure 2-2*, access to the project site will be provided by one (1) unsignalized full access driveway on Sunflower Avenue, one (1) unsignalized right-turn in/out only driveway on Sunflower Avenue, one (1) signalized full access driveway on Harbor Boulevard, one (1) signalized full access driveway on South Coast Drive, and one (1) unsignalized right-turn in/out only driveway on South Coast Drive.

It should be noted that to ensure that adequate site access is maintained and eastbound left-turn traffic does not queue into the eastbound through lanes and block through traffic, the Project is proposing to implement Project Design Features. These Project Design Features are subject to review and approval by the City of Costa Mesa and includes the following:

- Project Driveway (West) at South Coast Drive: Modify the existing median to accommodate a 245-foot eastbound left-turn lane with a 60-foot transition and install a three-phase signal with pedestrian crosswalks consistent with the most current MUTCD and City of Costa Mesa standards. The southbound approach will be striped with an exclusive left-turn lane and right-turn lane with an overlap phase.



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LINSCOTT LAW & GREENSPAN engineers

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SOURCE: GOOGLE

KEY

= PROJECT SITE

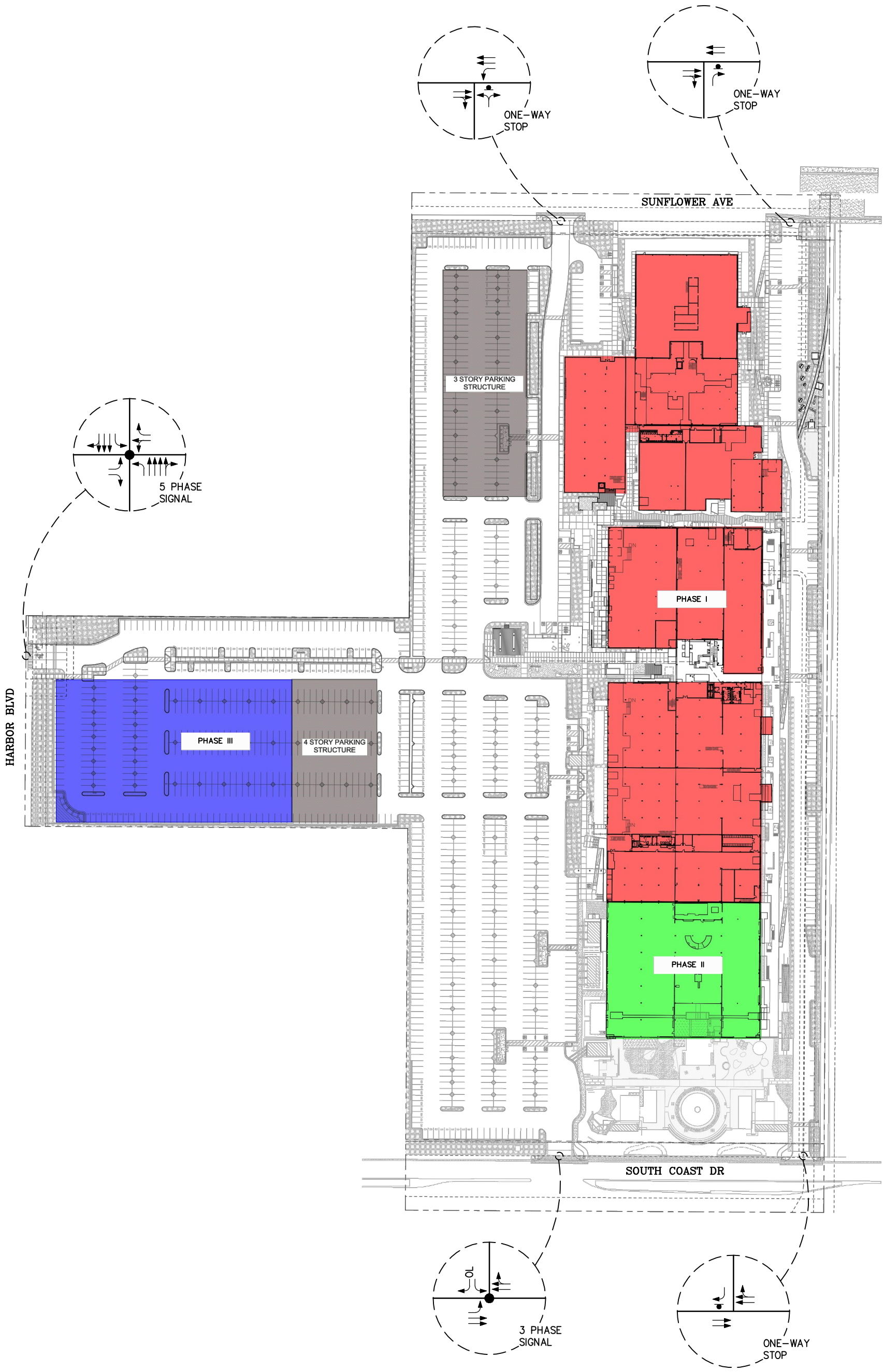
FIGURE 2-1

EXISTING SITE AERIAL

THE PRESS SITE, COSTA MESA

TABLE 2-1
PROJECT DEVELOPMENT SUMMARY

Project Description	Allocation of Land Uses per ITE Trip Generation					
	Office	**Retail**	**Meeting Space**	**Drinking Place**	**High Turnover Sit Down Restaurant**	**Fast Food Restaurant without Drive-Thru**
Phase 1						
Office	346,300 SF	--	--	--	--	--
Phase 2						
Café	--	--	--	--	5,195 SF	--
Food Stall	--	--	--	--	--	3,528 SF
Bar	--	--	--	2,721 SF	--	--
Retail	--	2,423 SF	--	--	--	--
Service	--	1,543 SF	--	--	--	--
Restaurant	--	--	--	--	20,767 SF	--
Back of House/Storage	--	--	--	--	906 SF	--
Speakeasy	--	--	--	2,514 SF	--	--
Meeting Space	--	--	1,808 SF	--	--	--
Dedicated Patio	--	--	--	--	7,281 SF	--
Brewery	--	--	--	1,947 SF	--	--
Management Office	276 SF	--	--	--	--	--
Phase 3						
Office	107,650 SF	--	--	--	--	--
Project Phases 1 and 2 Total	**346,576 SF**	**3,966 SF**	**1,808 SF**	**7,182 SF**	**34,149 SF**	**3,528 SF**
Project Phases 1, 2 and 3 Total	**454,226 SF**	**3,966 SF**	**1,808 SF**	**7,182 SF**	**34,149 SF**	**3,528 SF**



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SOURCE: EHRLICH YANAI RHEE CHANEY ARCHITECTS

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FIGURE 2-2

PHASE 1, 2 AND 3 SITE PLAN

THE PRESS SITE, COSTA MESA

3.0 EXISTING CONDITIONS

3.1 Existing Street System

The principal local network of streets serving the project site includes Harbor Boulevard, Susan Street, Fairview Road, MacArthur Boulevard, Sunflower Avenue, and South Coast Drive. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

Harbor Boulevard is an eight-lane, divided roadway south of South Coast Drive, a seven-lane divided roadway between South Coast Drive and Sunflower Avenue, and a six-lane divided roadway north of Sunflower Avenue oriented in the north-south direction. Harbor Boulevard borders the Project site to the west. The posted speed limit is 40 mph. On-street parking is generally not permitted along this roadway within the vicinity of the Project. Traffic signals control the study intersections of Harbor Boulevard at MacArthur Boulevard, Scenic Avenue/Lake Center Drive, Sunflower Avenue, South Coast Drive, I-405 Ramps, Gisler Avenue and Baker Street.

Susan Street is generally a four-lane, divided roadway south of Sunflower Avenue and a two-lane, divided roadway north of Sunflower Avenue oriented in the north-south direction. The posted speed limit on Susan Street is 35 mph. On-street parking is generally not permitted along this roadway within the vicinity of the Project. Traffic signals control the study intersections of Susan Street at Sunflower Avenue and South Coast Drive.

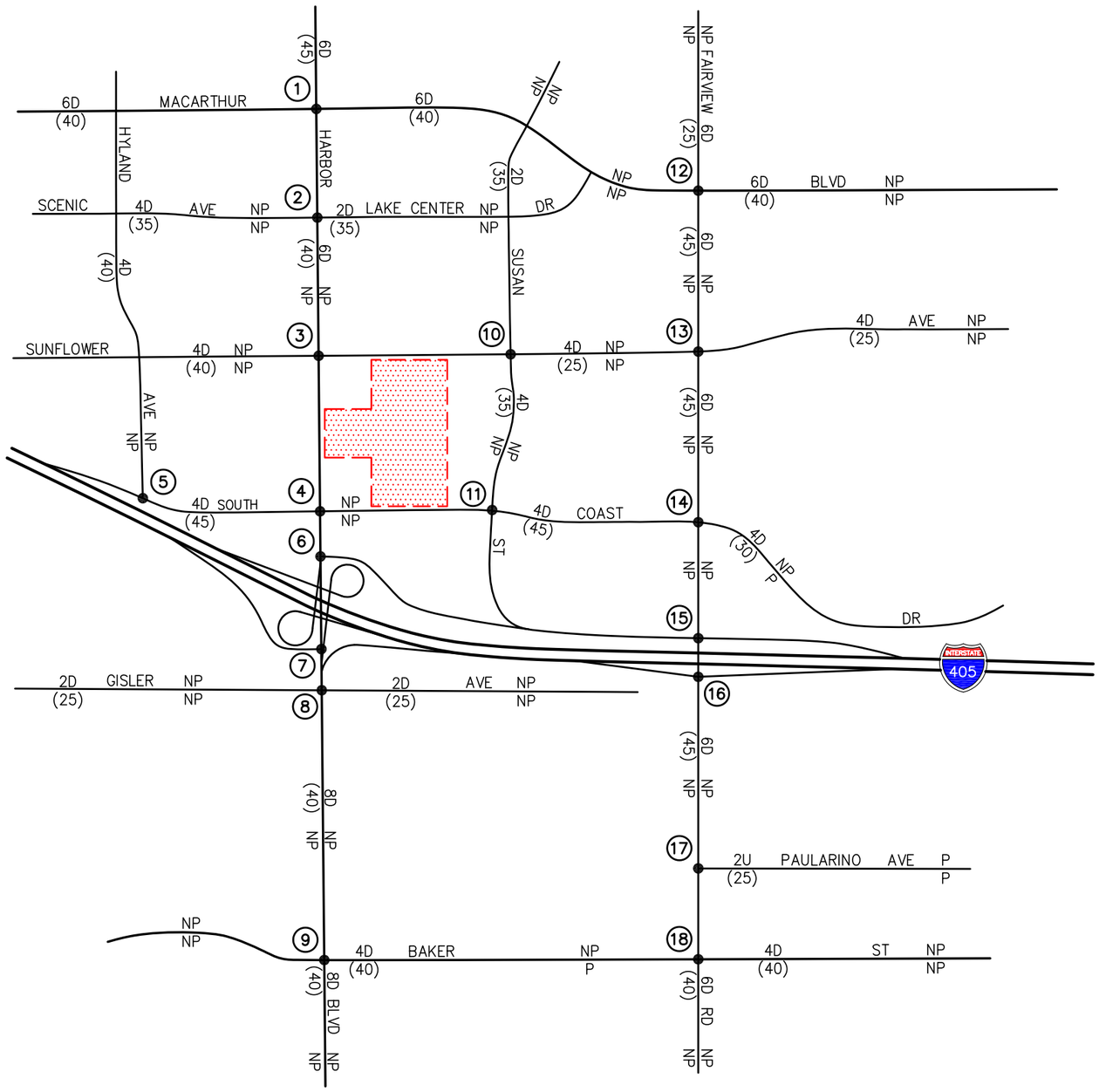
Fairview Road is generally a six-lane, divided roadway oriented in the north-south direction. The posted speed limit on Fairview Road is 45 mph. On-street parking is generally not permitted along this roadway in the vicinity of the Project. Traffic signals control the study intersections of Fairview Road at MacArthur Boulevard, Sunflower Avenue, South Coast Drive, I-405 Ramps, Paularino Avenue, and Baker Street.

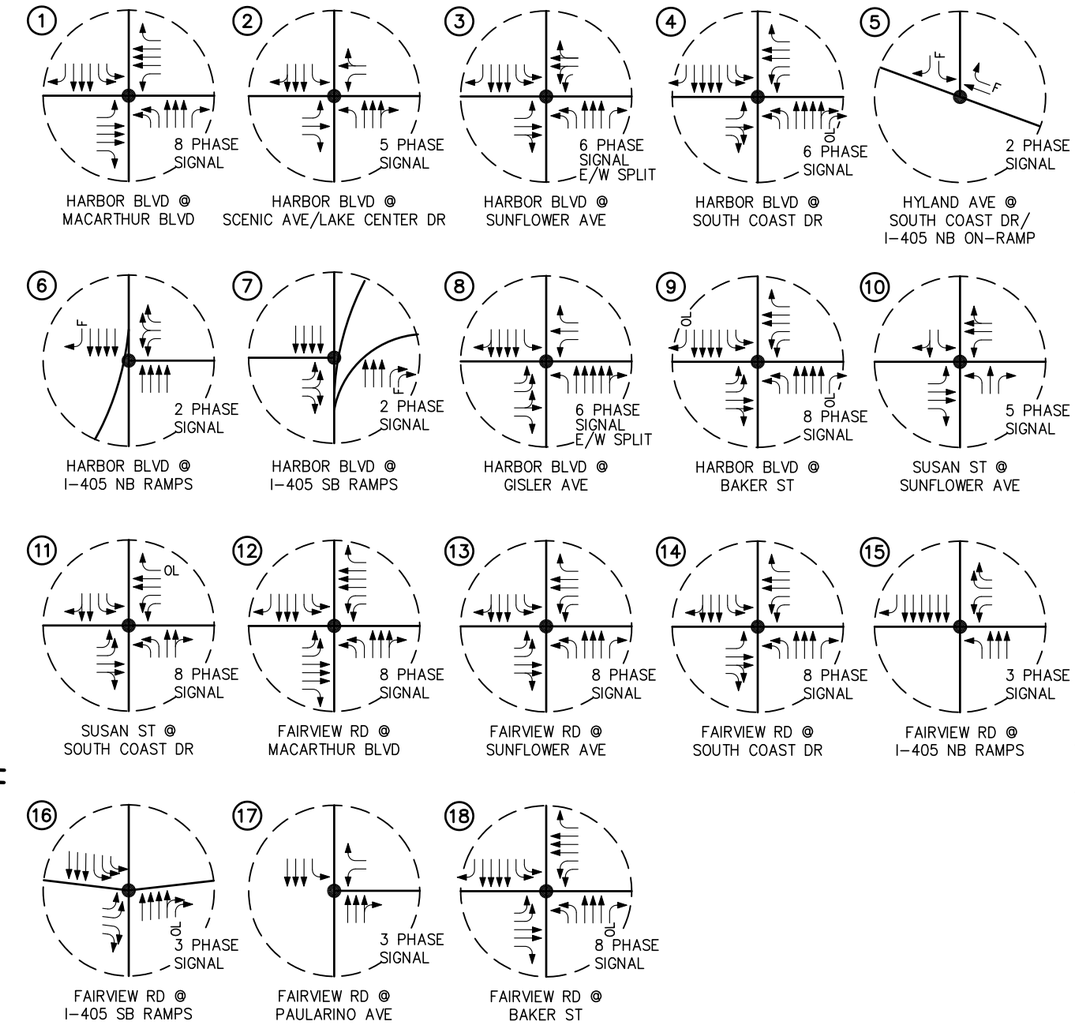
MacArthur Boulevard is generally a six-lane, divided roadway oriented in the east-west direction. The posted speed limit on MacArthur Boulevard is 40 mph. On-street parking is generally not permitted along this roadway within the vicinity of the Project.

Sunflower Avenue is generally a four-lane, divided roadway oriented in the east-west direction that borders the Project site to the north. The posted speed limit on Sunflower Avenue is 40 mph. On-street parking is generally not permitted along this roadway within the vicinity of the Project.

South Coast Drive is generally a four-lane, divided roadway oriented in the east-west direction that borders the Project site to the south. The posted speed limit on South Coast Drive is 45 mph. On-street parking is generally not permitted along this roadway within the vicinity of the Project.

Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. This figure identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key area study intersections.





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KEY

- ← = APPROACH LANE ASSIGNMENT
- ● = TRAFFIC SIGNAL, ☛ = STOP SIGN
- P = PARKING, NP = NO PARKING
- U = UNDIVIDED, D = DIVIDED
- 2 = NUMBER OF TRAVEL LANES
- (XX) = POSTED SPEED LIMIT (MPH)
- F = FREE-RIGHT, OL = OVERLAP
- = PROJECT SITE

FIGURE 3-1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

THE PRESS SITE, COSTA MESA

3.2 Existing Traffic Volumes

Eighteen (18) key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will pass through each of these intersections, and their analysis will reveal the expected relative impacts of the project. These key locations were selected for evaluation based on discussions with City of Costa Mesa staff and in consideration of Orange County CMP requirements.

Existing AM peak hour and PM peak hour traffic volumes for the eighteen (18) key study intersections evaluated in this report were obtained from manual turning movement counts conducted by AimTD LLC in May 2018 while schools were still in session.

Figures 3-2 and ***3-3*** illustrate the existing AM and PM peak hour traffic volumes at the eighteen (18) key study intersections evaluated in this report, respectively. ***Appendix B*** contains the detailed peak hour traffic count sheets for the key intersections evaluated in this report.

3.3 Existing Intersection Conditions

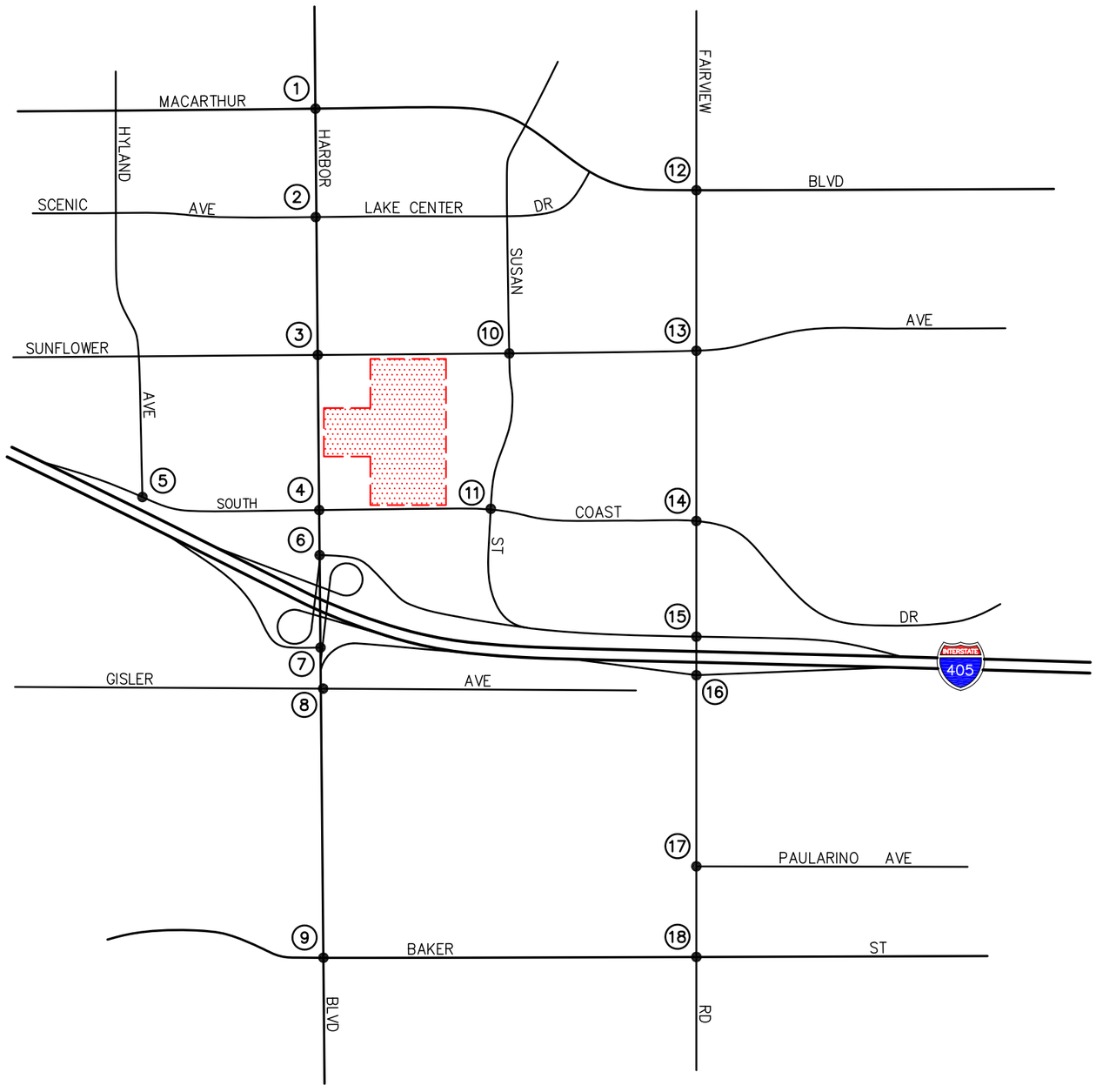
Existing AM and PM peak hour operating conditions for the eighteen (18) key study intersections were evaluated using the *Intersection Capacity Utilization* (ICU) methodology for signalized intersections and the methodology outlined in the *Highway Capacity Manual 6 (HCM 6)* for unsignalized intersections.

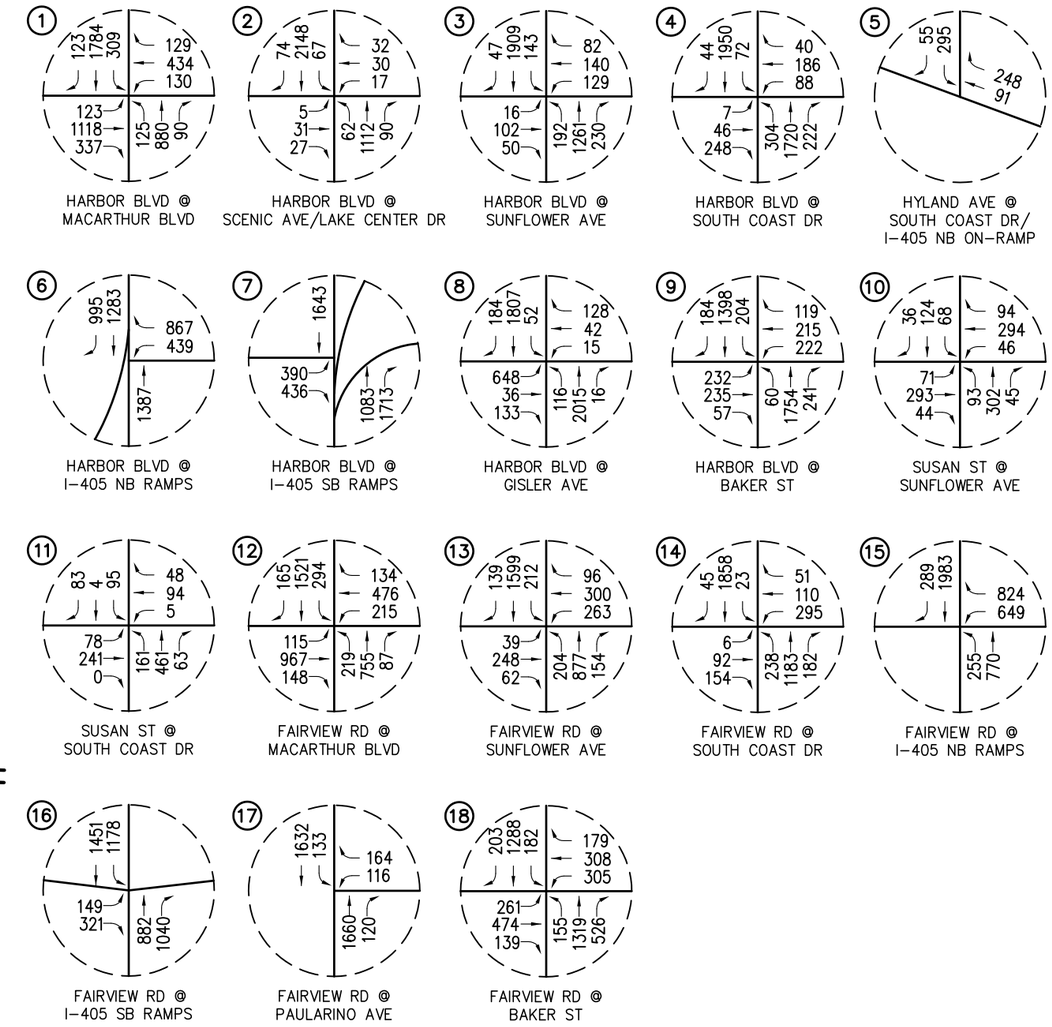
3.3.1 *Intersection Capacity Utilization (ICU) Method of Analysis*

In conformance with City of Costa Mesa, City of Santa Ana and Orange County CMP requirements, existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per City of Costa Mesa requirements, the ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn lanes, through lanes and right-turn lanes. No adjustments for clearance intervals are made since the assumed lane capacity reflects the effect of lost time. Per the direction of City staff, existing peak hour factors (PHF) were applied to level of service calculations for existing and near-term (Year 2021) traffic conditions.

Per City of Santa Ana requirements, the ICU calculations use a lane capacity of 1,700 vph for through lanes and 1,600 vph for left-turn lanes and right-turn lanes. A clearance adjustment factor of 0.05 was added to each Level of Service calculation.





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SOURCE: GOOGLE

KEY

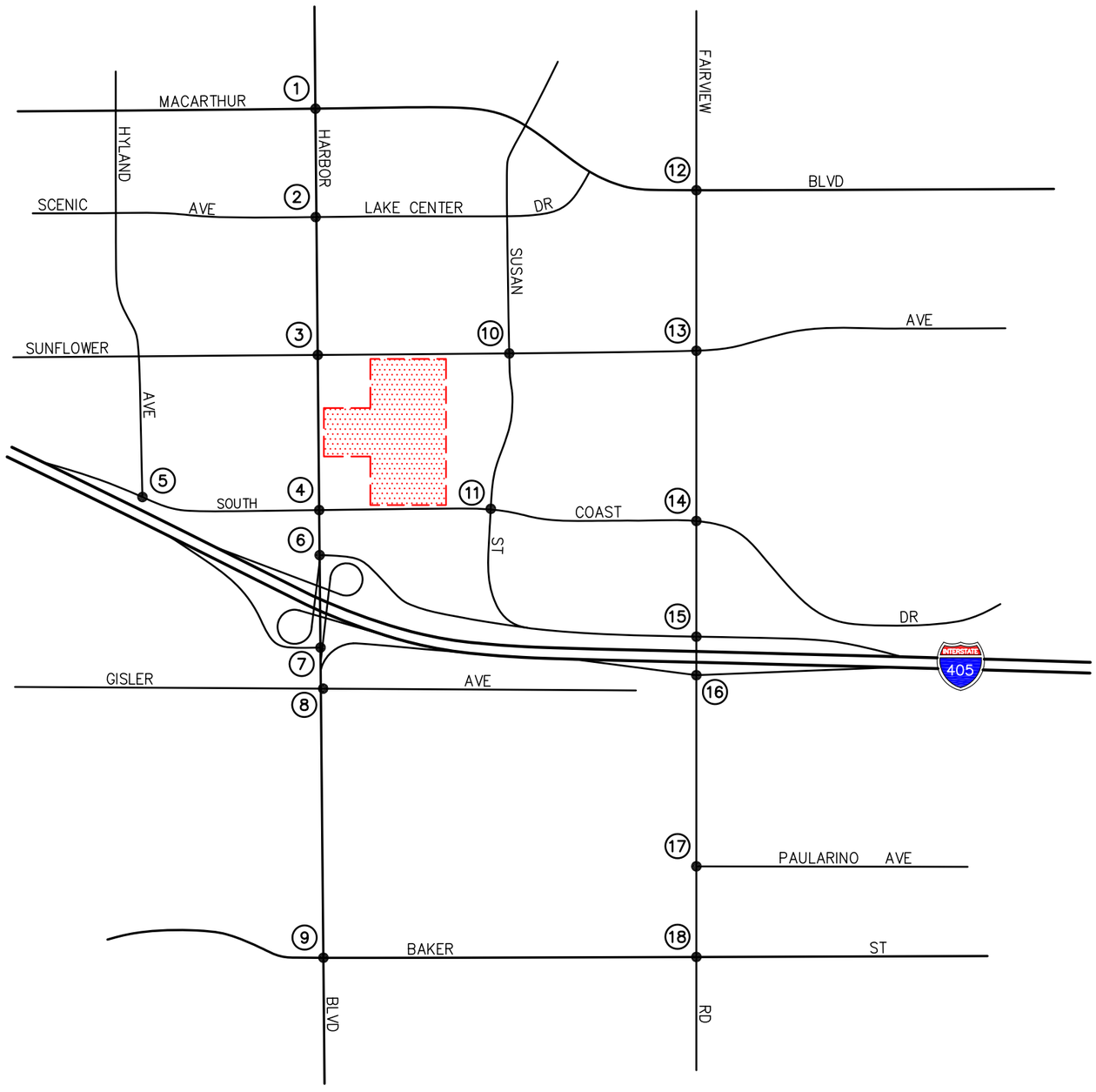
(#) = STUDY INTERSECTION

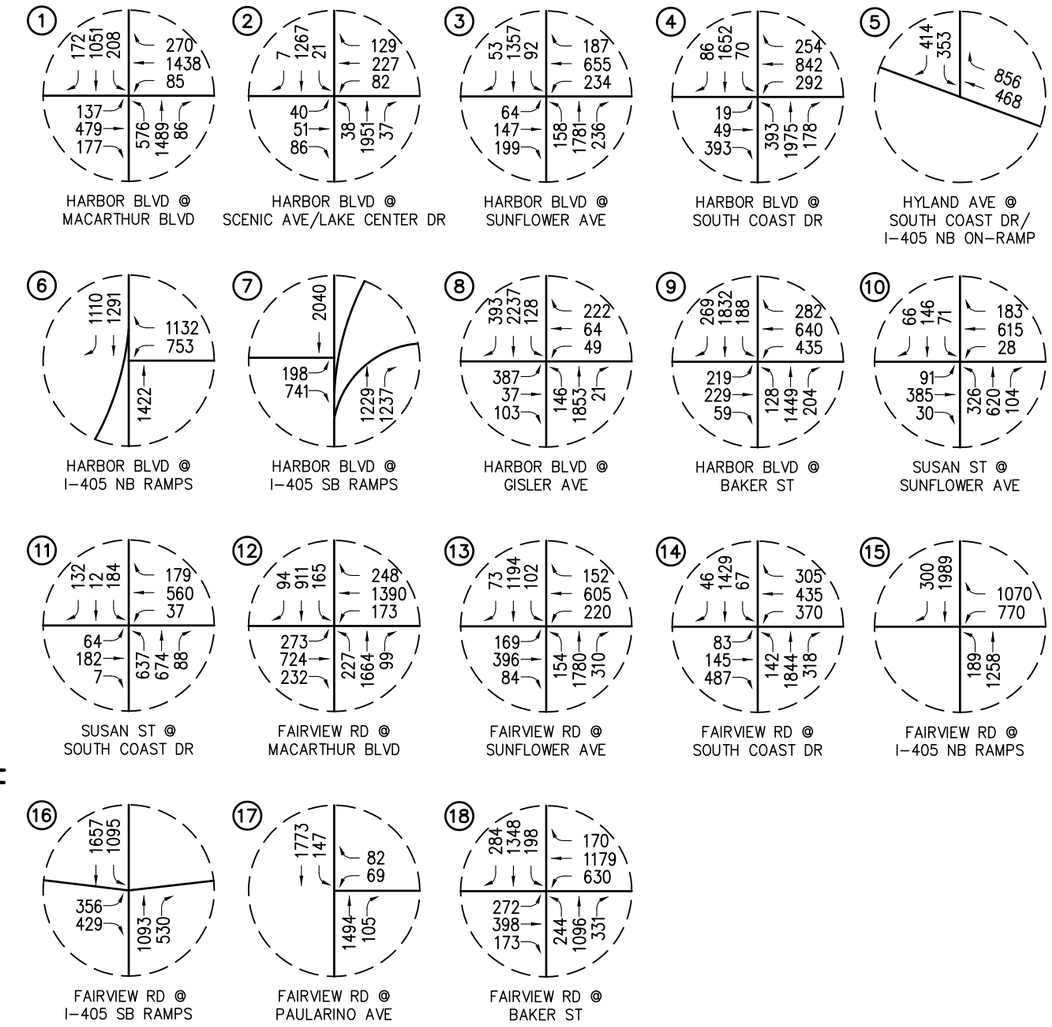
= PROJECT SITE

FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in ***Table 3-1***

The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. According to City of Costa Mesa criteria, LOS D (ICU = 0.801 – 0.900) is the minimum acceptable condition that should be maintained during the morning and evening peak commute hours.

Please note for the intersections of Harbor Boulevard/MacArthur Boulevard, Harbor Boulevard/Sunflower Avenue and Fairview Road/Sunflower Avenue which have shared jurisdiction between the Cities of Costa Mesa and Santa Ana, the ICU calculations utilized the City of Costa Mesa requirements.

3.3.2 *Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)*

The HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range, as shown in ***Table 3-2***.

3.3.3 *Level of Service Criteria*

According to the Cities of Costa Mesa and Santa Ana, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours.

3.4 Existing Level of Service Results

Table 3-3 summarizes the existing peak hour service level calculations for the eighteen (18) key study intersections based on existing traffic volumes and current street geometrics. Review of *Table 3-3* indicates that all the key study intersections currently operate at acceptable service levels (LOS D or better) during the AM and PM peak hour.

It should be noted that the level of service results for the joint jurisdiction intersections based on Santa Ana criteria are presented in the footnotes of *Table 3-3*. These results are similar to the findings based on Costa Mesa criteria.

Appendix C presents the Existing ICU/LOS calculation worksheets for the key study intersections.

TABLE 3-1
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (ICU) [1]

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	≤ 0.600	EXCELLENT. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

[1] Source: *Transportation Research Board Circular 212 - Interim Materials on Highway Capacity.*

TABLE 3-2

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM)[2]

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

[2] Source: *Highway Capacity Manual 6th Edition*, Chapter 20 (Two-Way Stop Control).

TABLE 3-3
EXISTING PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	Jurisdiction	Control Type	ICU	LOS
1.	Harbor Boulevard at MacArthur Boulevard[3]	AM	Costa Mesa/ Santa Ana	8∅ Traffic Signal	0.748	C
		PM			0.814	D
2.	Harbor Boulevard at Scenic Avenue/Lake Center Drive	AM	Costa Mesa	5∅ Traffic Signal	0.561	A
		PM			0.707	C
3.	Harbor Boulevard at Sunflower Avenue	AM	Costa Mesa/ Santa Ana	6∅ Traffic Signal	0.601	B
		PM			0.798	C
4.	Harbor Boulevard at South Coast Drive	AM	Costa Mesa	6∅ Traffic Signal	0.546	A
		PM			0.690	B
5.	Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM	Costa Mesa/ Caltrans	2∅ Traffic Signal	0.271	A
		PM			0.558	A
6.	Harbor Boulevard at I-405 NB Ramps	AM	Costa Mesa/ Caltrans	2∅ Traffic Signal	0.509	A
		PM			0.632	B
7.	Harbor Boulevard at I-405 SB Ramps	AM	Costa Mesa/ Caltrans	2∅ Traffic Signal	0.446	A
		PM			0.579	A
8.	Harbor Boulevard at Gisler Avenue	AM	Costa Mesa	6∅ Traffic Signal	0.616	B
		PM			0.773	C
9.	Harbor Boulevard at Baker Street	AM	Costa Mesa	8∅ Traffic Signal	0.516	A
		PM			0.601	B
10.	Susan Street at Sunflower Avenue	AM	Costa Mesa	5∅ Traffic Signal	0.487	A
		PM			0.776	C
11.	Susan Street at South Coast Drive	AM	Costa Mesa	8∅ Traffic Signal	0.321	A
		PM			0.513	A
12.	Fairview Road at MacArthur Boulevard	AM	Santa Ana	8∅ Traffic Signal	0.673	B
		PM			0.827	D
13.	Fairview Road at Sunflower Avenue	AM	Costa Mesa/ Santa Ana	8∅ Traffic Signal	0.661	B
		PM			0.678	B

Notes:

- ICU = Intersection Capacity Utilization
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions
- ∅ = Phase

[3] For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Existing Conditions are as follows:

1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.739/0.804, LOS = C/D
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.605/0.819, LOS = B/D
13. Fairview Road at Sunflower Avenue: [AM/PM] ICU = 0.655/0.662, LOS = B/B

TABLE 3-3 (CONTINUED)
EXISTING PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	Jurisdiction	Control Type	ICU	LOS
14.	Fairview Road at South Coast Drive	AM	Costa Mesa	8∅ Traffic Signal	0.681	B
		PM			0.704	C
15.	Fairview Road at I-405 NB Ramps	AM	Costa Mesa/ Caltrans	3∅ Traffic Signal	0.668	B
		PM			0.690	B
16.	Fairview Road at I-405 SB Ramps	AM	Costa Mesa/ Caltrans	3∅ Traffic Signal	0.614	B
		PM			0.587	A
17.	Fairview Road at Paularino Avenue	AM	Costa Mesa	3∅ Traffic Signal	0.620	B
		PM			0.497	A
18.	Fairview Road at Baker Street	AM	Costa Mesa	8∅ Traffic Signal	0.647	B
		PM			0.632	B

Notes:

- ICU = Intersection Capacity Utilization
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions
- ∅ = Phase

4.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the proposed project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the project's impacts identified.

5.0 PROJECT TRAFFIC CHARACTERISTICS

5.1 Project Traffic Generation

Table 5-1 presents the trip generation rates used for forecasting project trips. The trip generation potential of the proposed Project was estimated using the average rates for ITE Land Use 710: General Office Building, ITE Land Use 925: Drinking Place, ITE Land Use 932: High Turnover Sit Down Restaurant, and ITE Land Use 933: Fast-Food Restaurant without Drive Through Window. Average rates for ITE Land Use 826: Specialty Retail were also used, based on the *Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).* The meeting space land use of the Project was estimated using empirical trip rates.

Table 5-2 presents the trip generation potential for Phases 1 and 2 of the proposed Project, which is expected to be completed by Year 2021. As shown, Phases 1 and 2 of the Project are forecast to generate 8,245 daily trips, with 752 trips (541 inbound, 211 outbound) produced in the AM peak hour and 828 trips (333 inbound, 495 outbound) produced in the PM peak hour.

Table 5-3 presents the trip generation potential for Phases 1, 2, and 3 of the proposed Project, which is expected to be completed by long-term general plan buildout (Year 2035). As shown, the proposed Project is forecast to generate 9,293 daily trips, with 877 trips (648 inbound, 229 outbound) produced in the AM peak hour and 951 trips (353 inbound, 598 outbound) produced in the PM peak hour.

It should be noted that the entitled trip budget for the site, based on the *Tribune Property Traffic Analysis Report*, prepared by Stantec Consulting Services Inc., is 1,021 trips produced in the AM peak hour and 976 trips produced in the PM peak hour. The proposed project trips within the full general plan buildout (Project Phases 1, 2 and 3) fall within the entitled trip budget.

5.2 Project Traffic Distribution and Assignment

Figures 5-1A and ***5-1B*** present the traffic distribution patterns for the office and commercial components of the proposed Project, respectfully. Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- Trip distribution from the prior *Tribune Property Traffic Analysis Report*, prepared by Stantec Consulting Services Inc.,
- location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns,
- presence of traffic congestion in the surrounding vicinity,
- ingress/egress availability at the Project site, and
- input from City staff.

The anticipated AM and PM peak hour traffic volumes associated with the proposed Project Phases 1 and 2 are presented in ***Figures 5-2*** and ***5-3***, respectively. The anticipated AM and PM peak hour traffic volumes associated with the proposed Project Phases 1, 2 and 3 are presented in ***Figures 5-4*** and ***5-5***, respectively.

The traffic volume assignments presented in *Figures 5-2* and *5-3* reflect the traffic distribution characteristics shown in *Figures 5-1A* and *5-1B* and the traffic generation forecast presented in *Table 5-2*. The traffic volume assignments presented in *Figures 5-4* and *5-5* reflect the traffic distribution characteristics shown in *Figures 5-1A* and *5-1B* and the traffic generation forecast presented in *Table 5-3*.

5.3 Existing Plus Project Traffic Conditions

The existing plus project traffic conditions have been generated based upon existing conditions and the estimated project traffic. These forecast traffic conditions have been prepared pursuant to the California Environmental Quality Act (CEQA) guidelines, which require that the potential impacts of a Project be evaluated upon the circulation system as it currently exists. This traffic volume scenario and the related intersection capacity analyses will identify the roadway improvements necessary to mitigate the direct traffic impacts of the Project, if any.

Figures 5-6 and ***5-7*** present projected AM and PM peak hour traffic volumes at the eighteen (18) key study intersections with the addition of the trips generated by the proposed Project Phases 1, 2 and 3 to existing traffic volumes, respectively.

TABLE 5-1
PROJECT TRIP GENERATION RATES[4]

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Rates:							
▪ 710: General Office Building (TE/1000 SF)	9.74	86%	14%	1.16	16%	84%	1.15
▪ 826: Specialty Retail Center (TE/1000 SF)[5]	44.32	62%	38%	0.94	44%	56%	2.71
▪ 925: Drinking Place (TE/1000 SF)	113.19[6]	--	--	--	66%	34%	11.36
▪ 932: High Turnover Sit Down Restaurant (TE/1000 SF)	112.18	55%	45%	9.94	62%	38%	9.77
▪ 933: Fast Food Restaurant without Drive Through Window (TE/1000 SF)	346.23	60%	40%	25.10	50%	50%	28.34
▪ Meeting Space (TE/Person)[7]	0.87	--	--	--	100%	0%	0.43

Notes:
TE/1000 SF = Trip end per 1,000 SF
TE/Person = Trip end per person

4 Source: *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017)*.

5 Source: *Trip Generation, 9h Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012)*. ITE 10th Edition does not include trip rates for Specialty Retail Center. AM Peak Hour trip rates are not provided for this land use therefore the AM Peak hour rates were applied based on ITE 10th Edition LU 820: Shopping Center.

6 ITE 10th Edition does not include a daily trip rate; therefore, daily trips were estimated by applying a factor of 10 to the PM peak hour trips.

7 Capacity of the meeting space was determined by assuming 2 employees and an occupancy of one person per 35 SF of meeting space, which results in a capacity of 54 people. Empirical rates are based on trip ends per employee as well as per person with a vehicle occupancy of 2.5 people.

TABLE 5-2
PROJECT TRIP GENERATION FORECAST[8] - PHASES 1 AND 2

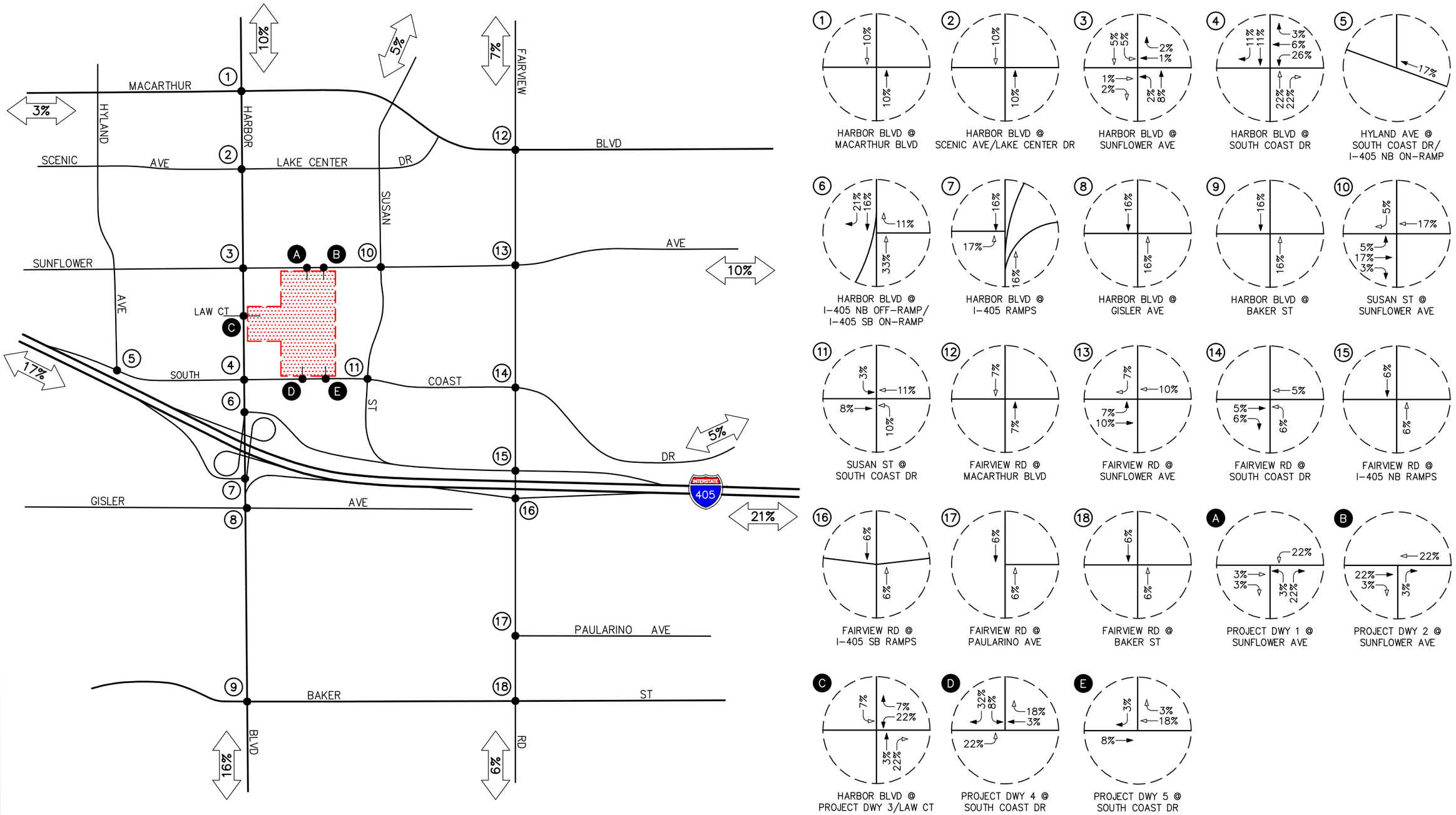
ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Forecasts:							
▪ Fast Food Restaurant without Drive-Through Window (3,528 SF)	1,221	53	36	89	50	50	100
Internal Capture (10%)	-122	-5	-4	-9	-5	-5	-10
subtotal	1,099	48	32	80	45	45	90
Pass-by (25% Daily, 10% AM, 43% PM)	-275	-5	-3	-8	-19	-20	-39
Total Fast Food without Drive-Through Window Trips	824	43	29	72	26	25	51
▪ High Turnover Sit Down Restaurant (34,149 SF)	3,831	186	153	339	207	127	334
Internal Capture (10%)	-383	-19	-15	-34	-21	-12	-33
subtotal	3,448	167	138	305	186	115	301
Pass-by (10% Daily, 10% AM, 10% PM)	-345	-17	-14	-31	-19	-11	-30
Total High Turnover Sit Down Restaurant Trips	3,103	150	124	274	167	104	271
▪ Specialty Retail (3,966 SF)	176	2	2	4	5	6	11
Pass-by (10% Daily, 10% AM, 10% PM)	-18	0	0	0	-1	0	-1
Total Specialty Retail Trips	158	2	2	4	4	6	10
▪ Meeting Space (1,808 SF with 52 seats and 2 employees)	46	--	--	--	23	0	23
▪ Drinking Place (7,182 SF)	820	--	--	--	54	28	82
Internal Capture (10%)	-82	--	--	--	-5	-3	-8
Total Drinking Place Trips	738	--	--	--	49	25	74
▪ Office Component (346,576 SF)	3,376	346	56	402	64	335	399
Total Phase 1 and 2 Project Trips	**8,245**	**541**	**211**	**752**	**333**	**495**	**828**

[8] Source: *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).*

TABLE 5-3
PROJECT TRIP GENERATION FORECAST[9] - PHASES 1, 2, AND 3

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Forecasts:							
▪ Fast Food Restaurant without Drive-Through Window (3,528 SF)	1,221	53	36	89	50	50	100
Internal Capture (10%)	-122	-5	-4	-9	-5	-5	-10
subtotal	1,099	48	32	80	45	45	90
Pass-by (25% Daily, 10% AM, 43% PM)	-275	-5	-3	-8	-19	-20	-39
Total Fast Food without Drive-Through Window Trips	824	43	29	72	26	25	51
▪ High Turnover Sit Down Restaurant (34,149 SF)	3,831	186	153	339	207	127	334
Internal Capture (10%)	-383	-19	-15	-34	-21	-12	-33
subtotal	3,448	167	138	305	186	115	301
Pass-by (10% Daily, 10% AM, 10% PM)	-345	-17	-14	-31	-19	-11	-30
Total High Turnover Sit Down Restaurant Trips	3,103	150	124	274	167	104	271
▪ Specialty Retail (3,966 SF)	176	2	2	4	5	6	11
Pass-by (10% Daily, 10% AM, 10% PM)	-18	0	0	0	-1	0	-1
Total Specialty Retail Trips	158	2	2	4	4	6	10
▪ Meeting Space (1,808 SF with 52 seats and 2 employees)	46	--	--	--	23	0	23
▪ Drinking Place (7,182 SF)	820	--	--	--	54	28	82
Internal Capture (10%)	-82	--	--	--	-5	-3	-8
Total Drinking Place Trips	738	--	--	--	49	25	74
▪ Office Component (454,226 SF)	4,424	453	74	527	84	438	522
Total Phase 1, 2, and 3 Project Trips	**9,293**	**648**	**229**	**877**	**353**	**598**	**951**

[9] Source: *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).*



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NO SCALE

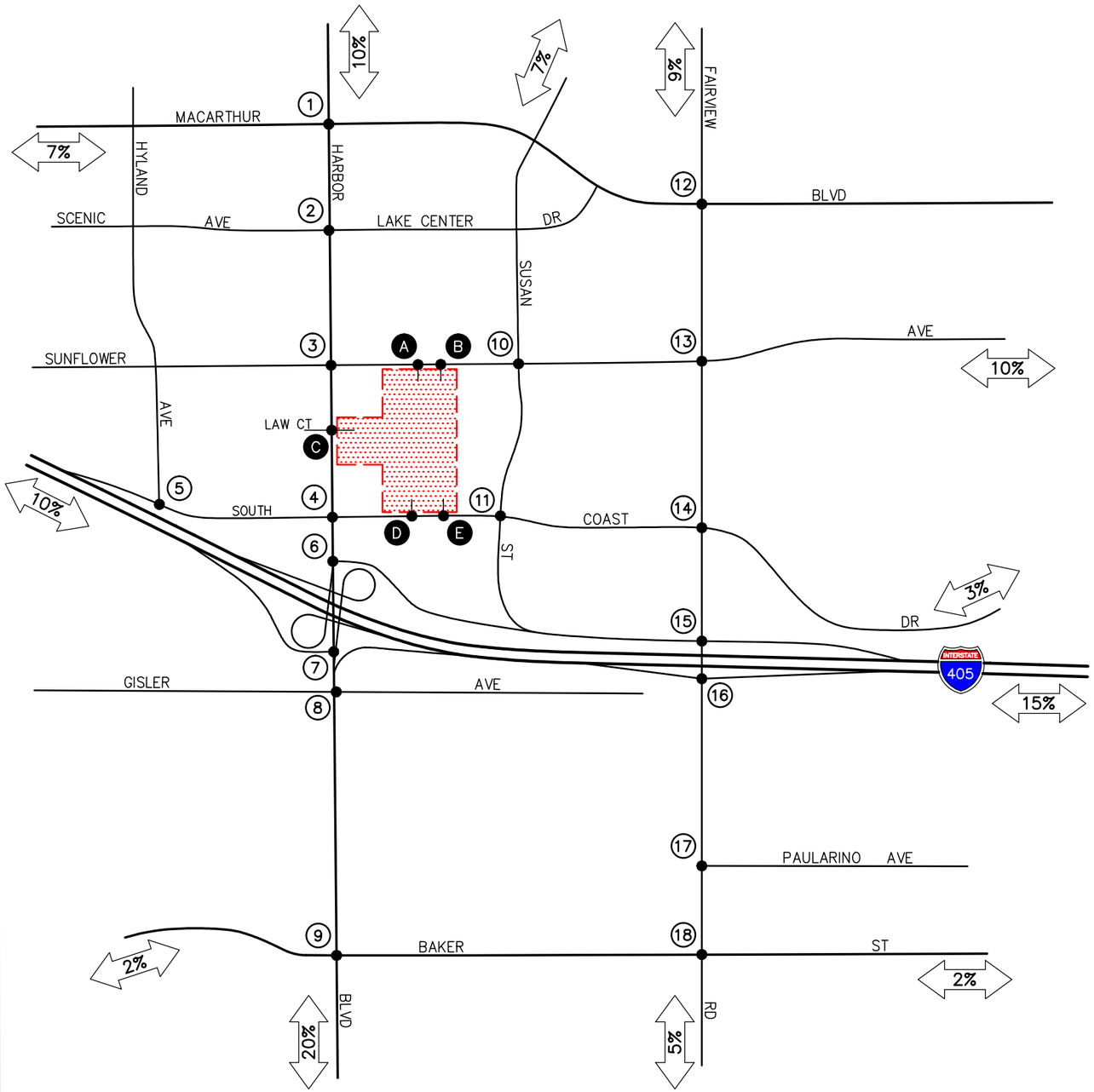
KEY

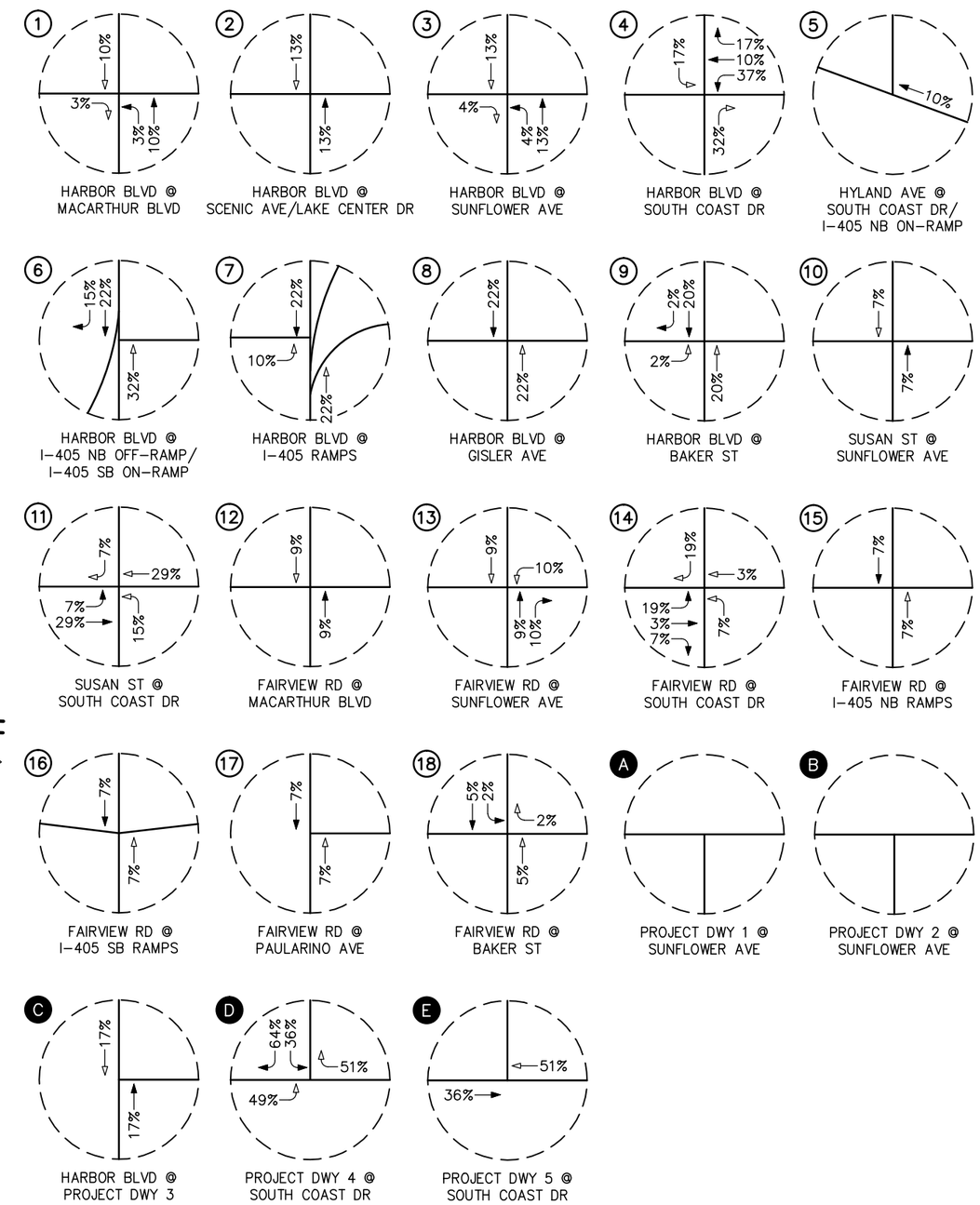
(#) = STUDY INTERSECTION
◁ = INBOUND PERCENTAGE
◀ = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-1A

PROJECT TRAFFIC DISTRIBUTION PATTERN – OFFICE

THE PRESS SITE, COSTA MESA





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N NO SCALE

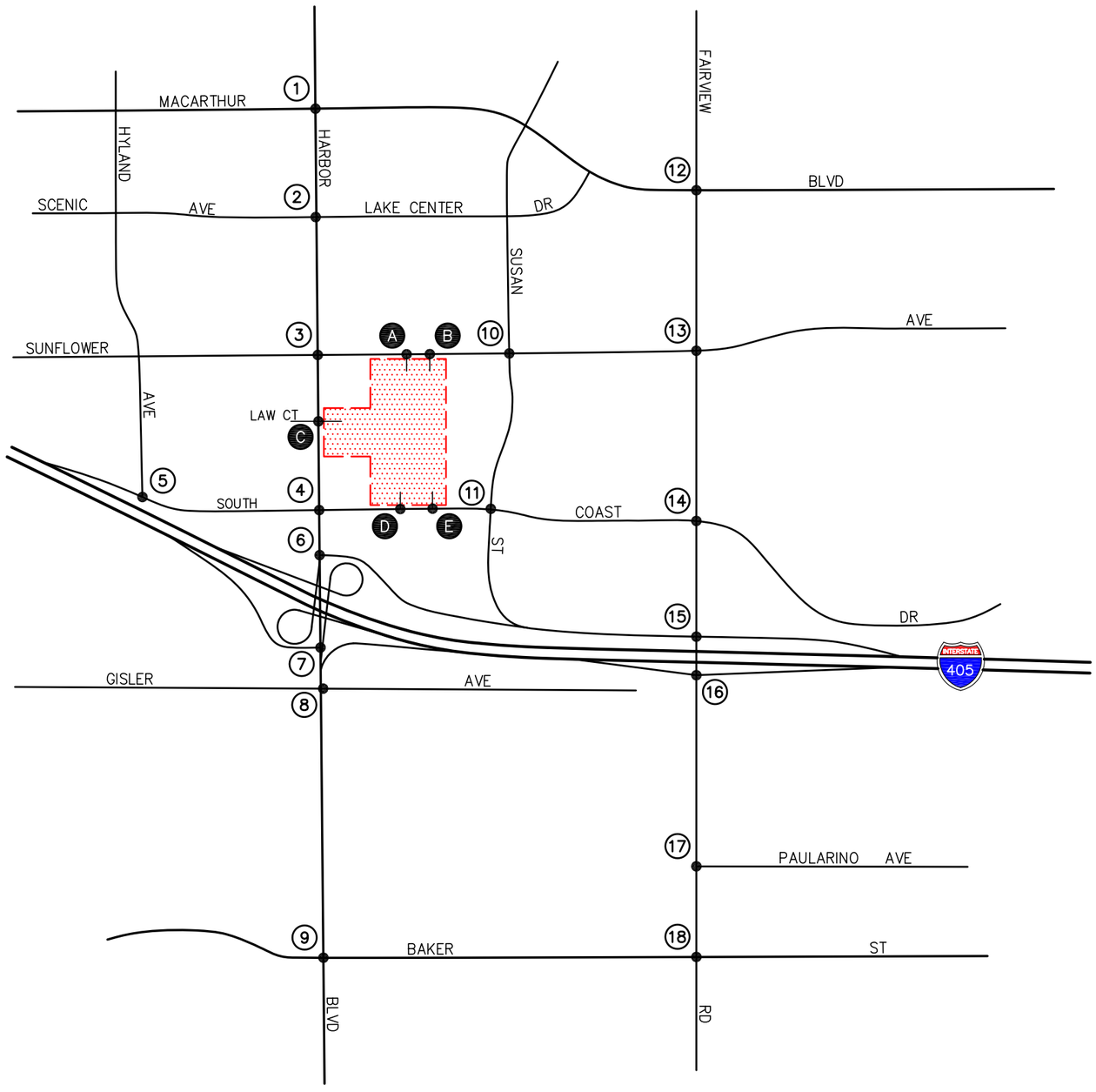
KEY

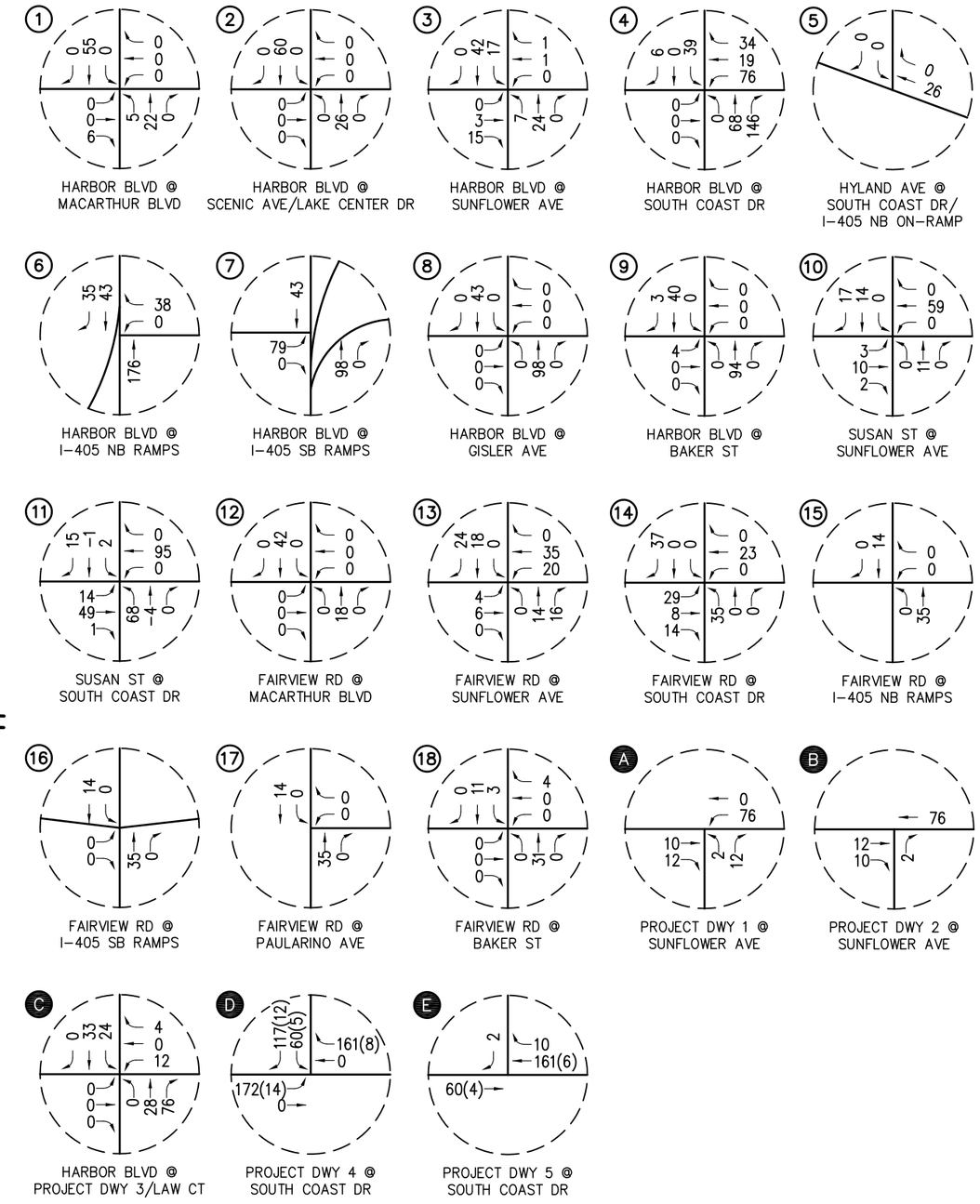
(#) = STUDY INTERSECTION
◁— = INBOUND PERCENTAGE
◀— = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-1B

PROJECT TRAFFIC DISTRIBUTION PATTERN – COMMERCIAL

THE PRESS SITE, COSTA MESA





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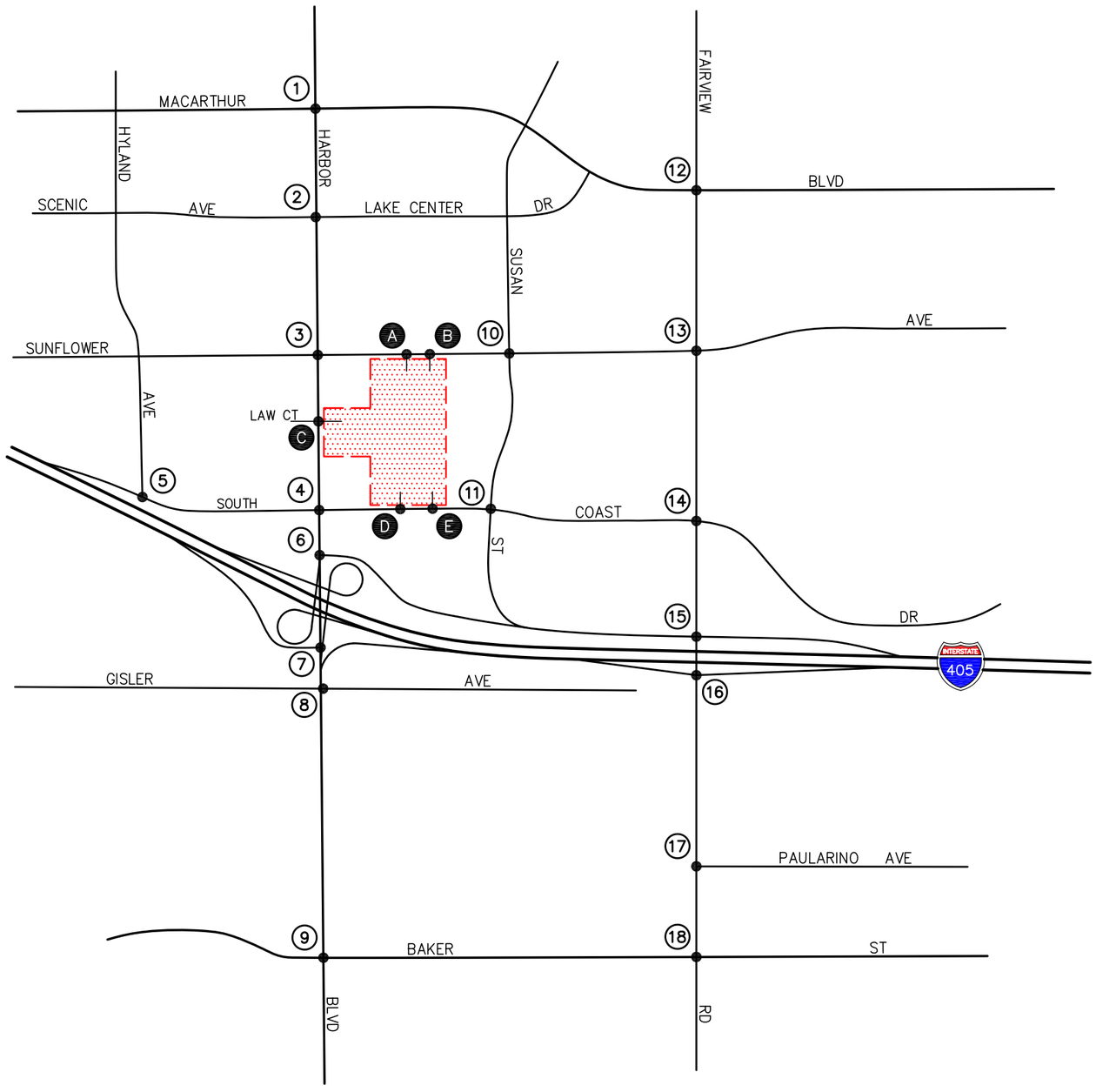
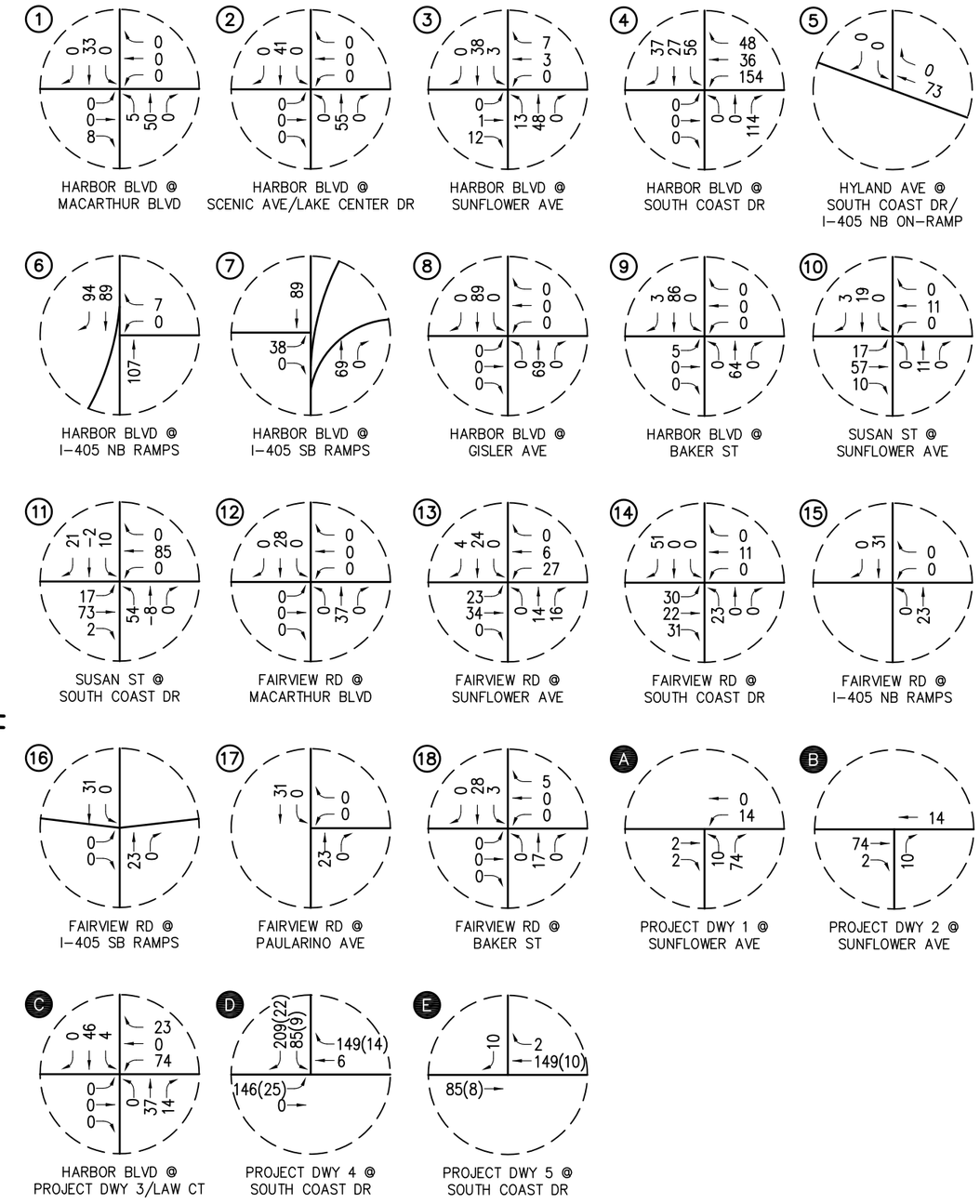
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE
(XX) = PASSBY TRIPS

FIGURE 5-2

AM PEAK HOUR PROJECT PHASES 1 AND 2 TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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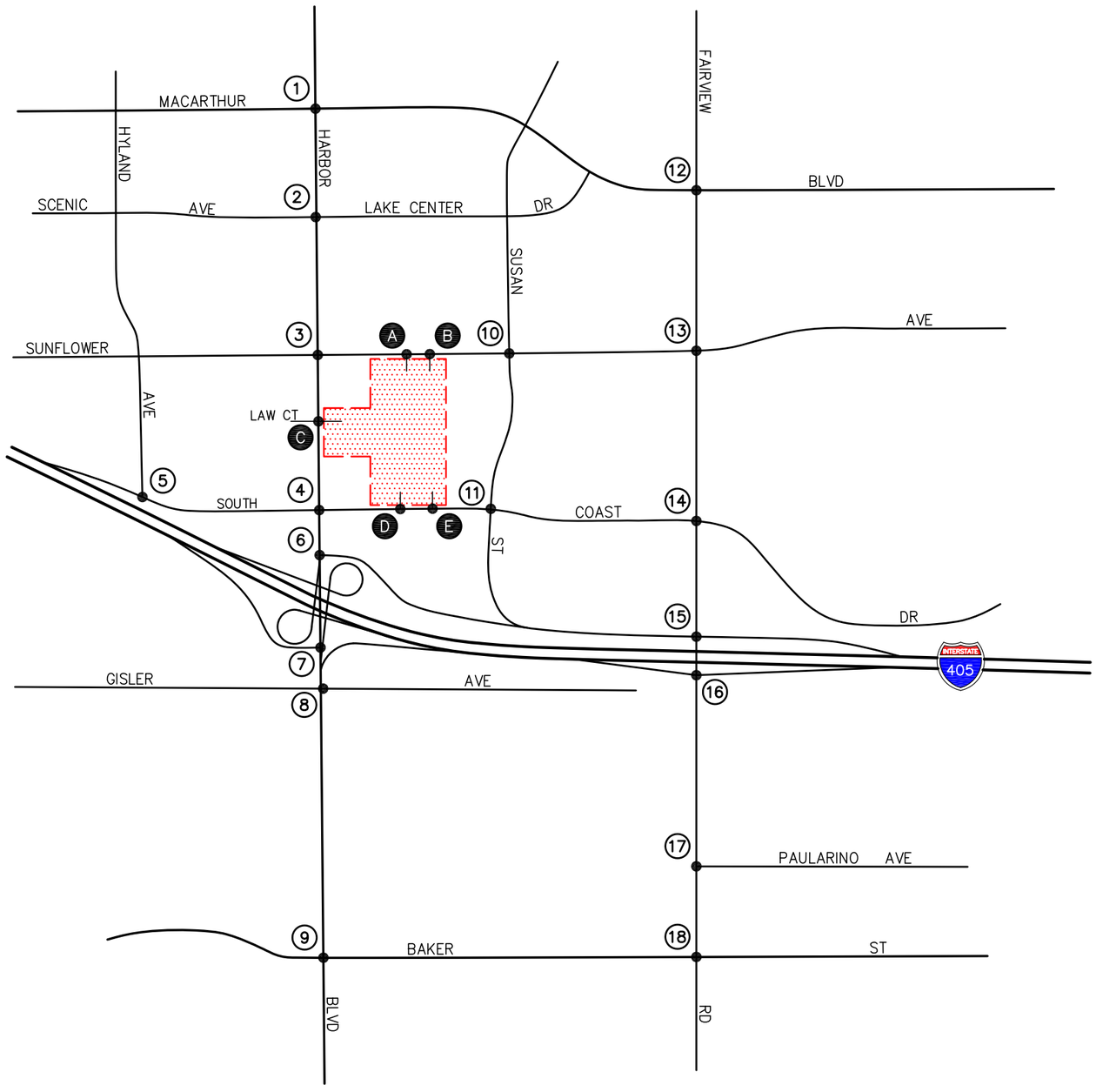
N NO SCALE

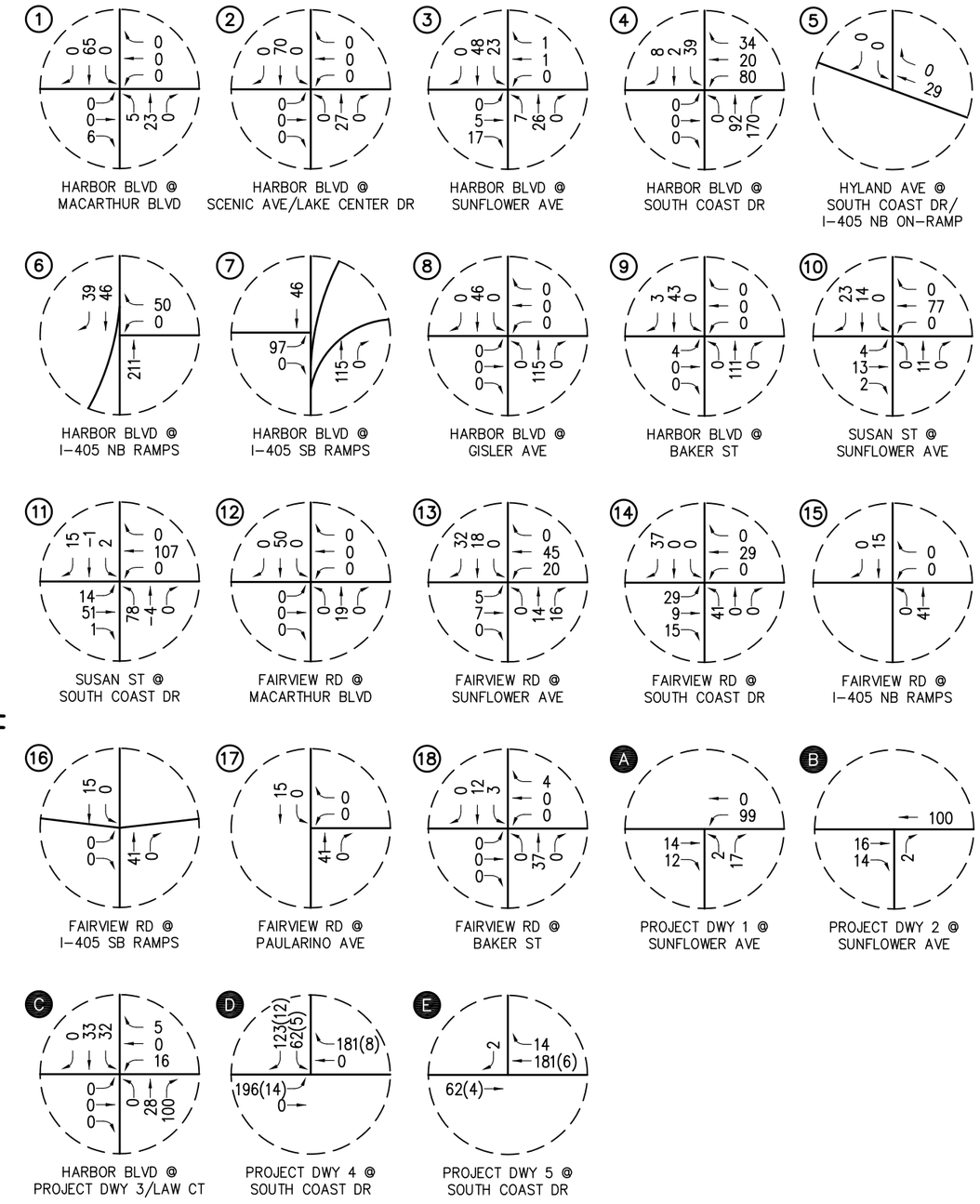
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE
(XX) = PASSBY TRIPS

FIGURE 5-3

PM PEAK HOUR PROJECT PHASES 1 AND 2 TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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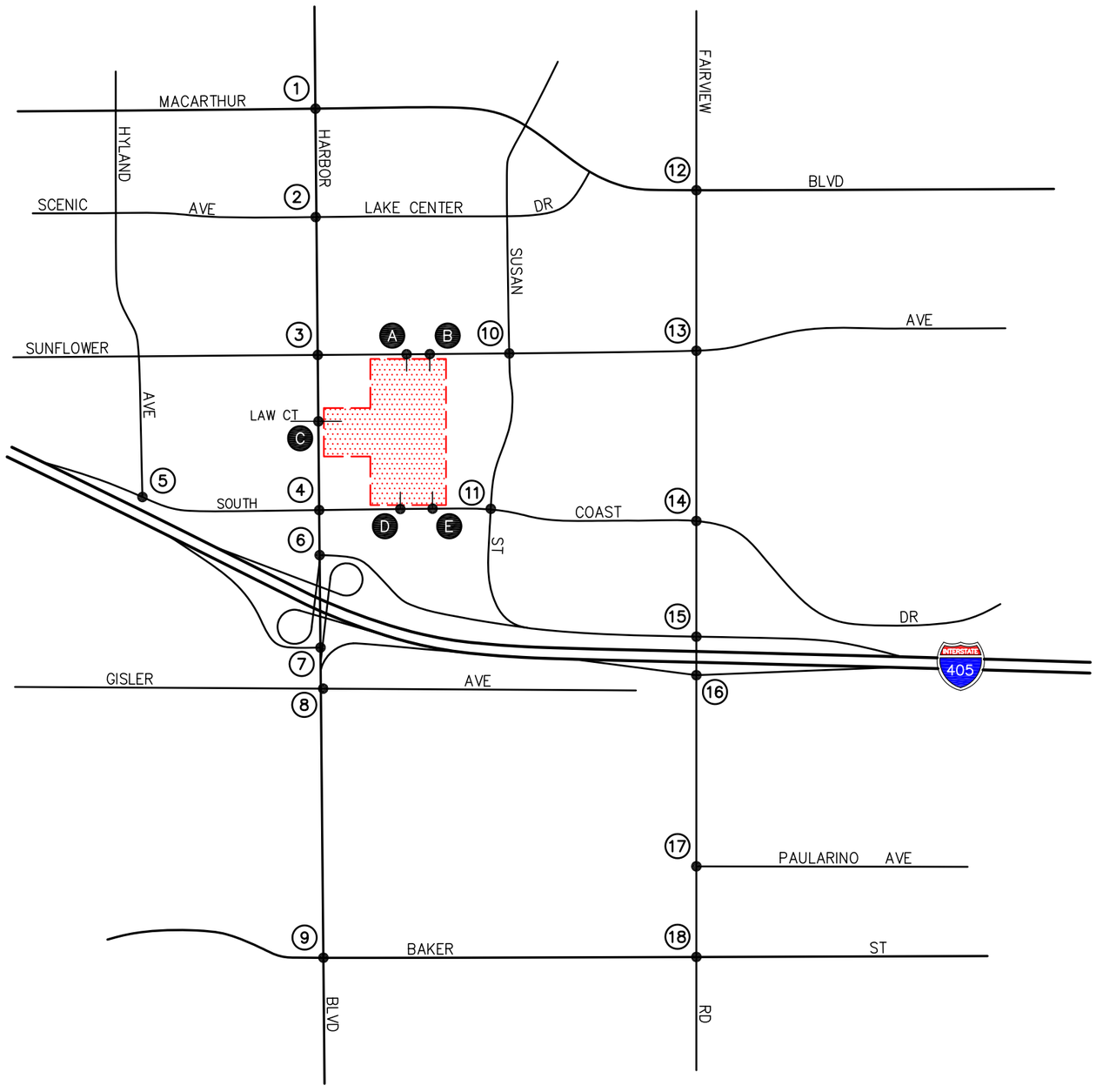
N NO SCALE

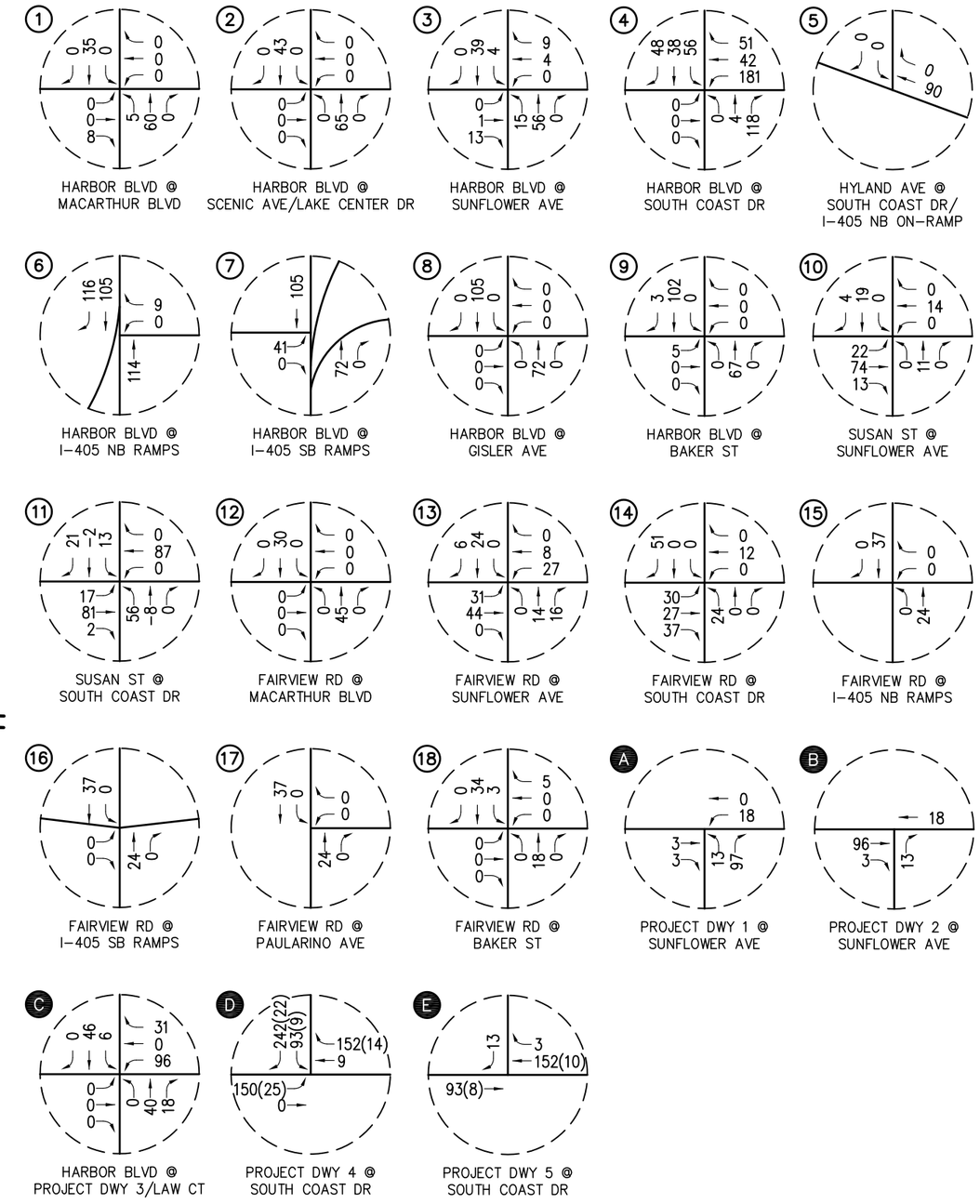
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE
(XX) = PASSBY TRIPS

FIGURE 5-4

AM PEAK HOUR PROJECT PHASES 1, 2, AND 3 TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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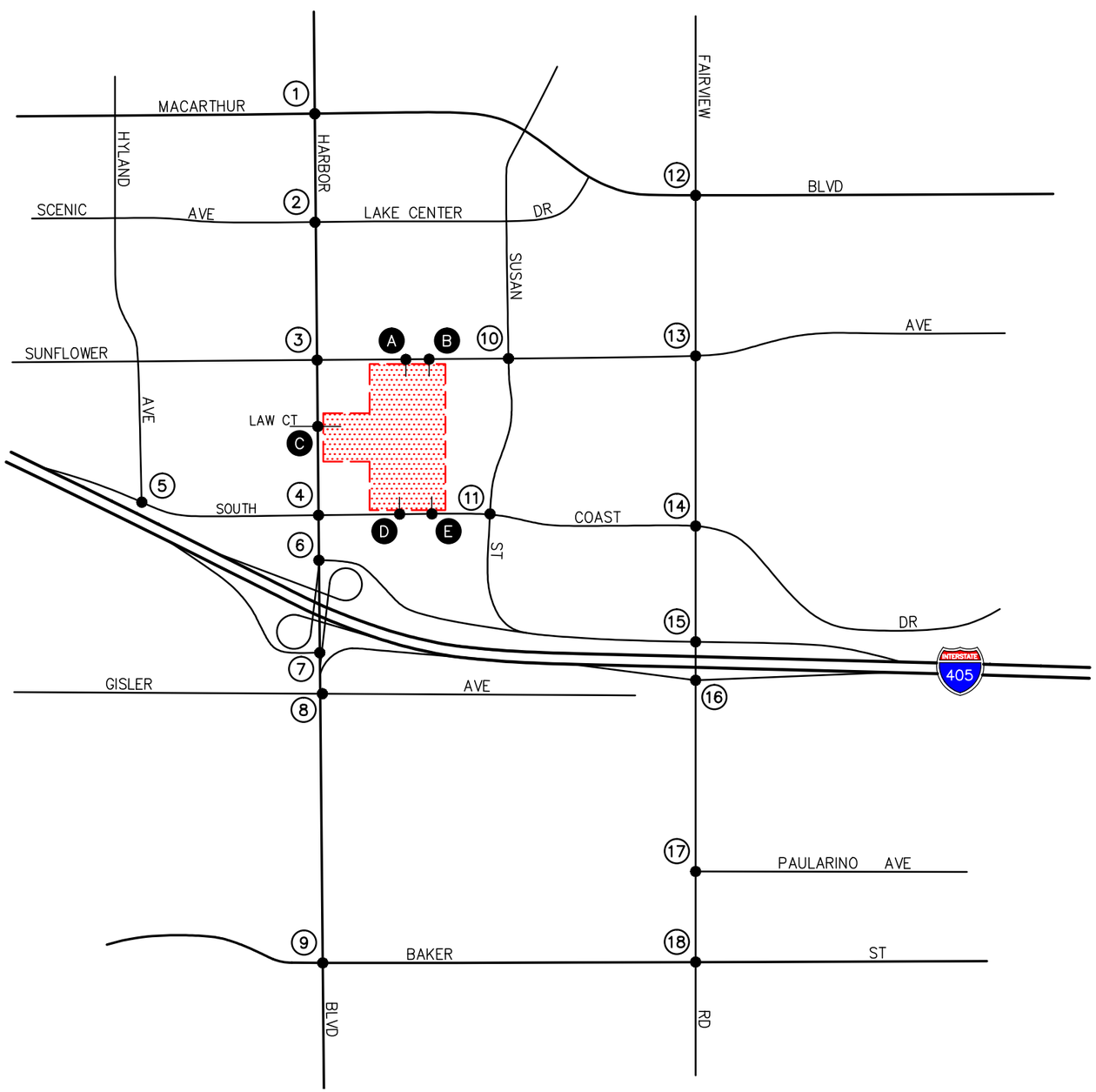
N NO SCALE

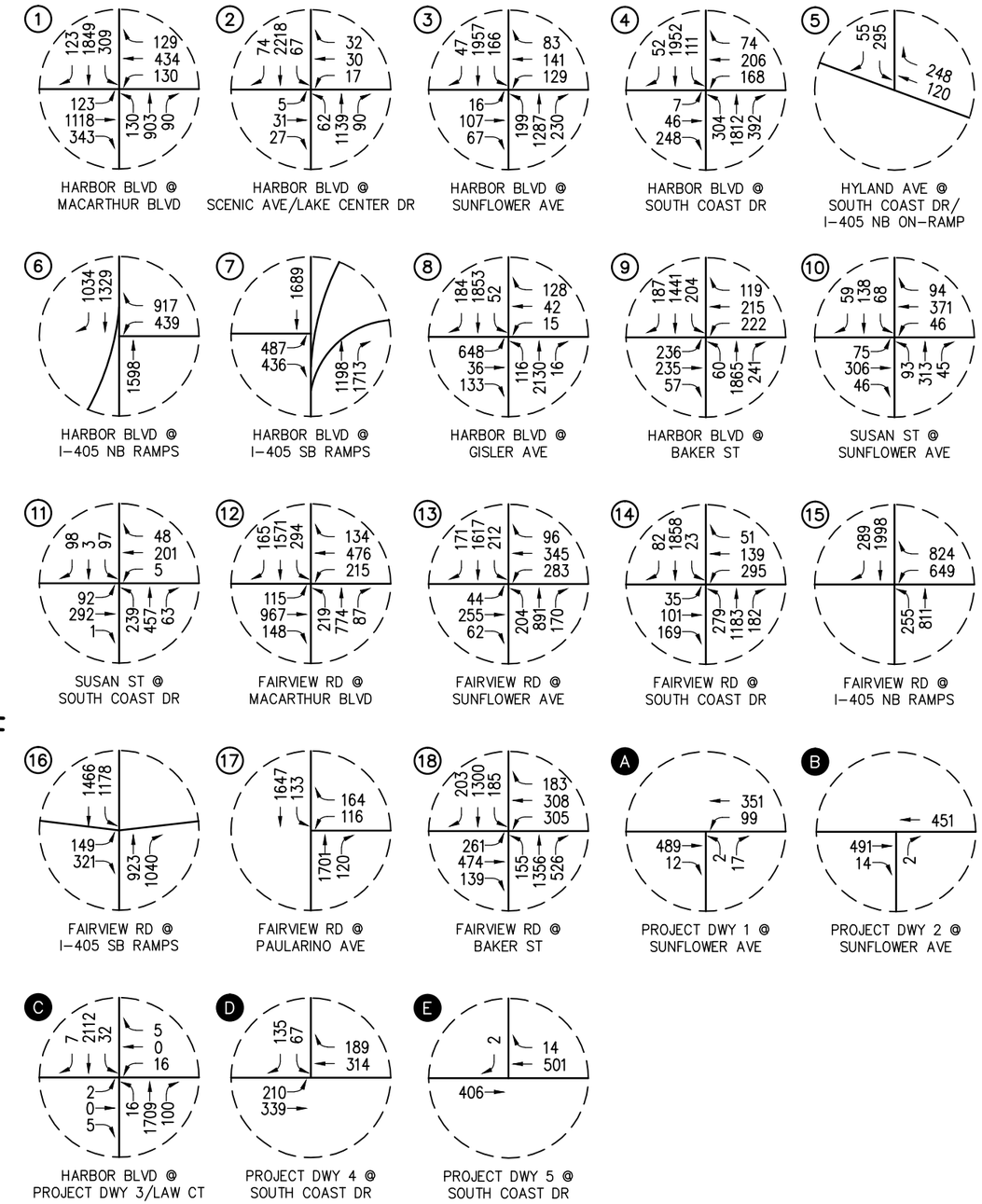
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE
(XX) = PASSBY TRIPS

FIGURE 5-5

PM PEAK HOUR PROJECT PHASES 1, 2, AND 3 TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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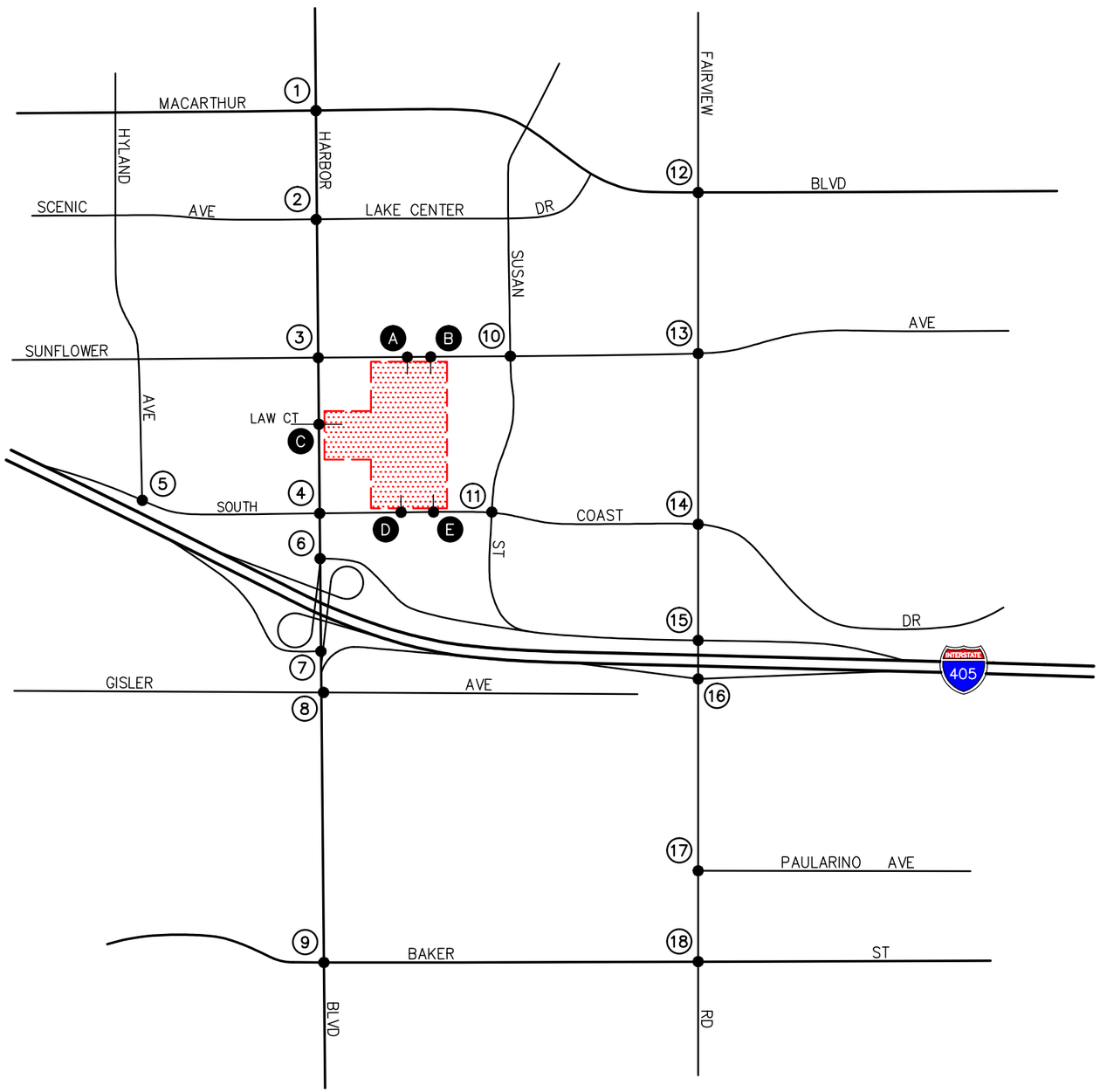
N NO SCALE

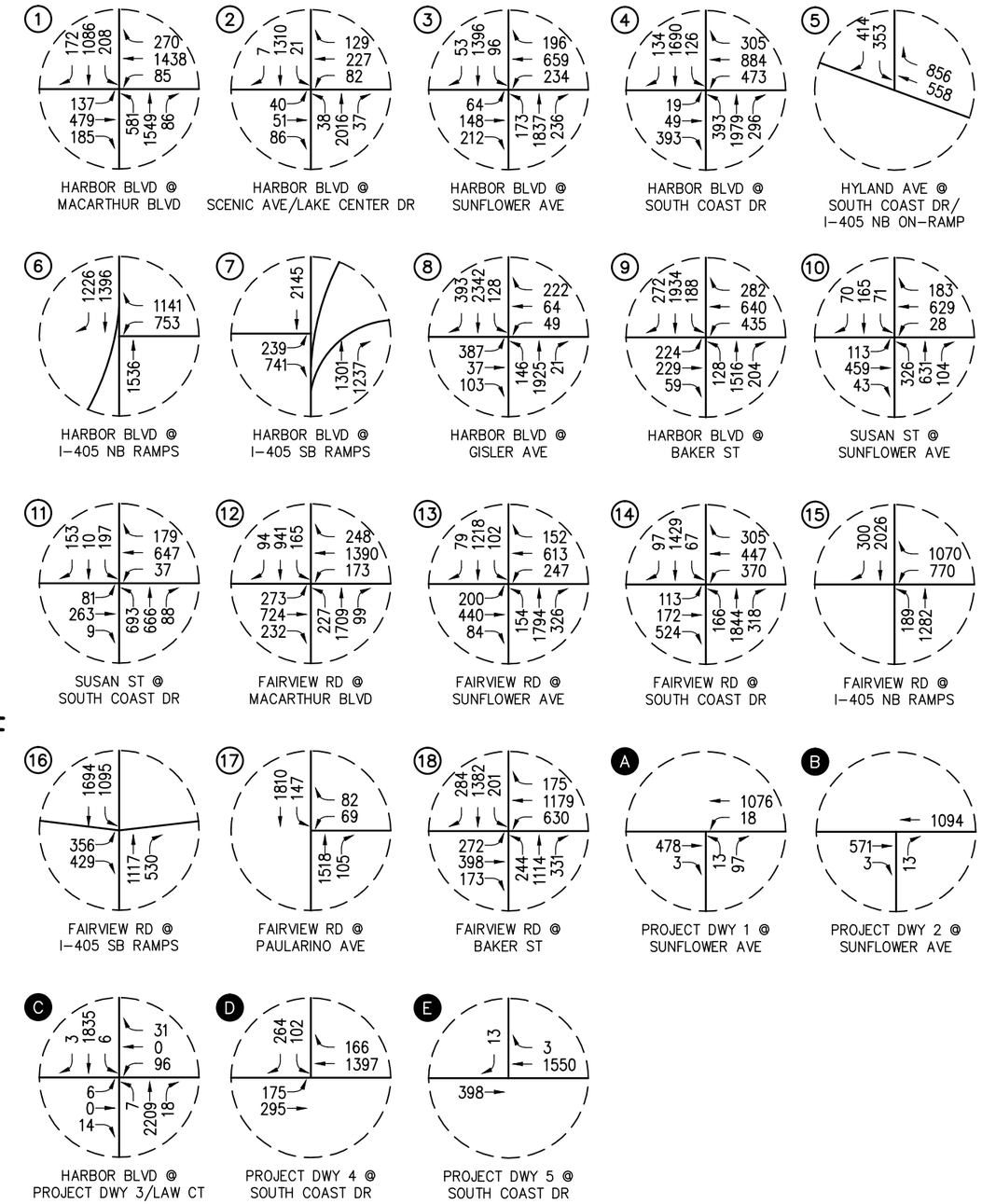
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 5-6

EXISTING PLUS PROJECT (PHASES 1, 2 AND 3) AM PEAK HOUR TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 5-7

EXISTING PLUS PROJECT (PHASES 1, 2 AND 3) PM PEAK HOUR TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA

6.0 FUTURE TRAFFIC CONDITIONS

6.1 Ambient Traffic Growth

Horizon year, background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown and future related projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent (1.0%) per year. Applied to the Year 2018 existing traffic volumes, this factor results in a 3.0% growth in existing volumes to the near-term horizon Year 2021.

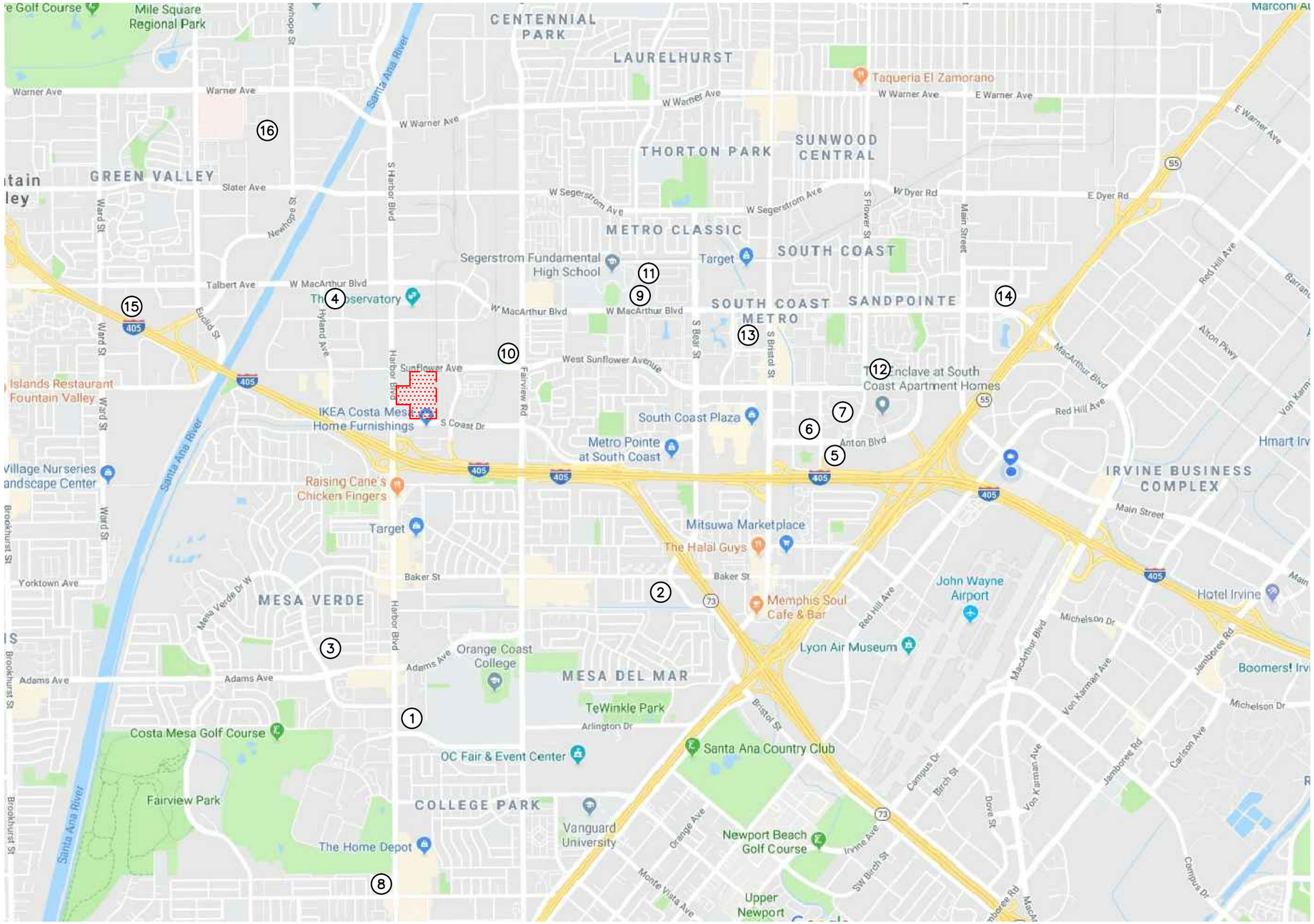
6.2 Related Projects Traffic Characteristics

The Cities of Costa Mesa, Santa Ana and Fountain Valley identified sixteen (16) related projects within the Project study area. Related projects, as defined by Section 15355 of the CEQA Guidelines, are "closely related past, present and reasonably foreseeable probable future projects." The Traffic Impact Analysis assumes that all these related projects will be developed and operational when the proposed Project is operational. This is the most conservative, worst-case approach, since the exact timing of each related project is uncertain. In addition, impacts for these related projects would likely be, or have been, subject to mitigation measures, which could reduce potential impacts. Under this analysis, however, those mitigation measures are not considered. The locations of the sixteen (16) related projects are presented in ***Figure 6-1***.

Table 6-1 presents the address, jurisdiction and description/size of the sixteen (16) related projects. ***Table 6-2*** presents the resultant trip generation for the sixteen (16) related projects. As shown in *Table 6-2*, the sixteen (16) cumulative projects are expected to generate a combined total 24,694 daily trips (one half arriving, one half departing) on a "typical" weekday, with 1,919 trips (1,071 inbound and 848 outbound) forecast during the AM peak hour and 2,472 trips (1,087 inbound and 1,385 outbound) forecast during the PM peak hour. ***Figures 6-2*** and ***6-3*** present the AM and PM peak hour related project volumes.

6.3 Year 2021 Traffic Volumes

Figures 6-4 and ***6-5*** present the AM and PM peak hour cumulative traffic volumes (existing traffic + ambient growth + related projects) at the eighteen (18) key study intersections for the Year 2021, respectively. ***Figures 6-6*** and ***6-7*** illustrate the Year 2021 forecast AM and PM peak hour traffic volumes, with the inclusion of the trips generated by the proposed Project Phases 1 and 2, respectively.



KEY

1. AURA
2. LUCENE
3. MIRIVAL PHASE II
4. 1585 MACARTHUR BOULEVARD
5. SYMPHONY APARTMENTS
6. ORANGE COUNTY MUSEUM OF ART
7. AVENUE OF THE ARTS HOTEL
8. COSTA MESA MOTOR INN
9. SHEA HOMES
10. SHELL SERVICE STATION RETAIL BUILDING
11. CHRIST OUR SAVIOR CHURCH
12. LEGACY SUNFLOWER APARTMENTS
13. METRO TOWN SQUARE EXPANSION
14. LEGADO AT THE MET
15. FOUNTAIN VALLEY CROSSINGS
16. WELBROOK ASSISTED LIVING FACILITY

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N NO SCALE

SOURCE: GOOGLE

KEY

(#) = CUMULATIVE PROJECT LOCATIONS

= PROJECT SITE

FIGURE 6–1

LOCATION OF CUMULATIVE PROJECTS

THE PRESS SITE, COSTA MESA

TABLE 6-1
LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[10]

No.	Cumulative Project	Location/Address	Description
City of Costa Mesa			
1.	Aura	2626 Harbor Boulevard	33 DU detached single-family residential
2.	Lucene	929 Baker Street	56 DU detached single-family residential
3.	Mirival Phase II	2850 Mesa Verde Drive East	11 DU detached single-family residential
4.	1585 MacArthur Boulevard	1585 MacArthur Boulevard	100,000 SF industrial building
5.	Symphony Apartments	585-595 Anton Boulevard	393 DU apartments and 4,104 SF retail
6.	Orange County Museum of Art	3333 Avenue of the Arts	66,750 SF art museum
7.	Avenue of the Arts Hotel	3350 Avenue of the Arts	150 room hotel[11]
8.	Costa Mesa Motor Inn	2277 Harbor Boulevard	224 DU apartments
City of Santa Ana			
9.	Shea Homes	2001 W. MacArthur Boulevard	42 DU single-family housing
10.	Shell Service Station Retail Building	3820 S. Fairview Street	1,600 SF gas station/convenience store
11.	Christ Our Savior Church	2000 W. Alton Avenue	Demolition of 7,190 SF existing church and construction of 46,307 SF church/community center/office
12.	Legacy Sunflower Apartments	651 W. Sunflower Avenue	226 DU apartments
13.	Metro Town Square Expansion	3719 S. Plaza Drive	6,000 SF retail/restaurant
14.	Legado at the MET	200 E. First American Way	278 DU apartments
City of Fountain Valley			
15.	Fountain Valley Crossings	Bound by Ellis Avenue to the south, Talbert Avenue to the north, Ward Street to the west, and the Santa Ana River Trail to the east	Rezoning the existing land uses into a mixed-use activity center to allow different types of new development, which includes Automotive parts sales, warehousing, office, industrial park, electronics superstore, shopping center, and residential.
16.	Welbrook Assisted Living Facility	11360 Warner Avenue	110,000 SF assisted living facility with 162 beds

Notes:
- SF = Square-feet
- DU = Dwelling units

[10] Source: Cities of Costa Mesa, Santa Ana, and Fountain Valley Planning Departments.

[11] According to the *Addendum to the Wyndham Boutique Hotel/High-Rise Residential Project Final Environmental Impact Report No. 1054 (SCH No. 2007011125)*, the previously approved project included the construction of a 238-room hotel, and the proposed project includes the expansion of the hotel to include an additional 150-rooms. Therefore, the net additional 150-room hotel was analyzed under the cumulative background traffic setting in this report.

TABLE 6-2
CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST[12]

Cumulative Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. Aura	312	6	18	24	21	12	33
2. Lucene[13]	533	11	31	42	35	21	56
3. Mirival Phase II	104	2	6	8	7	4	11
4. 1585 MacArthur Boulevard	496	62	8	70	8	55	63
5. Symphony Apartments[14]	2,770	41	163	204	163	94	257
6. Orange County Museum of Art[15]	3,754	49	20	69	234	254	488
7. Avenue of the Arts Hotel	1,254	42	29	71	46	44	90
8. Costa Mesa Motor Inn[16]	1,490	23	91	114	90	49	139
9. Shea Homes	396	8	23	31	26	16	42
10. Shell Service Station Retail Building	1,152	24	22	46	32	30	62
11. Christ Our Savior Church	272	8	5	13	9	10	19
12. Legacy Sunflower Apartments[17]	1,229	21	60	81	60	39	99
13. Metro Town Square Expansion	606	30	24	54	21	13	34
14. Legado at the MET[18]	2,015	30	124	154	121	67	188
15. Fountain Valley Crossings[19]	7,890	694	213	907	198	651	849
16. Welbrook Assisted Living Facility	421	20	11	31	16	26	42
Cumulative Projects Trip Generation Forecast	**24,694**	**1,071**	**848**	**1,919**	**1,087**	**1,385**	**2,472**

12 Unless otherwise noted, Source: *Trip Generation*, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).

13 Source: *Del Nova Homes Traffic Impact Analysis*, prepared by Transpo Group, dated January 2016.

14 Source: *Symphony Apartments Traffic Impact Analysis Report*, prepared by LLG Engineers, dated July 24, 2014.

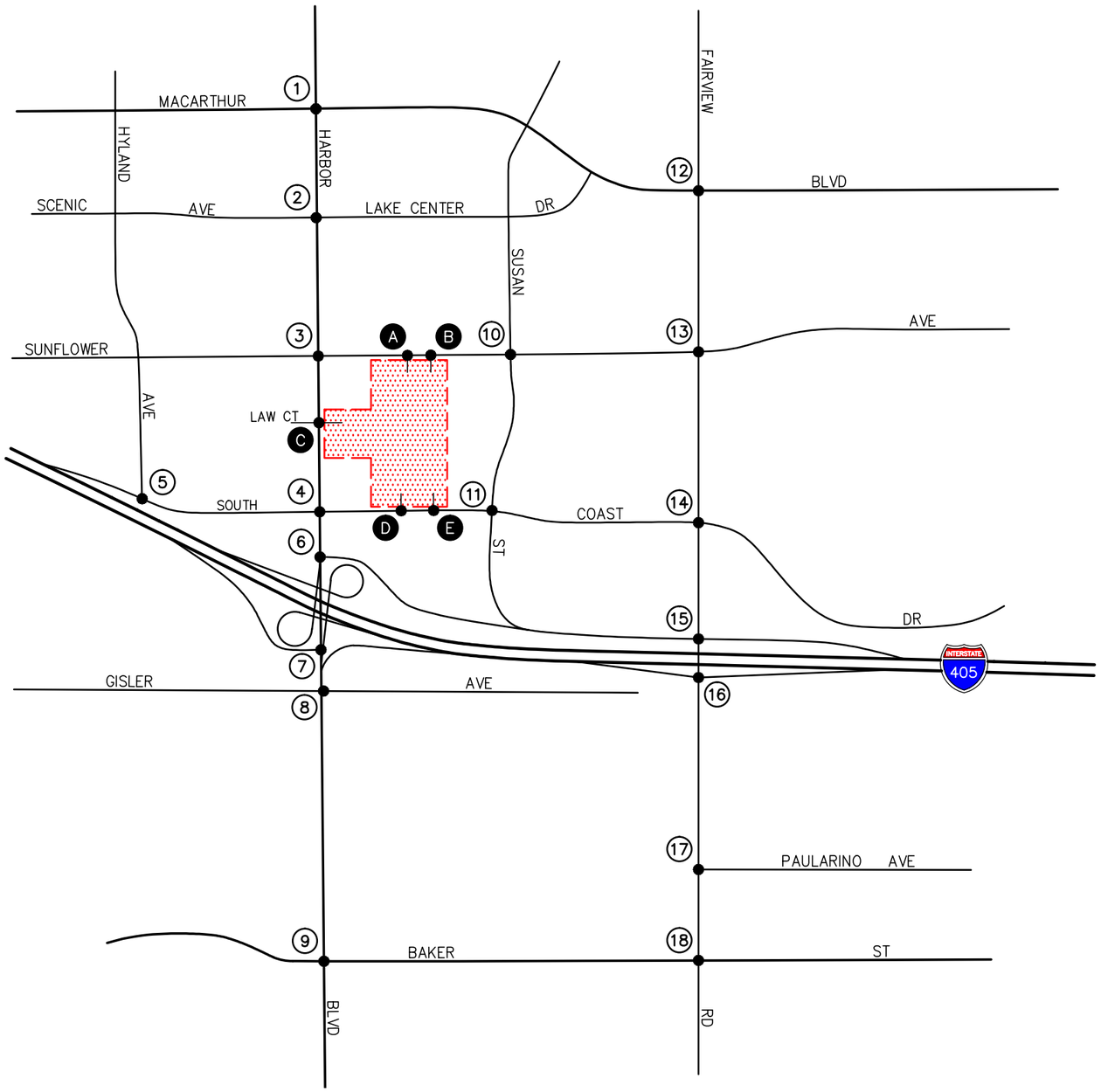
15 Source: *Addendum to the Final Program Environmental Impact Report for the South Coast Plaza Town Center Project SCH No. 2000041100* prepared by LSA, dated December 2018.

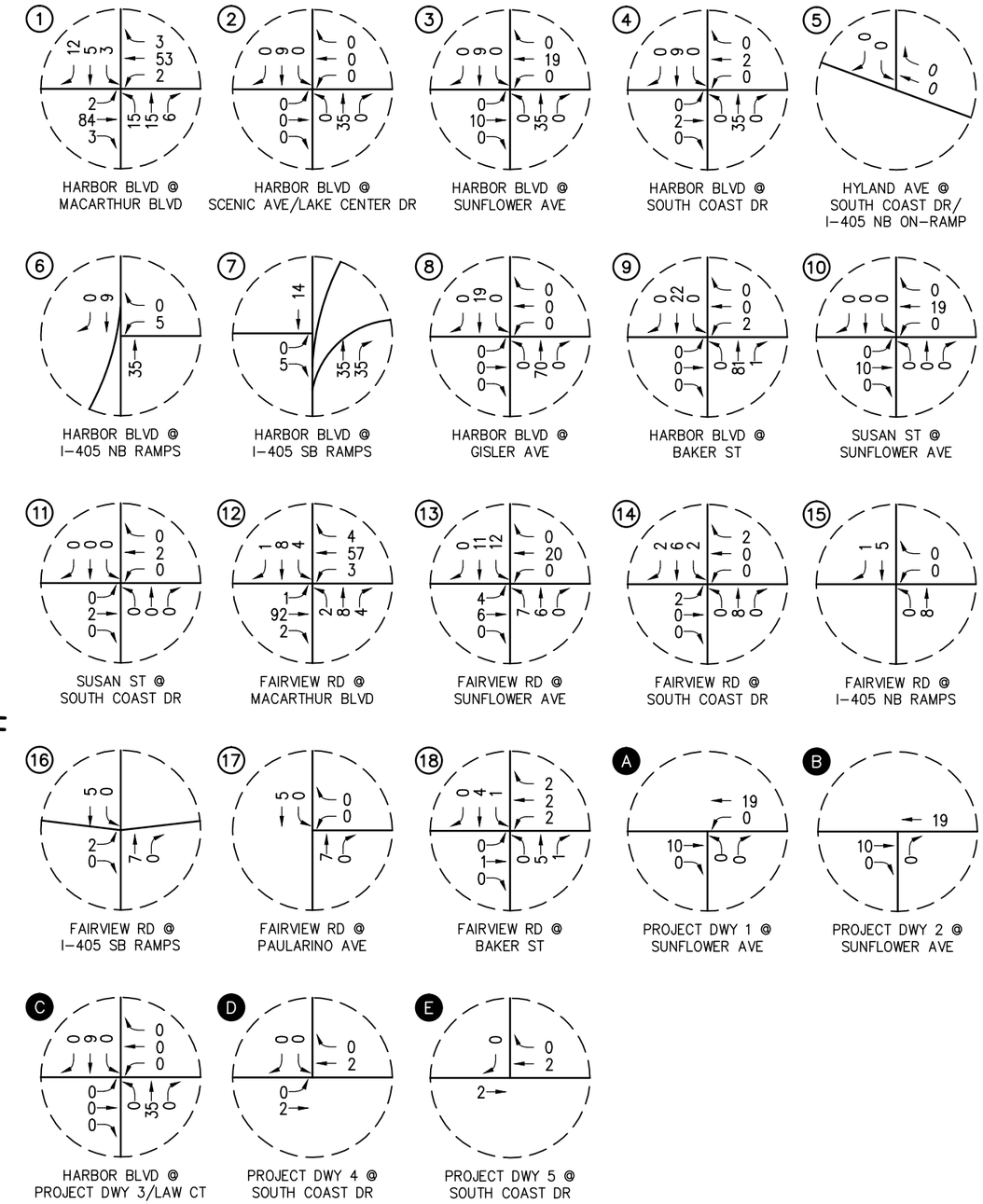
16 Source: *Revised Traffic Impact Analysis Report for The Costa Mesa Motor Inn* prepared by LLG Engineers, dated August 31, 2015.

17 Source: *Traffic Impact Analysis Report for Legacy Sunflower Apartments* prepared by LLG Engineers, dated January 2019.

18 Source: *Traffic Impact Analysis Report for The Met at South Coast* prepared by LLG Engineers, dated November 9, 2011.

19 Source: *Fountain Valley Crossings Specific Plan Transportation Impact Analysis*, prepared by Fehr & Peers dated August 2017.





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NO SCALE

SOURCE: GOOGLE

KEY

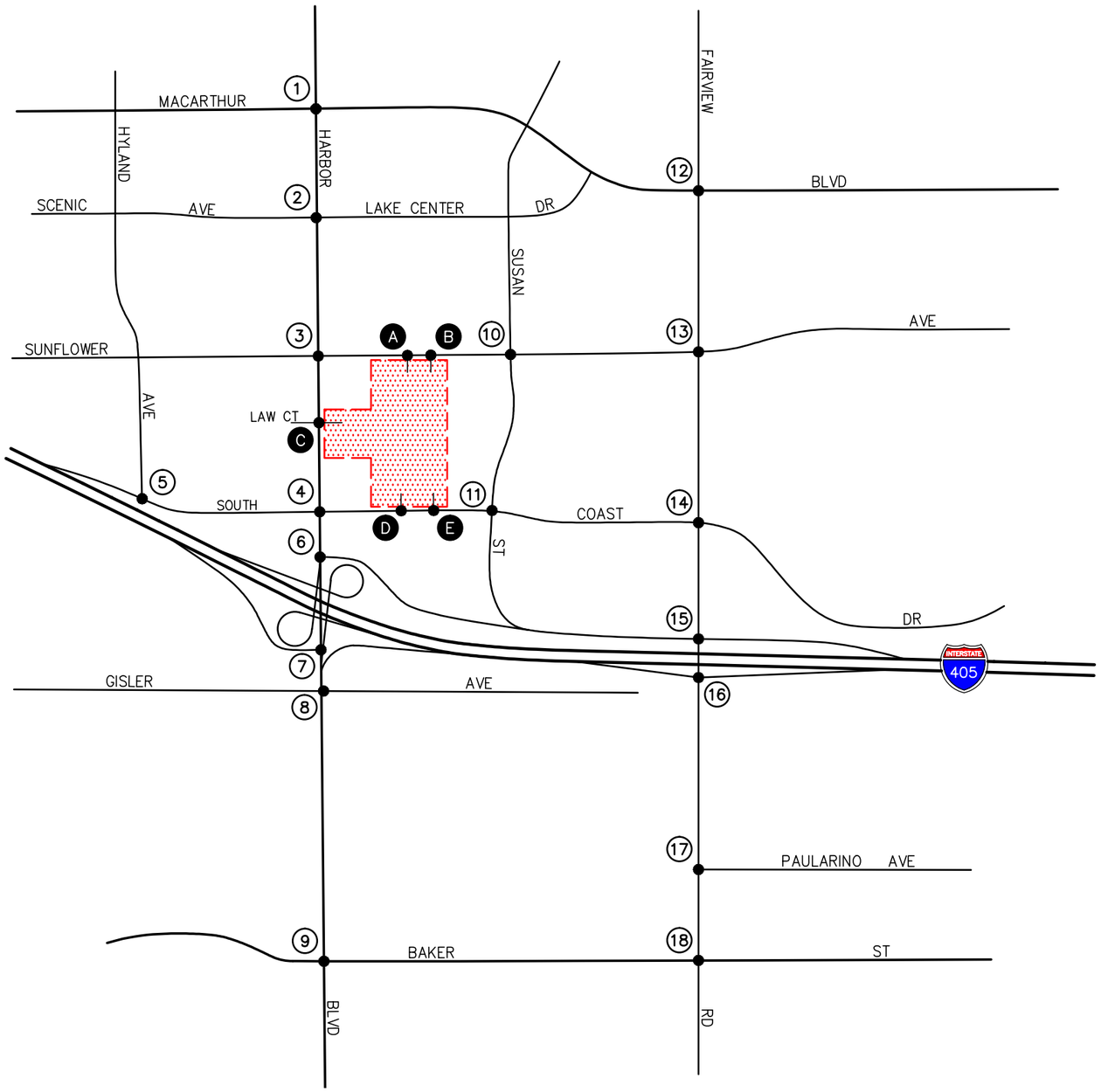
(#) = STUDY INTERSECTION

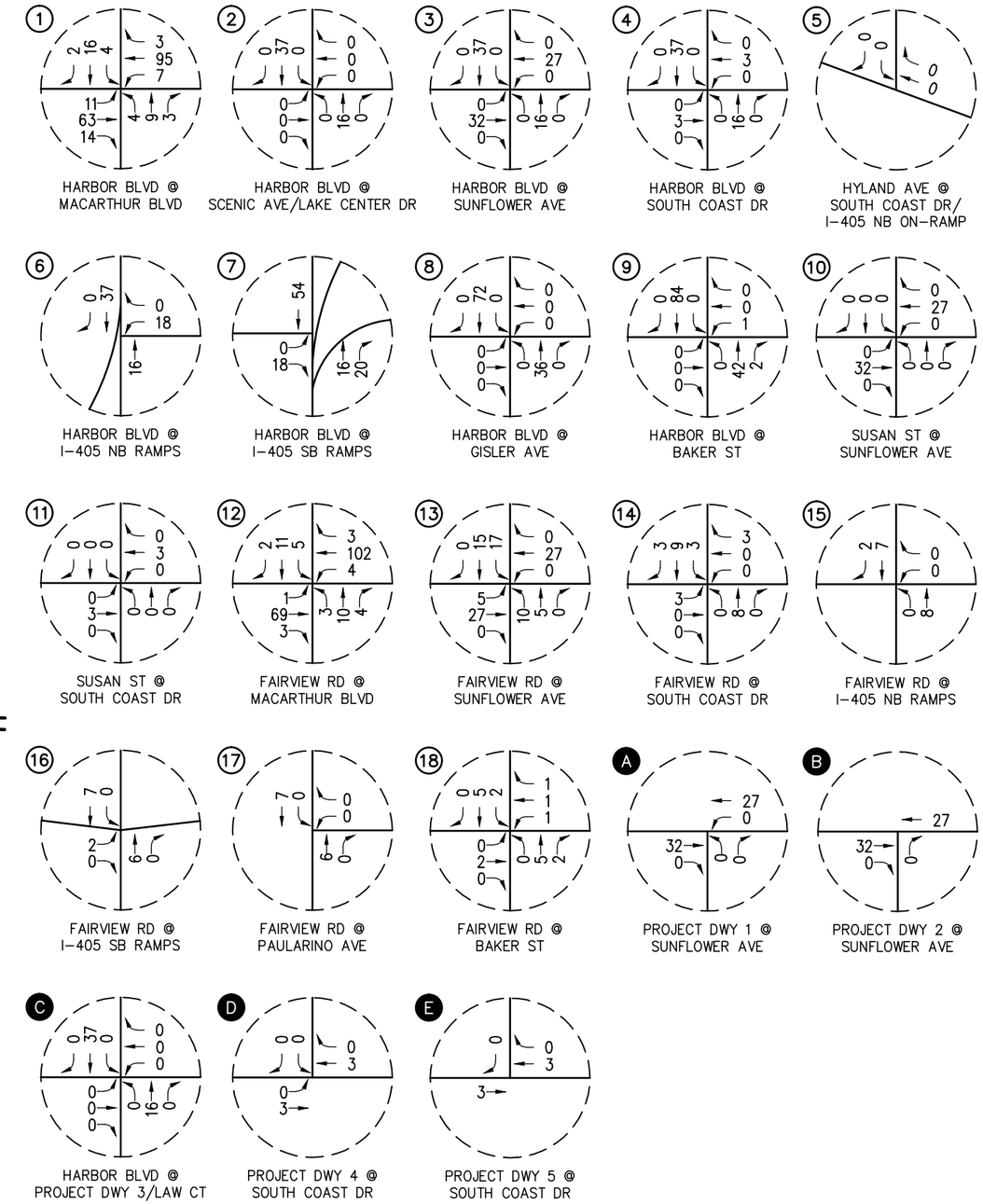
= PROJECT SITE

FIGURE 6-2

AM PEAK HOUR CUMULATIVE PROJECTS TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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N NO SCALE

SOURCE: GOOGLE

KEY

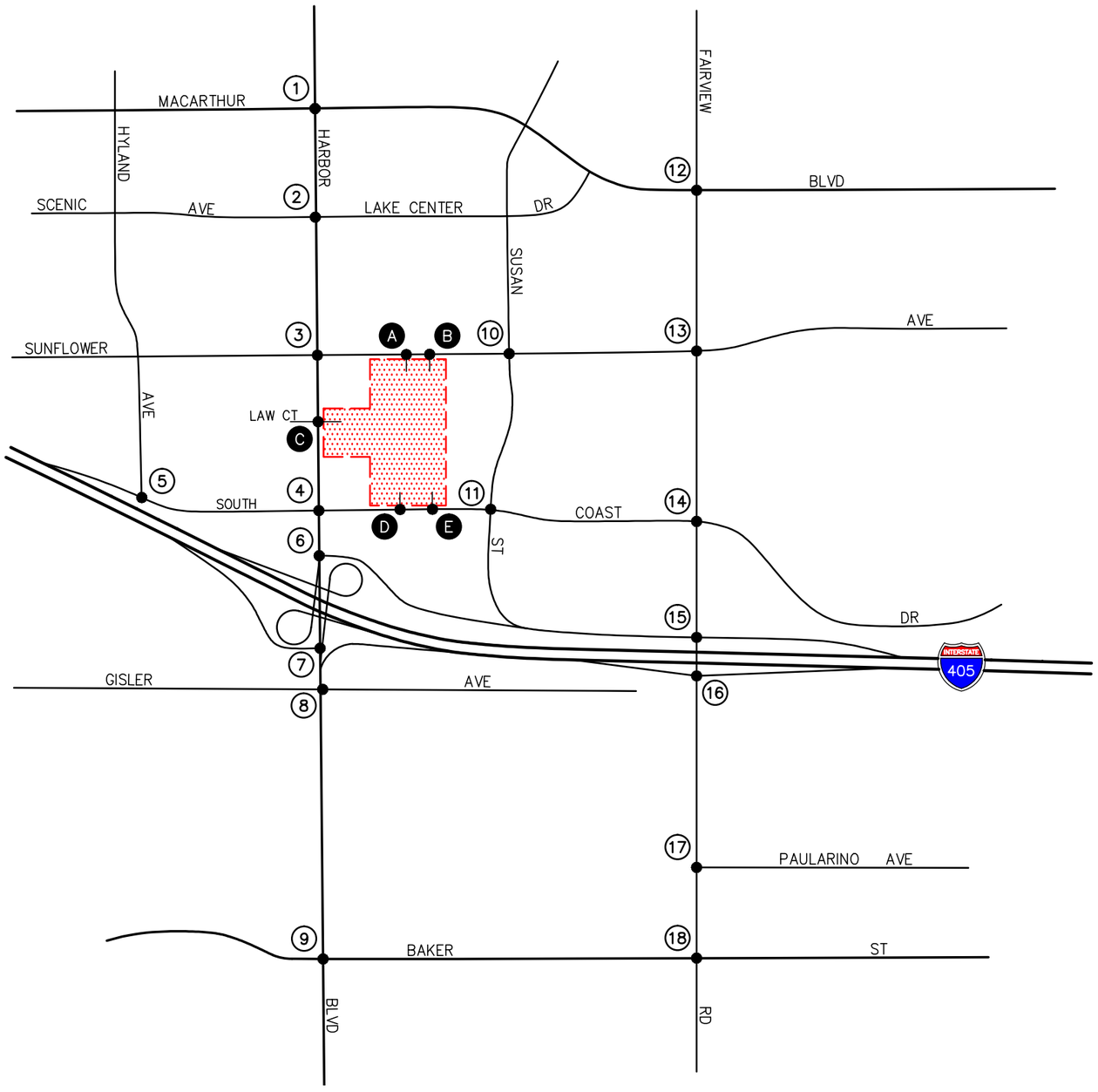
(#) = STUDY INTERSECTION

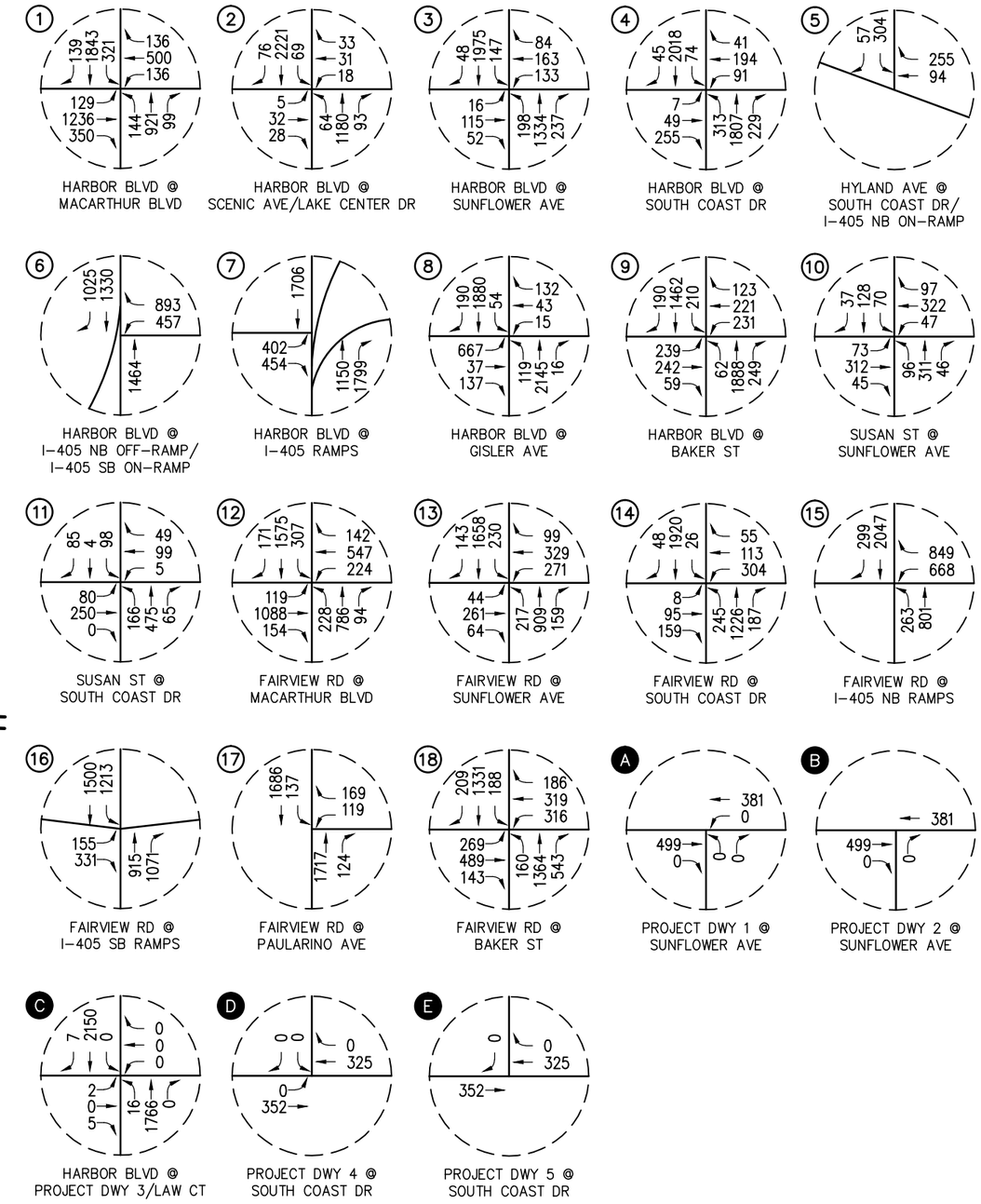
= PROJECT SITE

FIGURE 6-3

PM PEAK HOUR CUMULATIVE PROJECTS TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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LINSCOTT LAW & GREENSPAN engineers

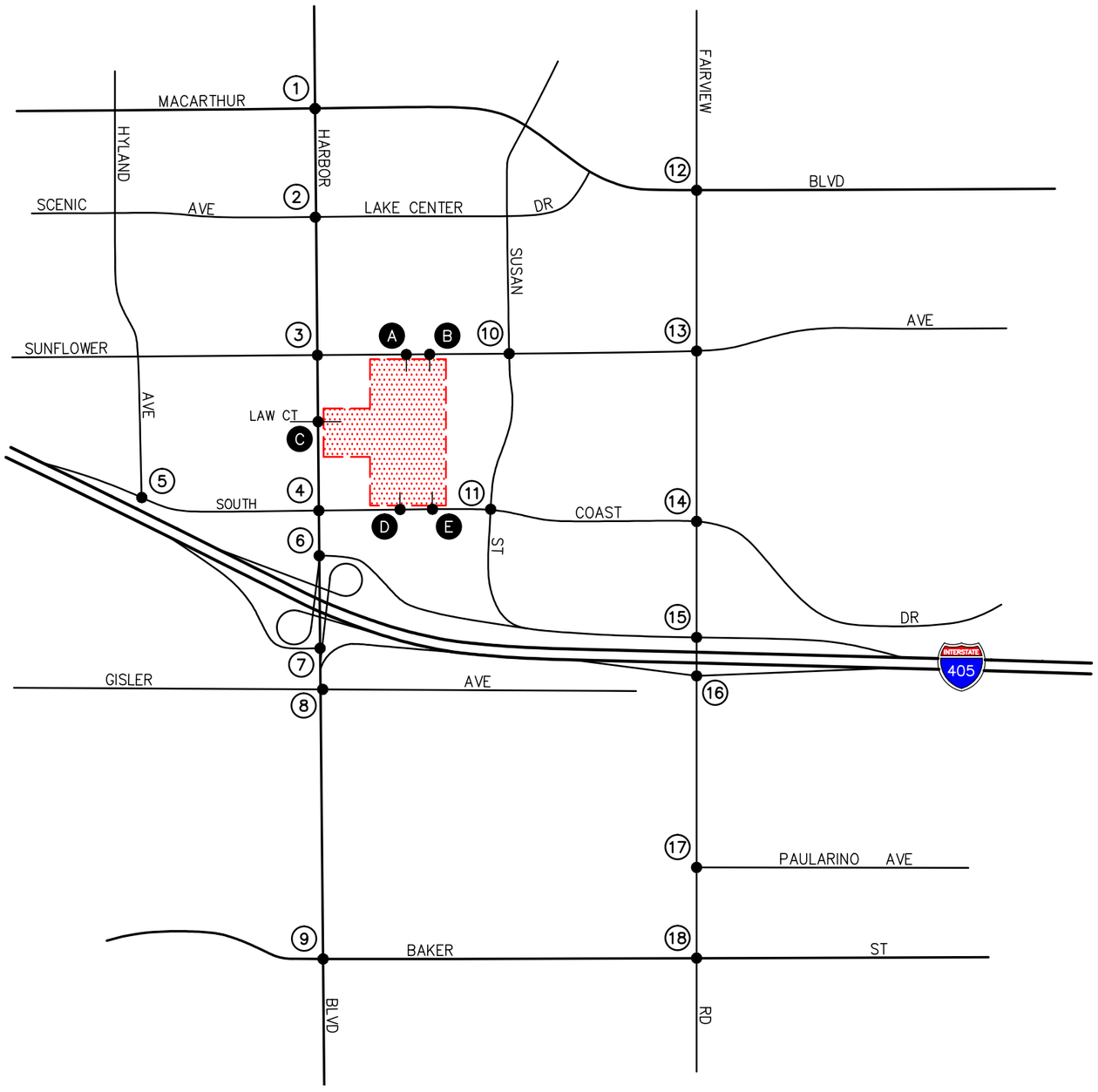
NO SCALE

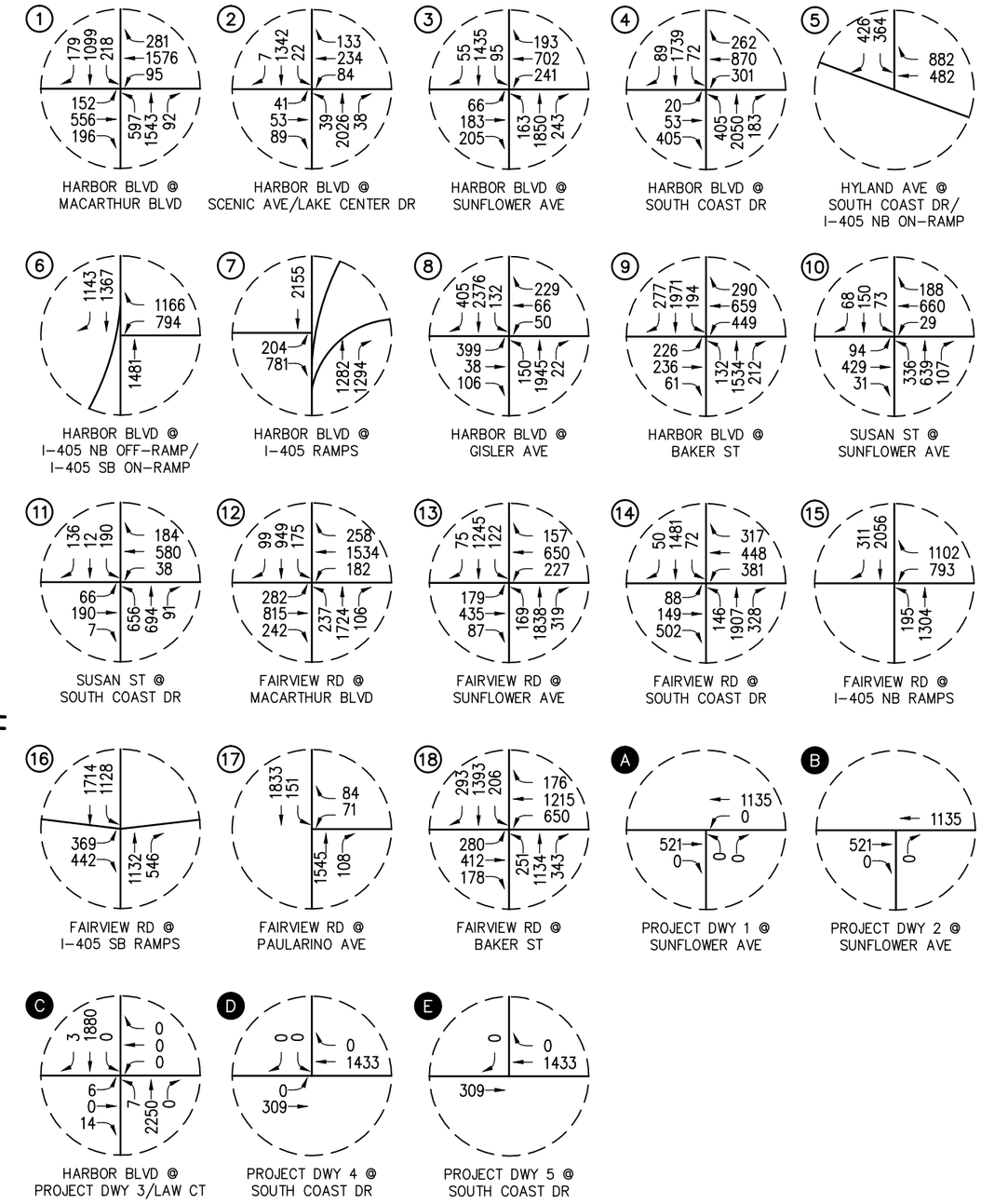
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-4

YEAR 2021 AM PEAK HOUR CUMULATIVE TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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LINSCOTT LAW & GREENSPAN engineers

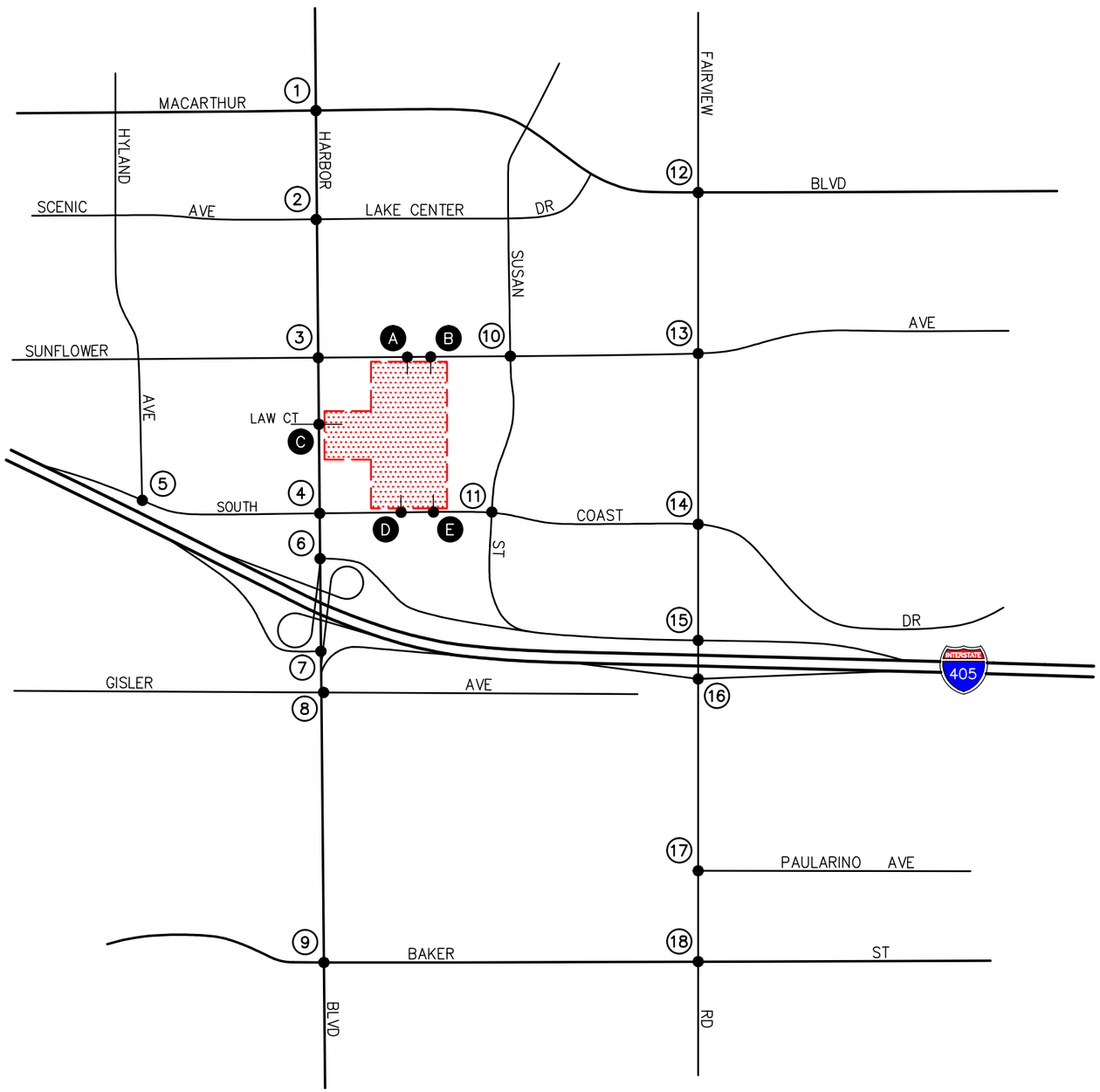
NO SCALE

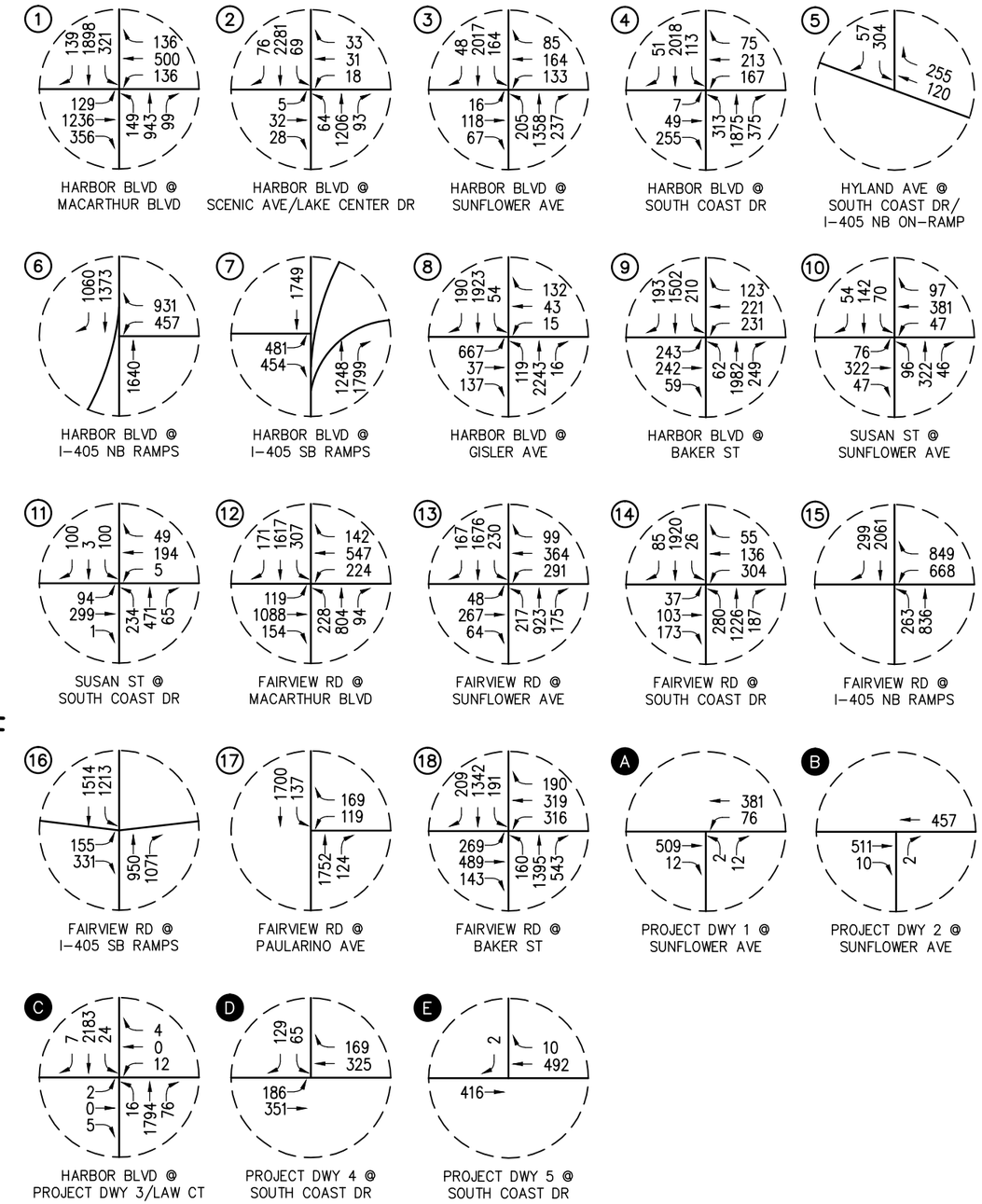
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-5

YEAR 2021 PM PEAK HOUR CUMULATIVE TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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KEY

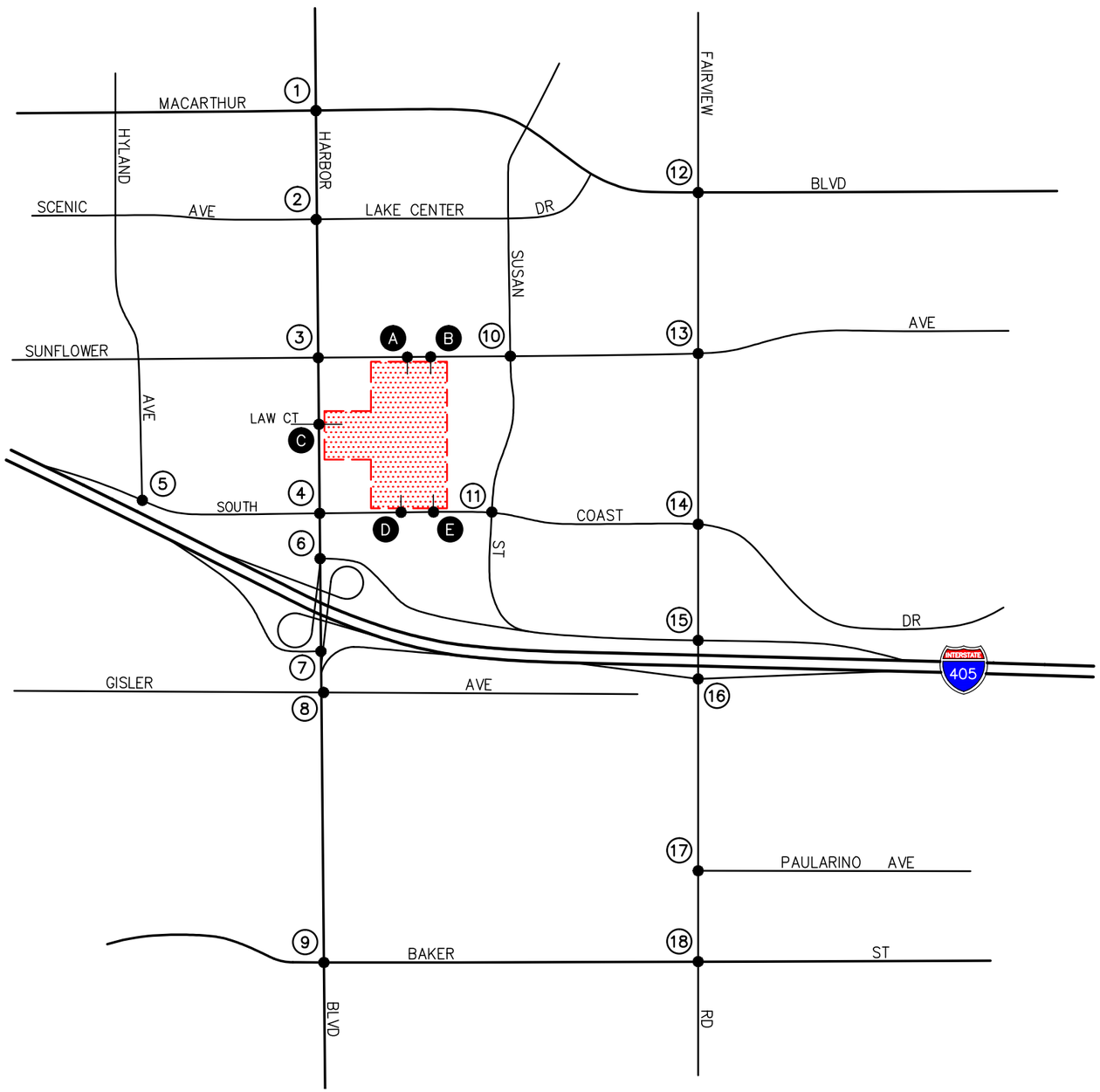
(#) = STUDY INTERSECTION

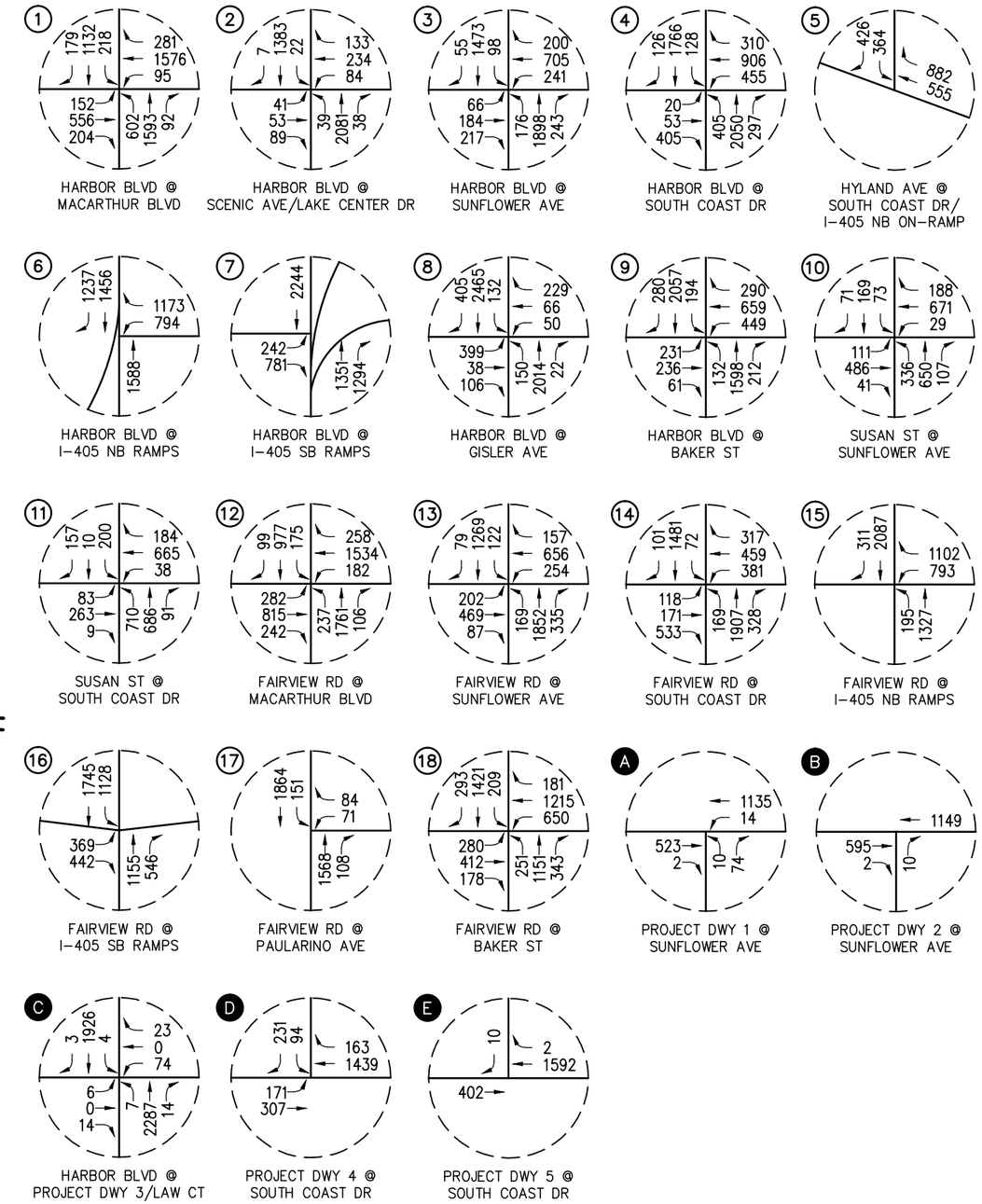
= PROJECT SITE

FIGURE 6-6

YEAR 2021 AM PEAK HOUR CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

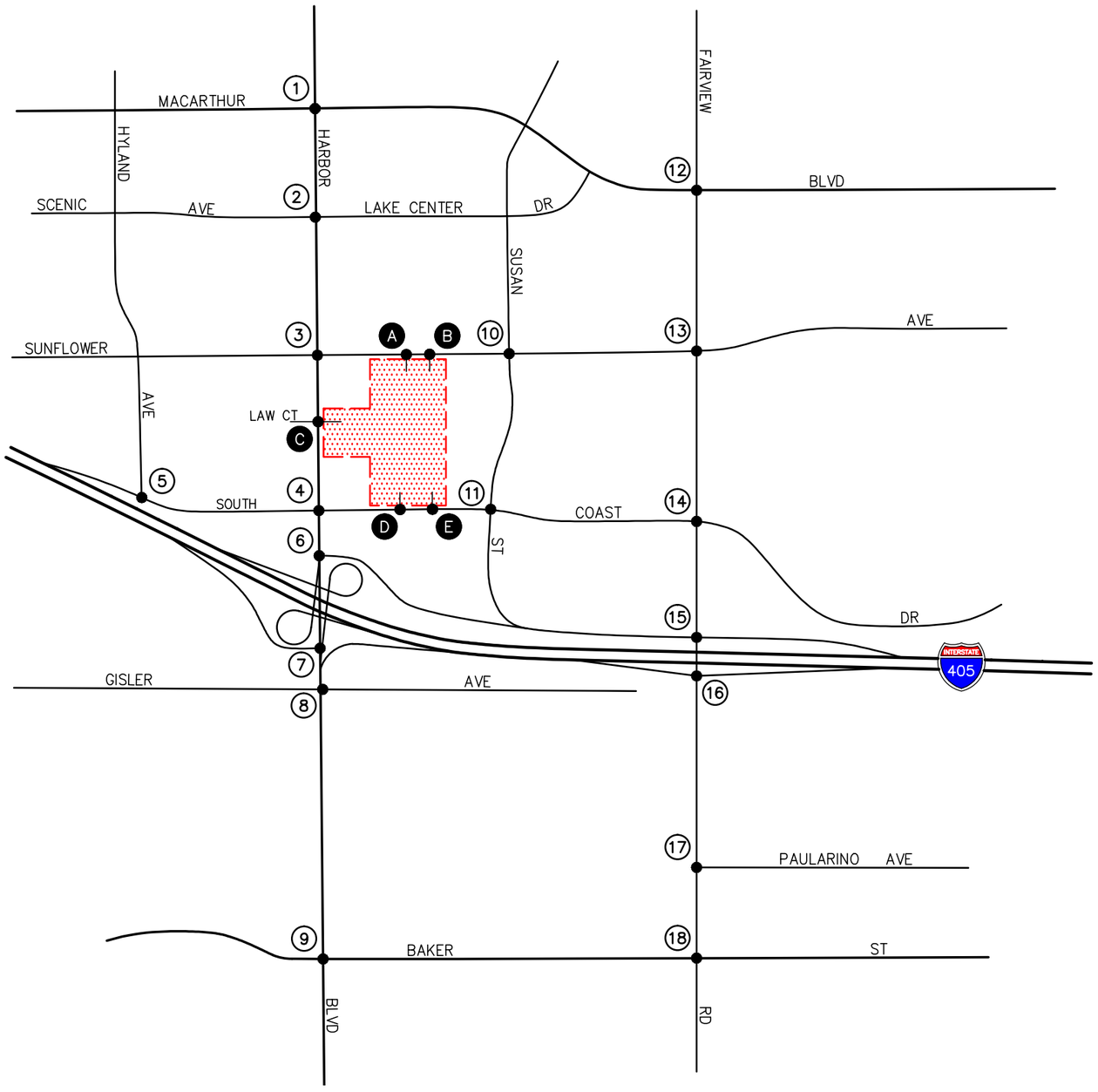
FIGURE 6-7

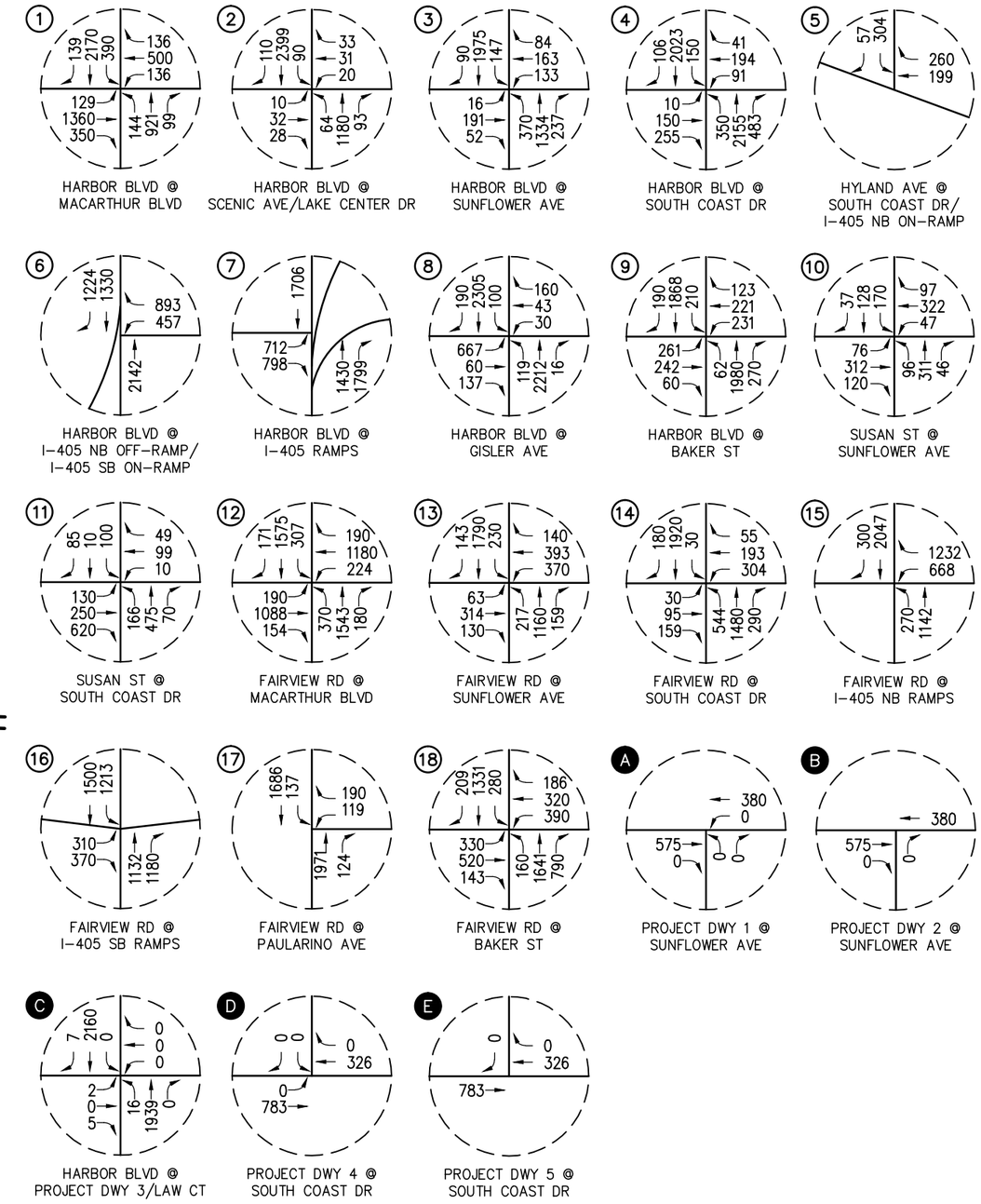
YEAR 2021 PM PEAK HOUR CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA

6.4 Year 2035 Traffic Volumes

Long-term (Year 2035) buildout peak hour traffic forecasts were based on Year 2035 volumes from the *Tribune Property Traffic Analysis,* prepared by Stantec in August 2016. ***Figures 6-8*** and ***6-9*** present the AM and PM peak hour buildout traffic volumes at the eighteen (18) key study intersections for the Year 2035, respectively. ***Figures 6-10*** and ***6-11*** illustrate the Year 2035 forecast AM and PM peak hour traffic volumes, with the inclusion of the trips generated by the proposed Project Phases 1, 2 and 3, respectively.





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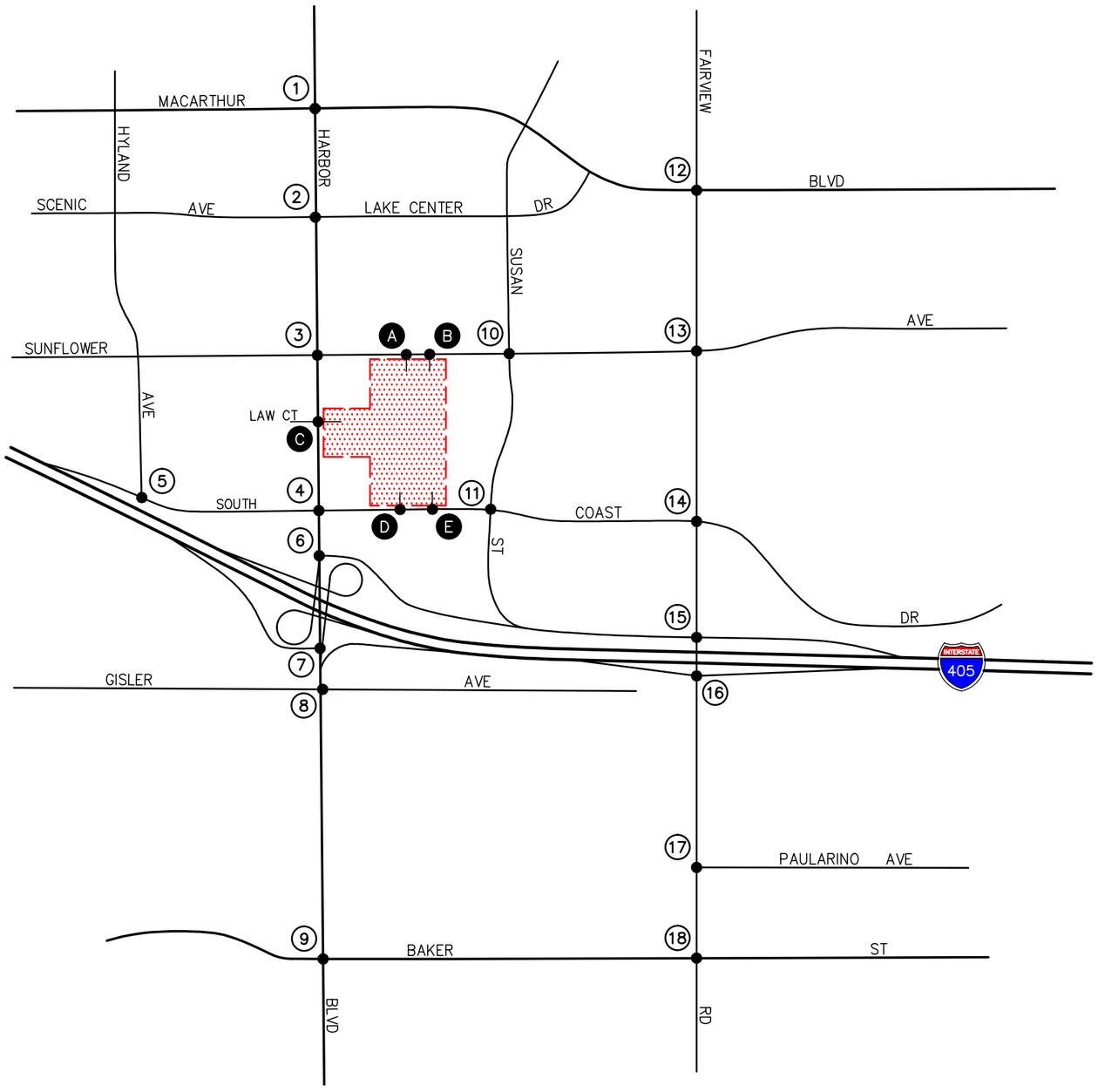
NO SCALE

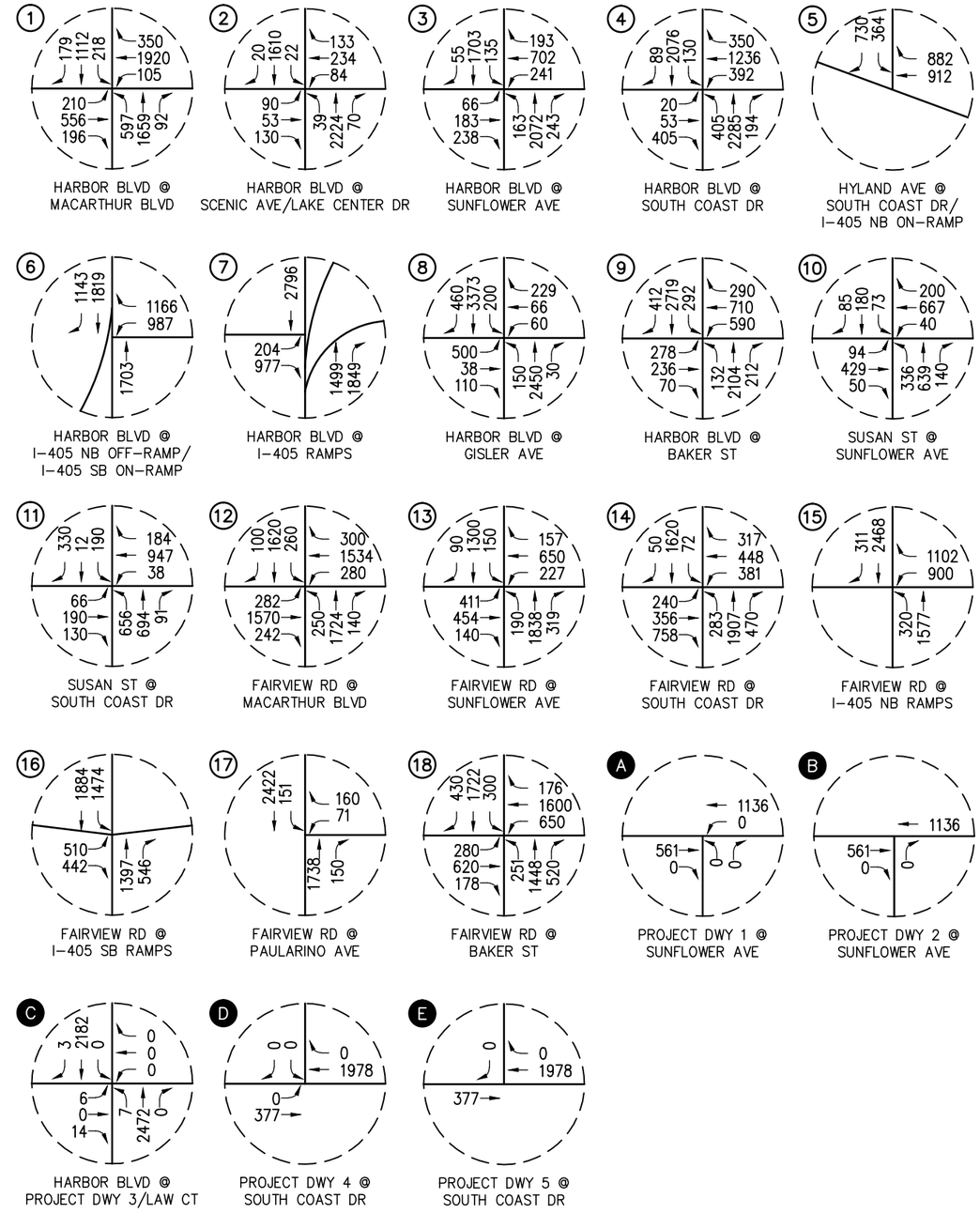
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-8

YEAR 2035 AM PEAK HOUR BUILDOUT TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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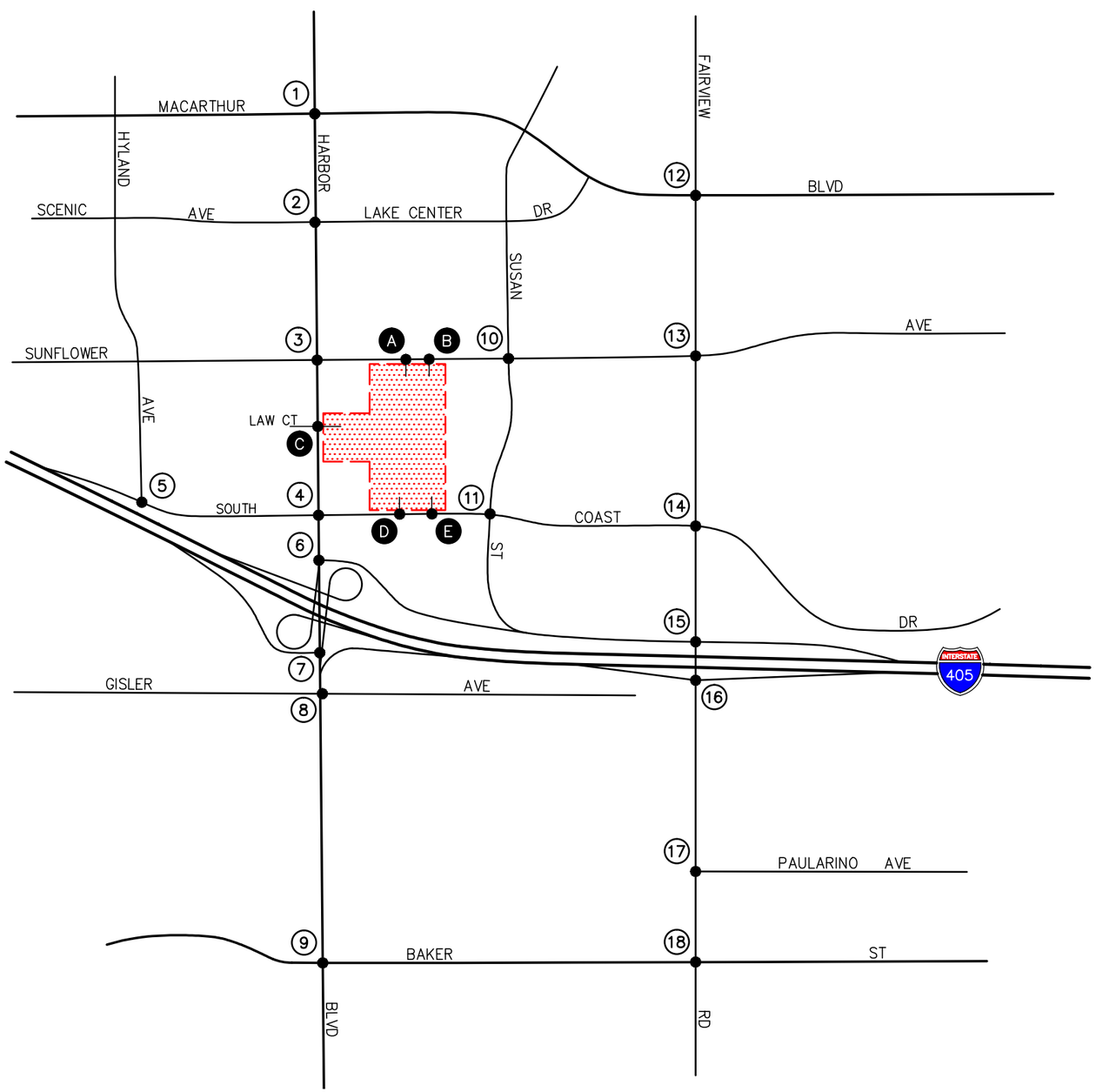
N NO SCALE

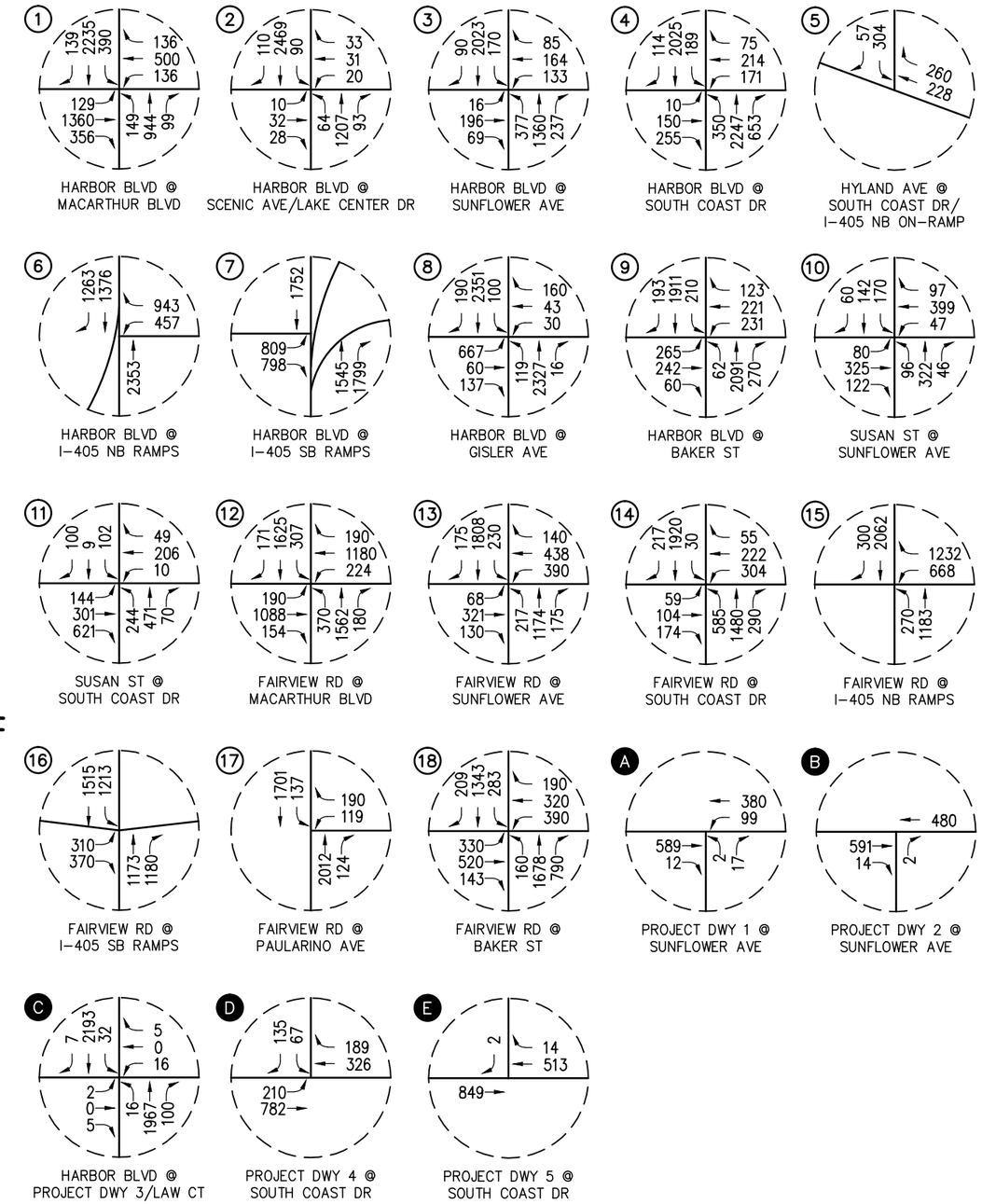
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-9

YEAR 2035 PM PEAK HOUR BUILDOUT TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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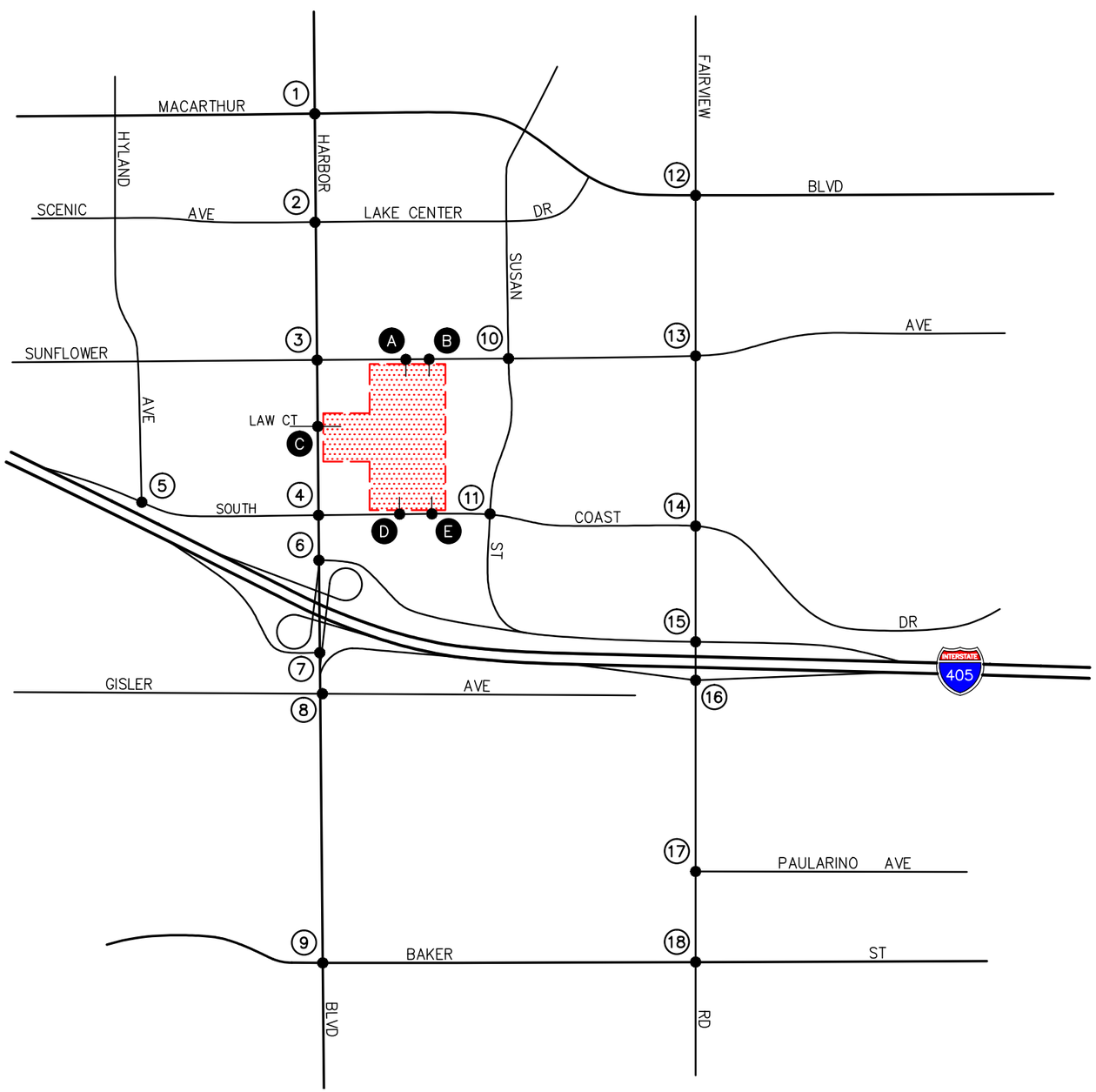
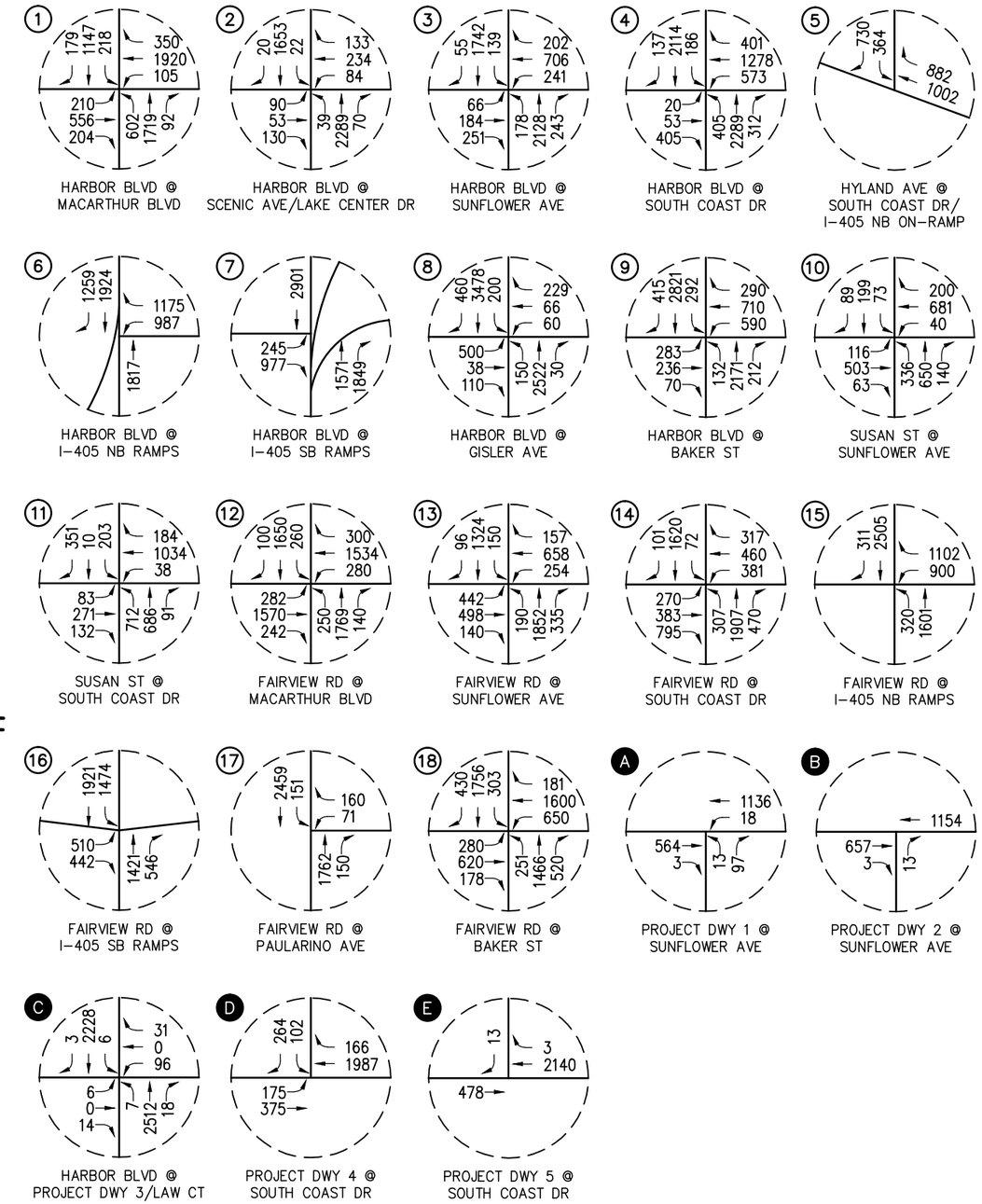
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-10

YEAR 2035 AM PEAK HOUR BUILDOUT PLUS PROJECT TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA





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LINSCOTT LAW & GREENSPAN engineers

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KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-11

YEAR 2035 PM PEAK HOUR BUILDOUT PLUS PROJECT TRAFFIC VOLUMES

THE PRESS SITE, COSTA MESA

7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The relative impact of the proposed Project during the AM peak hour and PM peak hour was evaluated based on analysis of future operating conditions at the eighteen (18) key study intersections, without, then with, the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the Project at each key intersection was then evaluated using the following traffic impact criteria.

7.1 Impact Criteria and Thresholds

7.1.1 *City of Costa Mesa*

Per the City of Costa Mesa guidelines, LOS D is the minimum acceptable level of service that should be maintained during the weekday AM peak hour and weekday PM peak hour. Per the City's criteria, the Project is considered to have a significant impact if the following criteria are met:

For Signalized Intersections:

- the ICU value under "with Project" conditions is 0.91 or greater (LOS E or F),
  and
- the ICU increase attributable to the Project is 0.01 or greater.

For Unsignalized Intersections:

- An unsignalized intersection impact is considered significant if the project causes an intersection at LOS D or better to degrade to LOS E or F, and the traffic signal warrant analysis determines that a signal is justified.

7.1.2 *City of Santa Ana*

For those study intersections solely under the jurisdiction of the City of Santa Ana, impacts to local and regional transportation systems are considered significant if:

- An unacceptable peak hour Level of Service (LOS) at any of the key intersections is projected. The City of Santa Ana considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections, except for those locations located within the City's defined major development areas, where LOS E is considered acceptable.
- The project increases traffic demand at the study intersection by 1% of capacity (ICU increase ≥ 0.010).
- At unsignalized intersections, an impact is considered significant if the project causes an intersection at LOS D or better to degrade to LOS E or F and the traffic signal warrant analysis determines that a signal is justified.

7.2 Traffic Impact Analysis Scenarios

The following scenarios are those for which volume/capacity calculations have been performed at the eighteen (18) key intersections for existing plus project, near-term (Year 2021) and long-term buildout (Year 2035) traffic conditions:

A. Existing Traffic Conditions;
B. Existing Plus Project Phases 1, 2 and 3 Traffic Conditions;
C. Scenario (B) with Improvements, if necessary;
D. Near-Term (Year 2021) Cumulative Traffic Conditions,
E. Near-Term (Year 2021) Cumulative plus Project Phases 1 and 2 Traffic Conditions;
F. Scenario (E) with Improvements, if necessary;
G. Long-Term (Year 2035) Buildout Traffic Conditions,
H. Long-Term (Year 2035) Buildout plus Project Phases 1, 2 and 3 Traffic Conditions;
I. Scenario (H) with Improvements, if necessary.

8.0 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

8.1 Existing Plus Project Analysis

Table 8-1 summarizes the peak hour Level of Service results at the eighteen (18) key study intersections for Existing Plus Project traffic conditions. The first column (1) of ICU/LOS values in *Table 8-1* presents a summary of Existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists Existing Plus Project (Phases 1, 2 and 3) traffic conditions. The third column (3) shows the increase in ICU value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fourth column (4) of *Table 8-1* indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service, if necessary.

8.1.1 *Existing Plus Project Traffic Conditions*

Review of Columns 2 and 3 of *Table 8-1* indicates that traffic associated with the proposed Project will not significantly impact any of the eighteen (18) key study intersections, when compared to the LOS standards and significant impact criteria specified in this report. All eighteen (18) key study intersections currently operate and are forecast to continue to operate at acceptable service levels during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

It should be noted that the level of service results for the joint jurisdiction intersections based on Santa Ana criteria are presented in the footnotes of *Table 8-1*. These results are similar to the findings based on Costa Mesa criteria.

Appendix C presents the Existing Plus Project ICU/LOS calculation worksheets for the key study intersections.

TABLE 8-1

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project (Phases 1, 2 and 3) Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
1.	Harbor Boulevard at	AM	0.748	C	0.764	C	0.016	No	--	--
	MacArthur Boulevard[20,21]	PM	0.814	D	0.823	D	0.009	No	--	--
2.	Harbor Boulevard at	AM	0.561	A	0.576	A	0.015	No	--	--
	Scenic Avenue/Lake Center Drive	PM	0.707	C	0.721	C	0.014	No	--	--
3.	Harbor Boulevard at	AM	0.601	B	0.621	B	0.020	No	--	--
	Sunflower Avenue[20,21]	PM	0.798	C	0.820	D	0.022	No	--	--
4.	Harbor Boulevard at	AM	0.546	A	0.573	A	0.027	No	--	--
	South Coast Drive	PM	0.690	B	0.711	C	0.021	No	--	--
5.	Hyland Avenue at	AM	0.271	A	0.291	A	0.020	No	--	--
	South Coast Drive/I-405 NB On-Ramp	PM	0.558	A	0.619	B	0.061	No	--	--
6.	Harbor Boulevard at	AM	0.509	A	0.559	A	0.050	No	--	--
	I-405 NB Ramps	PM	0.632	B	0.652	B	0.020	No	--	--
7.	Harbor Boulevard at	AM	0.446	A	0.474	A	0.028	No	--	--
	I-405 SB Ramps	PM	0.579	A	0.597	A	0.018	No	--	--

20 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Existing Conditions are as follows:

1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.739/0.804, LOS = C/D
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.605/0.819, LOS = B/D

21 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Existing Plus Project Conditions are as follows:

1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.754/0.812, LOS = C/D
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.624/0.844, LOS = B/D

TABLE 8-1 (CONTINUED)
EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project (Phases 1, 2 and 3) Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
8.	Harbor Boulevard at	AM	0.616	B	0.624	B	0.008	No	--	--
	Gisler Avenue	PM	0.773	C	0.790	C	0.017	No	--	--
9.	Harbor Boulevard at	AM	0.516	A	0.534	A	0.018	No	--	--
	Baker Street	PM	0.601	B	0.619	B	0.018	No	--	--
10.	Susan Street at	AM	0.487	A	0.528	A	0.041	No	--	--
	Sunflower Avenue	PM	0.776	C	0.802	D	0.026	No	--	--
11.	Susan Street at	AM	0.321	A	0.340	A	0.019	No	--	--
	South Coast Drive	PM	0.513	A	0.549	A	0.036	No	--	--
12.	Fairview Road at	AM	0.673	B	0.683	B	0.010	No	--	--
	MacArthur Boulevard	PM	0.827	D	0.836	D	0.009	No	--	--
13.	Fairview Road at	AM	0.661	B	0.681	B	0.020	No	--	--
	Sunflower Avenue[22,23]	PM	0.678	B	0.694	B	0.016	No	--	--
14.	Fairview Road at	AM	0.681	B	0.710	C	0.029	No	--	--
	South Coast Drive	PM	0.704	C	0.716	C	0.012	No	--	--

[22] For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Existing Conditions are as follows:

13. Fairview Road at Sunflower Avenue: [AM/PM] 0.655/0.662, LOS = B/B

[23] For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Existing Plus Project Conditions are as follows:

13. Fairview Road at Sunflower Avenue: [AM/PM] ICU = 0.670/0.669, LOS = B/B

TABLE 8-1 (CONTINUED)
EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project (Phases 1, 2 and 3) Traffic Conditions		(3) Significant Impact		(4) Existing Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
15.	Fairview Road at	AM	0.668	B	0.670	B	0.002	No	--	--
	I-405 NB Ramps	PM	0.690	B	0.694	B	0.004	No	--	--
16.	Fairview Road at	AM	0.614	B	0.729	C	0.115	No	--	--
	I-405 SB Ramps	PM	0.587	A	0.590	A	0.003	No	--	--
17.	Fairview Road at	AM	0.620	B	0.629	B	0.009	No	--	--
	Paularino Avenue	PM	0.497	A	0.502	A	0.005	No	--	--
18.	Fairview Road at	AM	0.647	B	0.656	B	0.009	No	--	--
	Baker Street	PM	0.632	B	0.637	B	0.005	No	--	--

8.2 Year 2021 Traffic Conditions

Table 8-2 summarizes the peak hour Level of Service results at the eighteen (18) key study intersections for the Year 2021 horizon year. The first column (1) of ICU/LOS values in *Table 8-2* presents a summary of Existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists projected cumulative traffic conditions (existing plus ambient plus related projects traffic) based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2021 near-term traffic conditions with the addition of Project traffic (Phases 1 and 2). The fourth column (4) shows the increase in ICU value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fifth column (5) of *Table 8-2* indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service, if necessary.

8.2.1 *Year 2021 Cumulative Traffic Conditions*

Review of Column 2 of *Table 8-2* indicates that the addition of ambient traffic growth and related projects traffic will not adversely impact any of the eighteen (18) key study intersections. All eighteen (18) key study intersections are forecast to operate at acceptable service levels during the AM and PM peak hours under Year 2021 Cumulative traffic conditions.

8.2.2 *Year 2021 Cumulative Plus Project Traffic Conditions*

Review of Columns 3 and 4 of *Table 8-2* indicates that traffic associated with the proposed Project (Phases 1 and 2) will not significantly impact any of the eighteen (18) key study intersections. All eighteen (18) key study intersections are forecast to operate at acceptable service levels during the AM and PM peak hours with the addition of Project generated traffic to Year 2021 Cumulative traffic conditions.

It should be noted that the level of service results for the joint jurisdiction intersections based on Santa Ana criteria are presented in the footnotes of *Table 8-2*. These results are similar to the findings based on Costa Mesa criteria.

Appendix C presents the Year 2021 Cumulative and Year 2021 Cumulative Plus Project ICU/LOS calculation worksheets for the key study intersections.

TABLE 8-2
YEAR 2021 CUMULATIVE PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Year 2021 Cumulative Traffic Conditions		(3) Year 2021 Cumulative Plus Project (Phases 1 and 2) Traffic Conditions		(4) Significant Impact		(5) Year 2021 Cumulative Plus Project (Phases 1 and 2) Plus Mitigation	
		ICU	LOS	ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
1. Harbor Boulevard at MacArthur Boulevard[24,25]	AM	0.748	C	0.796	C	0.810	D	0.014	No	--	--
	PM	0.814	D	0.870	D	0.879	D	0.009	No	--	--
2. Harbor Boulevard at Scenic Avenue/Lake Center Drive	AM	0.561	A	0.579	A	0.592	A	0.013	No	--	--
	PM	0.707	C	0.732	C	0.744	C	0.012	No	--	--
3. Harbor Boulevard at Sunflower Avenue[24,25]	AM	0.601	B	0.629	B	0.646	B	0.017	No	--	--
	PM	0.798	C	0.845	D	0.863	D	0.018	No	--	--
4. Harbor Boulevard at South Coast Drive	AM	0.546	A	0.564	A	0.589	A	0.025	No	--	--
	PM	0.690	B	0.719	C	0.735	C	0.016	No	--	--
5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM	0.271	A	0.279	A	0.298	A	0.019	No	--	--
	PM	0.558	A	0.575	A	0.625	B	0.050	No	--	--
6. Harbor Boulevard at I-405 NB Ramps	AM	0.509	A	0.531	A	0.570	A	0.039	No	--	--
	PM	0.632	B	0.657	B	0.676	D	0.019	No	--	--
7. Harbor Boulevard at I-405 SB Ramps	AM	0.446	A	0.462	A	0.487	A	0.025	No	--	--
	PM	0.579	A	0.611	B	0.626	B	0.015	No	--	--

24 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2021 Cumulative Conditions are as follows:
1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.784/0.856, LOS = C/D
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.631/0.853, LOS = B/D

25 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2021 Cumulative Plus Project Conditions are as follows:
1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.796/0.864, LOS = C/D
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.647/0.875, LOS = B/D

TABLE 8-2 (CONTINUED)
YEAR 2021 CUMULATIVE PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2021 Cumulative Traffic Conditions		(3) Year 2021 Cumulative Plus Project (Phases 1 and 2) Traffic Conditions		(4) Significant Impact		(5) Year 2021 Cumulative Plus Project (Phases 1 and 2) Plus Mitigation	
			ICU	LOS	ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
8.	Harbor Boulevard at	AM	0.616	B	0.638	B	0.645	B	0.007	No	--	--
	Gisler Avenue	PM	0.773	C	0.808	D	0.823	D	0.015	No	--	--
9.	Harbor Boulevard at	AM	0.516	A	0.545	A	0.561	A	0.016	No	--	--
	Baker Street	PM	0.601	B	0.633	B	0.648	B	0.015	No	--	--
10.	Susan Street at	AM	0.487	A	0.509	A	0.542	A	0.033	No	--	--
	Sunflower Avenue	PM	0.776	C	0.808	D	0.830	D	0.022	No	--	--
11.	Susan Street at	AM	0.321	A	0.331	A	0.349	A	0.018	No	--	--
	South Coast Drive	PM	0.513	A	0.530	A	0.564	A	0.034	No	--	--
12.	Fairview Road at	AM	0.673	B	0.713	C	0.722	C	0.009	No	--	--
	MacArthur Boulevard	PM	0.827	D	0.875	D	0.883	D	0.008	No	--	--
13.	Fairview Road at	AM	0.661	B	0.687	B	0.705	C	0.018	No	--	--
	Sunflower Avenue[26,27]	PM	0.678	B	0.715	C	0.728	C	0.013	No	--	--
14.	Fairview Road at	AM	0.681	B	0.704	C	0.729	C	0.025	No	--	--
	South Coast Drive	PM	0.704	C	0.728	C	0.738	C	0.010	No	--	--

[26] For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2021 Cumulative Conditions are as follows:

13. Fairview Road at Sunflower Avenue: [AM/PM] ICU = 0.675/0.696, LOS = B/B

[27] For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2021 Cumulative Plus Project Conditions are as follows:

13. Fairview Road at Sunflower Avenue: [AM/PM] ICU = 0.692/0.698, LOS = B/B

TABLE 8-2 (CONTINUED)
YEAR 2021 CUMULATIVE PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2021 Cumulative Traffic Conditions		(3) Year 2021 Cumulative Plus Project (Phases 1 and 2) Traffic Conditions		(4) Significant Impact		(5) Year 2021 Cumulative Plus Project (Phases 1 and 2) Plus Mitigation	
			ICU	LOS	ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
15.	Fairview Road at	AM	0.668	B	0.689	B	0.691	B	0.002	No	--	--
	I-405 NB Ramps	PM	0.690	B	0.712	C	0.715	C	0.003	No	--	--
16.	Fairview Road at	AM	0.614	B	0.633	B	0.639	B	0.006	No	--	--
	I-405 SB Ramps	PM	0.587	A	0.606	B	0.609	B	0.003	No	--	--
17.	Fairview Road at	AM	0.620	B	0.640	B	0.648	B	0.008	No	--	--
	Paularino Avenue	PM	0.497	A	0.512	A	0.517	A	0.005	No	--	--
18.	Fairview Road at	AM	0.647	B	0.668	B	0.677	B	0.009	No	--	--
	Baker Street	PM	0.632	B	0.653	B	0.658	B	0.005	No	--	--

8.3 Year 2035 Traffic Conditions

Table 8-3 summarizes the peak hour Level of Service results at the eighteen (18) key study intersections for the Year 2035 buildout year. The first column (1) of ICU/LOS values in *Table 8-3* presents a summary of Existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists projected buildout traffic conditions based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2035 long-term buildout traffic conditions with the addition of Project traffic (Phases 1, 2 and 3). The fourth column (4) shows the increase in ICU value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fifth column (5) of *Table 8-3* indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service, if necessary.

8.3.1 *Year 2035 Buildout Traffic Conditions*

Review of Column 2 of *Table 8-3* indicates that two (2) out of the eighteen key study intersections are forecast to operate adversely during the AM and/or PM peak hours. The remaining study intersections are forecast to operate at acceptable services levels during the AM and PM peak hours under Year 2035 buildout traffic conditions. The intersections operating adversely consist of the following:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
1. Harbor Boulevard at MacArthur Boulevard	--	--	0.949	E
12. Fairview Road at MacArthur Boulevard	--	--	0.915	E

8.3.2 *Year 2035 Buildout Plus Project Traffic Conditions*

Review of Column 3 of *Table 8-3* indicates that two (2) intersections are forecast to operate adversely during the AM and/or PM peak hours. The remaining study intersections are forecast to operate at acceptable service levels during the AM and PM peak hours under Year 2035 buildout traffic conditions with the addition of the proposed Project trips. The intersections operating adversely consist of the following:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
1. Harbor Boulevard at MacArthur Boulevard	--	--	0.958	E
12. Fairview Road at MacArthur Boulevard	--	--	0.924	E

Review of Column 4 of *Table 8-3* indicates that traffic associated with the proposed Project will not significantly impact any of the eighteen (18) key study intersections. Although the intersections of Harbor Boulevard/MacArthur Boulevard and Fairview Road/MacArthur Boulevard are forecast to

operate adversely, the proposed Project adds less than 0.010 to the ICU increment and is therefore not considered significantly impacted based on the significant impact criteria defined in this report.

It should be noted that the level of service results for the joint jurisdiction intersections based on Santa Ana criteria are presented in the footnotes of *Table 8-3*. These results are similar to the findings based on Costa Mesa criteria.

Appendix C presents the Year 2035 Buildout and Year 2035 Buildout Plus Project ICU/LOS calculation worksheets for the key study intersections.

TABLE 8-3
YEAR 2035 BUILDOUT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Year 2035 Buildout Traffic Conditions		(3) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Traffic Conditions		(4) Significant Impact		(5) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Plus Mitigation	
		ICU	LOS	ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
1. Harbor Boulevard at MacArthur Boulevard[28,29]	AM	0.748	C	0.865	D	0.881	D	0.016	No	--	--
	PM	0.814	D	**0.949**	**E**	**0.958**	**E**	0.009	No	--	--
2. Harbor Boulevard at Scenic Avenue/Lake Center Drive	AM	0.561	A	0.609	B	0.624	B	0.015	No	--	--
	PM	0.707	C	0.777	C	0.791	C	0.014	No	--	--
3. Harbor Boulevard at Sunflower Avenue[28,29]	AM	0.601	B	0.648	B[30]	0.662	B[30]	0.014	No	--	--
	PM	0.798	C	0.842	D	0.864	D	0.022	No	--	--
4. Harbor Boulevard at South Coast Drive	AM	0.546	A	0.580	A	0.606	B	0.026	No	--	--
	PM	0.690	B	0.850	D	0.869	D	0.019	No	--	--
5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp	AM	0.271	A	0.314	A	0.333	A	0.019	No	--	--
	PM	0.558	A	0.798	C	0.854	D	0.056	No	--	--
6. Harbor Boulevard at I-405 NB Ramps	AM	0.509	A	0.616	B	0.662	B	0.046	No	--	--
	PM	0.632	B	0.733	C	0.751	C	0.018	No	--	--
7. Harbor Boulevard at I-405 SB Ramps	AM	0.446	A	0.613	B	0.657	B	0.044	No	--	--
	PM	0.579	A	0.742	C	0.759	C	0.017	No	--	--

28 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2035 Buildout Conditions are as follows:
1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.872/0.962, LOS = D/E
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.671/0.854, LOS = B/D

29 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2035 Buildout Plus Project Conditions are as follows:
1. Harbor Boulevard at MacArthur Boulevard: [AM/PM] ICU = 0.886/0.971, LOS = D/E
3. Harbor Boulevard at Sunflower Avenue: [AM/PM] ICU = 0.684/0.875, LOS = B/D

30 Year 2035 Buildout traffic conditions include planned improvements as discussed in Section 11.0.

TABLE 8-3 (CONTINUED)
YEAR 2035 BUILDOUT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2035 Buildout Traffic Conditions		(3) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Traffic Conditions		(4) Significant Impact		(5) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			ICU	LOS	ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
8.	Harbor Boulevard at	AM	0.616	B	0.686	B[31]	0.693	B[31]	0.007	No	--	--
	Gisler Avenue	PM	0.773	C	0.876	D	0.892	D	0.016	No	--	--
9.	Harbor Boulevard at	AM	0.516	A	0.542	A	0.559	A	0.017	No	--	--
	Baker Street	PM	0.601	B	0.775	C	0.792	C	0.017	No	--	--
10.	Susan Street at	AM	0.487	A	0.479	A	0.513	A	0.034	No	--	--
	Sunflower Avenue	PM	0.776	C	0.775	C	0.800	C	0.025	No	--	--
11.	Susan Street at	AM	0.321	A	0.477	A	0.492	A	0.015	No	--	--
	South Coast Drive	PM	0.513	A	0.628	B	0.684	B	0.056	No	--	--
12.	Fairview Road at	AM	0.673	B	0.796	C	0.800	C	0.004	No	--	--
	MacArthur Boulevard	PM	0.827	D	**0.915**	**E**	**0.924**	**E**	0.009	No	--	--
13.	Fairview Road at	AM	0.661	B	0.725	C	0.744	C	0.019	No	--	--
	Sunflower Avenue[32,33]	PM	0.678	B	0.761	C	0.776	C	0.015	No	--	--
14.	Fairview Road at	AM	0.681	B	0.762	C	0.788	C	0.026	No	--	--
	South Coast Drive	PM	0.704	C	0.792	C	0.822	D	0.030	No	--	--

31 Year 2035 Buildout traffic conditions include planned improvements as discussed in Section 11.0.

32 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2035 Buildout Conditions are as follows:

13. Fairview Road at Sunflower Avenue: [AM/PM] ICU = 0.775/0.777, LOS = C/C

33 For the intersections with shared jurisdictions with the Cities of Costa Mesa and Santa Ana, the City of Santa Ana TIA/ICU Guidelines were applied and the corresponding LOS results for Year 2035 Buildout Plus Project Conditions are as follows:

13. Fairview Road at Sunflower Avenue: [AM/PM] ICU = 0.788/0.792, LOS = C/C

TABLE 8-3 (CONTINUED)
YEAR 2035 BUILDOUT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2035 Buildout Traffic Conditions		(3) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Traffic Conditions		(4) Significant Impact		(5) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			ICU	LOS	ICU	LOS	ICU	LOS	Increase	Yes/No	ICU	LOS
15.	Fairview Road at	AM	0.668	B	0.767	C	0.769	C	0.002	No	--	--
	I-405 NB Ramps	PM	0.690	B	0.801	D	0.805	D	0.004	No	--	--
16.	Fairview Road at	AM	0.614	B	0.637	B	0.644	B	0.007	No	--	--
	I-405 SB Ramps	PM	0.587	A	0.709	C	0.712	C	0.003	No	--	--
17.	Fairview Road at	AM	0.620	B	0.641	B	0.649	B	0.008	No	--	--
	Paularino Avenue	PM	0.497	A	0.605	B	0.612	B	0.007	No	--	--
18.	Fairview Road at	AM	0.647	B	0.744	C	0.745	C	0.001	No	--	--
	Baker Street	PM	0.632	B	0.816	D	0.821	D	0.005	No	--	--

9.0 STATE OF CALIFORNIA (CALTRANS) ANALYSIS

In conformance with the current Caltrans *Guide for the Preparation of Traffic Impact Studies, dated December 2002*, existing and projected peak hour operating conditions at the five (5) state-controlled study intersections within the study area have been evaluated using the *Highway Capacity Manual* operations method of analysis. These state-controlled locations include the following study intersections:

5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp (Costa Mesa/Caltrans)
6. Harbor Avenue at I-405 NB Ramps (Costa Mesa/Caltrans)
7. Harbor Avenue at I-405 SB Ramps (Costa Mesa/Caltrans)
15. Fairview Road at I-405 NB Ramps (Costa Mesa/Caltrans)
16. Fairview Road at I-405 SB Ramps (Costa Mesa/Caltrans)

Caltrans "endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities"; it does not require that LOS "D" (shall) be maintained. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this analysis, LOS D is the target level of service standard and will be utilized to assess the project impacts at the state-controlled study intersections.

The Caltrans *Guide for the Preparation of Traffic Impact Studies, dated December 2002* states that if an existing State-owned facility operates at less than the target LOS (i.e. LOS D); the existing service level should be maintained. Based on Caltrans Criteria, a Project's impact is considered significant if the Project causes the LOS to change from an acceptable LOS (i.e., LOS D or better) to a deficient LOS (i.e. LOS E or F).

9.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

Based on the HCM 6th Edition operations method of analysis, level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents and when there are no other vehicles on the road.

In the HCM, only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay.* Control delay includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in ***Table 9-1***.

TABLE 9-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM)[34]

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and ≤ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and ≤ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and ≤ 55.0	Long traffic delays. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and ≤ 80.0	Very long traffic delays. This level is considered by many agencies (i.e. SANBAG) to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	≥ 80.0	Severe congestion. This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

[34] Source: *Highway Capacity Manual* (Signalized Intersections).

9.2 Existing Plus Project Traffic Conditions

Table 9-2 summarizes the peak hour Level of Service results at the five (5) state-controlled study intersections for existing plus project traffic conditions. The first column (1) of HCM/LOS values in *Table 9-2* presents a summary of existing AM and PM peak hour traffic. The second column (2) lists Existing Plus Project traffic conditions (Phases 1, 2 and 3). The third column (3) shows whether the traffic associated with the Project will have a significant impact based on the significant impact criteria defined in this report. The fourth column (4) indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service, if necessary.

9.2.1 *Existing Traffic Conditions*

Review of Column 1 of *Table 9-2* indicates that all the state-controlled study intersections currently at acceptable service levels (LOS C or better) during the AM and PM peak hour.

9.2.2 *Existing Plus Project Traffic Conditions*

Review of columns 2 and 3 of *Table 9-2* indicates that all the state-controlled study intersections are forecast to continue to operate at acceptable service levels (LOS C or better) during the AM and PM peak hour with the addition of Project generated traffic.

Appendix D presents the existing plus project HCM/LOS calculation worksheets for the state-controlled study intersections.

TABLE 9-2

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY - CALTRANS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project (Phases 1, 2 and 3) Traffic Conditions		(3) Significant Impact	(4) Existing Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			HCM (s/v)	LOS	HCM (s/v)	LOS	Yes/No	HCM (s/v)	LOS
5.	Hyland Avenue at	AM	33.0	C	31.2	C	No	--	--
	South Coast Drive/I-405 NB On-Ramp	PM	21.5	C	20.6	C	No	--	--
6.	Harbor Boulevard at	AM	17.2	B	17.4	B	No	--	--
	I-405 NB Ramps	PM	20.9	C	21.2	C	No	--	--
7.	Harbor Boulevard at	AM	13.1	B	13.8	B	No	--	--
	I-405 SB Ramps	PM	14.7	B	14.9	B	No	--	--
15.	Fairview Road at	AM	24.7	C	24.6	C	No	--	--
	I-405 NB Ramps	PM	27.4	C	27.5	C	No	--	--
16.	Fairview Road at	AM	23.2	C	23.1	C	No	--	--
	I-405 SB Ramps	PM	22.0	C	22.0	C	No	--	--

Notes:

- LOS = Level of Service, please refer to *Table 9-1* for the LOS definitions
- s/v = seconds per vehicle (delay)

9.3 Year 2021 Traffic Conditions

Table 9-3 summarizes the peak hour Level of Service results at the at the five (5) state-controlled study intersections for the Year 2021 horizon year. The first column (1) of HCM/LOS values in *Table 9-3* presents a summary of existing AM and PM peak hour traffic conditions. The second column (2) lists projected cumulative traffic conditions (existing plus ambient plus related projects traffic) based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2021 near-term traffic conditions with the addition of Project traffic (Phases 1 and 2). The fourth column (4) shows whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fifth column (5) indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service, if necessary.

9.3.1 *Year 2021 Cumulative Traffic Conditions*

Review of Column 2 of *Table 9-3* indicates all the state-controlled study intersections are forecast to operate at acceptable service levels (LOS C or better) during the AM and PM peak hour under Year 2021 cumulative traffic conditions.

9.3.2 *Year 2021 Cumulative Plus Project Traffic Conditions*

Review of columns 3 and 4 of *Table 9-3* indicates all the state-controlled study intersections are forecast to continue to operate at acceptable service levels (LOS C or better) during the AM and PM peak hour under Year 2021 cumulative traffic conditions with the addition of project traffic.

Appendix D presents the Year 2021 HCM/LOS calculation worksheets for the state-controlled study intersections.

TABLE 9-3

YEAR 2021 CUMULATIVE PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY - CALTRANS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2021 Cumulative Traffic Conditions		(3) Year 2021 Cumulative Plus Project (Phases 1 and 2) Traffic Conditions		(4) Significant Impact	(5) Year 2021 Cumulative Plus Project (Phases 1 and 2) Plus Mitigation	
			HCM (s/v)	LOS	HCM (s/v)	LOS	HCM (s/v)	LOS	Yes/No	HCM (s/v)	LOS
5.	Hyland Avenue at	AM	33.0	C	32.9	C	31.1	C	No	--	--
	South Coast Drive/I-405 NB On-Ramp	PM	21.5	C	21.6	C	20.9	C	No	--	--
6.	Harbor Boulevard at	AM	17.2	B	17.4	B	17.6	B	No	--	--
	I-405 NB Ramps	PM	20.9	C	21.6	C	21.9	C	No	--	--
7.	Harbor Boulevard at	AM	13.1	B	13.3	B	13.9	B	No	--	--
	I-405 SB Ramps	PM	14.7	B	16.1	B	15.4	B	No	--	--
15.	Fairview Road at	AM	24.7	C	26.4	C	26.4	C	No	--	--
	I-405 NB Ramps	PM	27.4	C	28.8	C	28.9	C	No	--	--
16.	Fairview Road at	AM	23.2	C	24.0	C	24.0	C	No	--	--
	I-405 SB Ramps	PM	22.0	C	22.4	C	22.4	C	No	--	--

Notes:

- LOS = Level of Service, please refer to *Table 9-1* for the LOS definitions
- s/v = seconds per vehicle (delay)

9.4 Year 2035 Traffic Conditions

Table 9-4 summarizes the peak hour Level of Service results at the at the five (5) state-controlled study intersections for the Year 2035 buildout year. The first column (1) of HCM/LOS values in *Table 9-4* presents a summary of existing AM and PM peak hour traffic conditions. The second column (2) lists projected buildout traffic conditions based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2035 buildout traffic conditions with the addition of Project traffic (Phases 1, 2 and 3). The fourth column (4) shows whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fifth column (5) indicates the anticipated operating conditions with implementation of improvements planned and/or recommended to mitigate Project traffic and/or achieve an acceptable Level of Service, if necessary.

9.4.1 *Year 2035 Buildout Traffic Conditions*

Review of Column 2 of *Table 9-4* indicates all the state-controlled study intersections are forecast to operate at acceptable service levels (LOS D or better) during the AM and PM peak hour under Year 2035 buildout traffic conditions.

9.4.2 *Year 2035 Buildout Plus Project Traffic Conditions*

Review of columns 3 and 4 of *Table 9-4* indicates all the state-controlled study intersections are forecast to continue to operate at acceptable service levels (LOS D or better) during the AM and PM peak hour under Year 2035 buildout traffic conditions with the addition of project traffic.

Appendix D presents the Year 2035 HCM/LOS calculation worksheets for the state-controlled study intersections.

TABLE 9-4

YEAR 2035 BUILDOUT PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY - CALTRANS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2035 Buildout Traffic Conditions		(3) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Traffic Conditions		(4) Significant Impact	(5) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Plus Mitigation	
			HCM (s/v)	LOS	HCM (s/v)	LOS	HCM (s/v)	LOS	Yes/No	HCM (s/v)	LOS
5.	Hyland Avenue at	AM	33.0	C	27.2	C	26.0	C	No	--	--
	South Coast Drive/I-405 NB On-Ramp	PM	21.5	C	21.7	C	23.9	C	No	--	--
6.	Harbor Boulevard at	AM	17.2	B	17.5	B	18.3	B	No	--	--
	I-405 NB Ramps	PM	20.9	C	24.6	C	25.5	C	No	--	--
7.	Harbor Boulevard at	AM	13.1	B	18.9	B	19.8	B	No	--	--
	I-405 SB Ramps	PM	14.7	B	19.7	B	20.2	C	No	--	--
15.	Fairview Road at	AM	24.7	C	37.3	D	38.9	D	No	--	--
	I-405 NB Ramps	PM	27.4	C	41.1	D	41.0	D	No	--	--
16.	Fairview Road at	AM	23.2	C	29.9	C	29.8	C	No	--	--
	I-405 SB Ramps	PM	22.0	C	25.2	C	25.4	C	No	--	--

Notes:

- LOS = Level of Service, please refer to *Table 9-1* for the LOS definitions
- s/v = seconds per vehicle (delay)

10.0 SITE ACCESS EVALUATION

10.1 Site Access

Vehicular access to the project site will be provided by one (1) unsignalized full access driveway on Sunflower Avenue, one (1) unsignalized right-turn in/out only driveway on Sunflower Avenue, one (1) signalized full access driveway on Harbor Boulevard, one (1) signalized full access driveway on South Coast Drive, and one (1) unsignalized right-turn in/out only driveway on South Coast Drive.

Table 10-1 summarizes the intersection operations at the proposed driveways for Year 2021 Cumulative Plus Project (Phases 1 and 2) and Year 2035 buildout Plus Project (Phases 1, 2 and 3) traffic conditions upon completion and full occupancy of the proposed Project. The operations analysis for the project driveways are based on Intersection Capacity Utilization (ICU) for signalized intersections or the *Highway Capacity Manual* (HCM 6th Edition) methodology for unsignalized intersections.

A review of *Table 10-1* indicates that the five (5) proposed project driveways are forecast to operate at acceptable LOS D or better during both the AM and PM peak hours for Year 2021 Cumulative and Year 2035 Buildout traffic conditions.

Appendix E presents the ICU/LOS and HCM/LOS calculation worksheets for the project driveways.

10.2 Internal Circulation Evaluation

The on-site circulation was evaluated in terms of vehicle-pedestrian conflicts. Based on our review of the preliminary site plan, the overall layout does not create any unsafe vehicle-pedestrian conflict points and the driveway throating is sufficient such that access to parking spaces is not impacted by internal vehicle queuing/stacking. The on-site circulation is very good based on our review of the proposed site plan, whereas the alignment, spacing, and throating of the Project driveways is adequate. The circulation around the buildings is adequate with sufficient sight distance along the drive aisles.

TABLE 10-1
PROJECT DRIVEWAY PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Project Driveway	Time Period	Intersection Control	(1) Year 2021 Cumulative Plus Project (Phases 1 and 2) Traffic Conditions		(2) Year 2035 Buildout Plus Project (Phases 1, 2 and 3) Traffic Conditions	
			ICU/Delay	LOS	ICU/Delay	LOS
A. Project Driveway 1 at Sunflower Avenue	AM	One – Way Stop	11.3 s/v	B	11.5 s/v	B
	PM		13.1 s/v	B	13.4 s/v	B
B. Project Driveway 2 at Sunflower Avenue	AM	One – Way Stop	10.0 s/v	A	10.2 s/v	B
	PM		10.3 s/v	B	10.5 s/v	B
C. Harbor Boulevard at Project Driveway 3/Law Court	AM	5∅ Traffic Signal	0.502	A	0.481	A
	PM		0.485	A	0.538	A
D. Project Driveway 4 at South Coast Drive	AM	3∅ Traffic Signal	0.325	A	0.334	A
	PM		0.702	C	0.846	D
E. Project Driveway 5 at South Coast Drive	AM	One – Way Stop	9.9 s/v	A	9.9 s/v	A
	PM		16.9 s/v	C	22.4 s/v	C

Notes:

- ICU = Intersection Capacity Utilization
- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions
- ∅ = Phase

11.0 AREA-WIDE TRAFFIC IMPROVEMENTS

For those intersections where projected traffic volumes are expected to result in significant impacts, this report recommends traffic improvements that change the intersection geometry to increase capacity. These capacity improvements involve roadway widening and/or re-striping to reconfigure roadways to specific approaches of a key intersection. The identified improvements are expected to:

- Address the impact of existing traffic, Project traffic and future non-project (ambient traffic growth and cumulative projects) traffic, and
- Improve Levels of Service as to mitigate the impact.

11.1 Project Specific Improvements

The following improvements are to be constructed as a project design feature:

- **Project Driveway 4 at South Coast Drive**: Modify the existing median to accommodate a 245-foot eastbound left-turn lane with a 60-foot transition and install a three-phase signal with pedestrian crosswalks consistent with the most current MUTCD and City of Costa Mesa standards. The southbound approach will be striped with an exclusive left-turn lane and right-turn lane with an overlap phase.

11.2 Planned Improvements

11.2.1 *Year 2035 Buildout Traffic Conditions*

Based on the improvements identified in the *City of Costa Mesa General Plan*, two (2) intersections will implement the following planned improvements as part of the Year 2035 background conditions:

- **Intersection 3 – Harbor Boulevard at Sunflower Avenue**: Construct an exclusive eastbound and westbound right-turn lane. Modify the existing traffic signal as necessary. These improvements are consistent with improvements identified in the *City of Costa Mesa General Plan.*

- **Intersection 8 – Harbor Boulevard at Gisler Avenue**: Construct an exclusive southbound right-turn lane. Modify the existing traffic signal as necessary. These improvements are consistent with improvements identified in the *City of Costa Mesa General Plan.*

11.3 Recommended Improvements

11.3.1 *Existing Plus Project Traffic Conditions*

The results of the intersection capacity analyses summarized in *Table 8-1* indicates that the proposed Project will not significantly impacts any of the eighteen (18) key study intersections under Existing Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

11.3.2 *Year 2021 Cumulative Plus Project Traffic Conditions*

The results of the intersection capacity analyses summarized in *Table 8-2* indicates that the proposed Project will not significantly impacts any of the eighteen (18) key study intersections under Year 2021 Cumulative Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

11.3.3 *Year 2035 Buildout Plus Project Traffic Conditions*

The results of the intersection capacity analyses summarized in *Table 8-3* indicates that the proposed Project will not significantly impacts any of the eighteen (18) key study intersections under Year 2035 Buildout Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

11.3.4 *Existing Plus Project Traffic Conditions – Caltrans*

The results of the intersection capacity analyses summarized in *Table 9-2* indicates that the proposed Project will not significantly impact any of the five (5) state-controlled study intersections under Existing Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

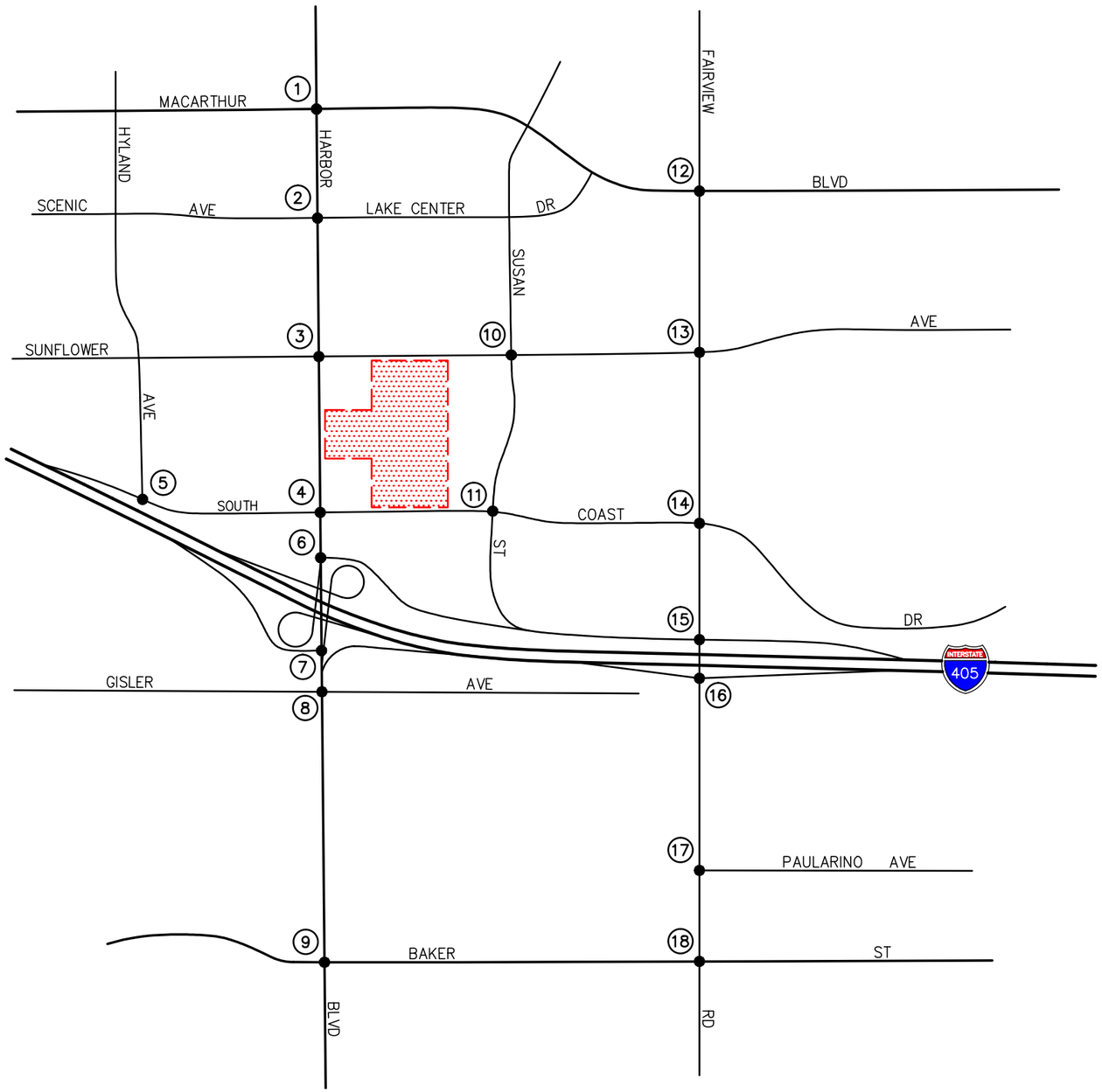
11.3.5 *Year 2021 Cumulative Plus Project Traffic Conditions - Caltrans*

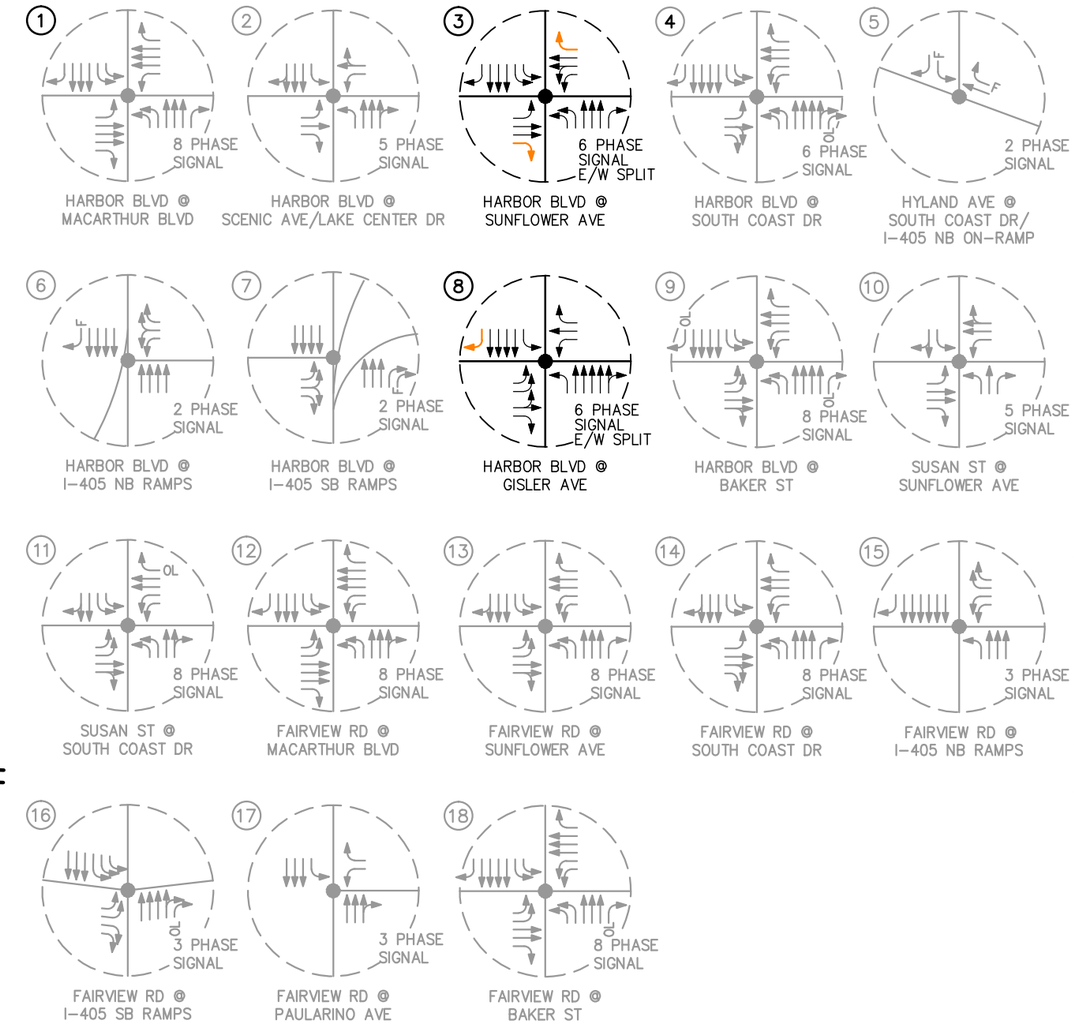
The results of the intersection capacity analyses summarized in *Table 9-3* indicates that the proposed Project will not significantly impact any of the five (5) state-controlled study intersections under Year 2021 Cumulative Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

11.3.6 *Year 2035 Buildout Plus Project Traffic Conditions - Caltrans*

The results of the intersection capacity analyses summarized in *Table 9-4* indicates that the proposed Project will not significantly impact any of the five (5) state-controlled study intersections under Year 2035 Buildout Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

Figure 11-1 illustrates the planned improvements for the key study intersections.





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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= APPROACH LANE ASSIGNMENT
= PLANNED IMPROVEMENTS
● = TRAFFIC SIGNAL, ☛ = STOP SIGN
F = FREE-RIGHT, OL = OVERLAP
= PROJECT SITE

FIGURE 11-1

PLANNED IMPROVEMENTS

THE PRESS SITE, COSTA MESA

11.4 Traffic Impact Fees

Pursuant to the requirements of the City of Costa Mesa, Traffic Impact Fees will be required of the proposed Project. The purpose of the fee is to fund the necessary transportation/circulation improvements that are related to incremental traffic impacts on the City's circulation system by new development. The "City-wide" traffic impact fee, based on Average Daily Trips Ends (ADT), for all new development is assessed based on a rate of $235 per ADT.

The trip making potential for the proposed Project (Phases 1, 2 and 3) would result in 9,293 daily trips. Applying the net daily trips to the trip fee would result in a Project contribution of $2,183,855.00 (9,293 daily trips x $235 per ADT). However, the precise fee will be determined upon issuance of Project building permits.

12.0 CONGESTION MANAGEMENT PROGRAM (CMP) COMPLIANCE ASSESSMENT

This analysis is consistent with the requirements and procedures outlined in the current *Orange County Congestion Management Program (CMP).* The CMP requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (HS). As noted in *Section 5.0* of this traffic study, the proposed Project (Phases 1, 2 and 3) is forecast to generate approximately 9,293 daily trip-ends and thus meets the criteria requiring a CMP TIA.

The CMPHS includes specific roadways, which include State Highways and Super Streets, which are now known as Smart Streets. Therefore, the CMP TIA analysis requirements relate to the potential impacts only on the specified CMPHS, which in this case is Harbor Boulevard. As described in the "Radius of Development Influence" section of the CMP TIA, the study area (i.e. CMP intersections) is recommended to be defined by the CMP links which have a project impact of three percent, or more, of their daily LOS "E" capacity.

Table 12-1 summarizes the Project percentage impact CMP analysis for seven (7) key roadway segments in the vicinity of the proposed Project along Harbor Boulevard. Column 1 of *Table 12-1* shows the CMP LOS “E” Capacity for each roadway segment. Column 2 shows the Project ADT for each roadway segment. Column 3 shows the Project ADT LOS "E" capacity percentages for each roadway segment and Column 4 shows whether the added project traffic meets or exceeds the “three percent” limit.

Review of *Table 12-1* shows that the three percent limit is exceeded for three (3) of the seven key roadway segments. Review of *Section 8.0* of this report indicates that the intersections located along Harbor Boulevard adjacent to these three roadway segments are forecast to operate at acceptable service levels and therefore further analysis is not needed.

TABLE 12-1
PROJECT PERCENTAGE RADIUS OF INFLUENCE CMP ANALYSIS

Roadway Segment	(1) CMP LOS "E" Capacity	(2) Project ADT	(3) Percentage (3) = (2) ÷ (1)	(4) Radius of Influence (Yes/No)
1. Harbor Boulevard north of MacArthur Boulevard	56,300	929	1.65%	No
2. Harbor Boulevard between MacArthur Boulevard and Scenic Avenue	56,300	1,075	1.91%	No
3. Harbor Boulevard between Scenic Avenue and Sunflower Avenue	56,300	1,075	1.91%	No
4. Harbor Boulevard between Sunflower Avenue and South Coast Drive	56,300	1,868	**3.32%**	**Yes**
5. Harbor Boulevard between South Coast Drive and Gisler Avenue	56,300	3,472	**6.17%**	**Yes**
6. Harbor Boulevard between Gisler Avenue and Baker Street	56,300	1,779	**3.16%**	**Yes**
7. Harbor Boulevard south of Baker Street	56,300	1,682	2.99%	No

13.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Existing Site*** – The Project site is addressed at 1375 Sunflower Avenue, 1376 South Coast Drive, and 3370 Harbor Boulevard. It is generally located east of Harbor Avenue between South Coast Drive and Sunflower Avenue in the City of Costa Mesa, California. The existing building was formerly the LA Times site.

- ***Project Description*** – The Project Phase 1 consists of renovating and occupying 346,300 SF of the former LA Times office building with office uses, Phase 2 includes 50,909 SF of commercial space, and Phase 3 includes 107,650 SF office. The commercial space is comprised of 276 SF office space, 3,966 SF retail, 1,808 SF meeting space, 7,182 SF drinking place, 34,149 SF high turnover sit-down restaurant, and 3,528 SF fast food restaurant without drive-through.

  Vehicular access to the project site will be provided by one (1) unsignalized full access driveway on Sunflower Avenue, one (1) unsignalized right-turn in/out only driveway on Sunflower Avenue, one (1) signalized full access driveway on Harbor Boulevard, one (1) signalized full access driveway on South Coast Drive, and one (1) unsignalized right-turn in/out only driveway on South Coast Drive.

  It should be noted that to ensure adequate site access is maintained and left-turn volumes do not queue into the eastbound through lanes and block through traffic, the Project is proposing to implement Project Design Features. These Project Design Features are subject to review and approval by the City of Costa Mesa and includes the following:

  - Project Driveway (West) at South Coast Drive: Modify the existing median to accommodate a 245-foot eastbound left-turn lane with a 60-foot transition and install a three-phase signal with pedestrian crosswalks consistent with the most current MUTCD and City of Costa Mesa standards. The southbound approach will be striped with an exclusive left-turn lane and right-turn lane with an overlap phase.

- ***Study Scope*** – The following eighteen (18) key study intersections were selected for detailed peak hour level of service analyses under Existing, Existing Plus Project, Year 2021 Cumulative, Year 2021 Cumulative Plus Project, Year 2035 Buildout, and Year 2035 Buildout Plus Project traffic conditions:

  Key Study Intersections

  1. Harbor Boulevard at MacArthur Boulevard (Costa Mesa/Santa Ana)
  2. Harbor Boulevard at Scenic Avenue/Lake Center Drive (Costa Mesa)
  3. Harbor Avenue at Sunflower Avenue (Costa Mesa/Santa Ana)
  4. Harbor Avenue at South Coast Drive (Costa Mesa)
  5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp (Costa Mesa/Caltrans)
  6. Harbor Avenue at I-405 NB Ramps (Costa Mesa/Caltrans)
  7. Harbor Avenue at I-405 SB Ramps (Costa Mesa/Caltrans)
  8. Harbor Avenue at Gisler Avenue (Costa Mesa)
  9. Harbor Avenue at Baker Street (Costa Mesa)

10. Susan Street at Sunflower Avenue (Costa Mesa)
11. Susan Street at South Coast Drive (Costa Mesa)
12. Fairview Road at MacArthur Boulevard (Santa Ana)
13. Fairview Road at Sunflower Avenue (Costa Mesa/Santa Ana)
14. Fairview Road at South Coast Drive (Costa Mesa)
15. Fairview Road at I-405 NB Ramps (Costa Mesa/Caltrans)
16. Fairview Road at I-405 SB Ramps (Costa Mesa/Caltrans)
17. Fairview Road at Paularino Avenue (Costa Mesa)
18. Fairview Road at Baker Street (Costa Mesa)

- ***Existing Traffic Conditions*** – All of the key study intersections currently operate at acceptable service levels during the AM and PM peak hour.

- ***Project Trip Generation*** – Phases 1 and 2 of the Project are forecast to generate 8,245 daily trips, with 752 trips (541 inbound, 211 outbound) produced in the AM peak hour and 828 trips (333 inbound, 495 outbound) produced in the PM peak hour. Phases 1, 2 and 3 of the Project is forecast to generate 9,293 daily trips, with 877 trips (648 inbound, 229 outbound) produced in the AM peak hour and 951 trips (353 inbound, 598 outbound) produced in the PM peak hour.

- ***Related Projects*** – The Cities of Costa Mesa, Santa Ana and Fountain Valley identified sixteen (16) related projects within the Project study area. The sixteen (16) cumulative projects are expected to generate a combined total 24,694 daily trips (one half arriving, one half departing) on a "typical" weekday, with 1,919 trips (1,071 inbound and 848 outbound) forecast during the AM peak hour and 2,472 trips (1,087 inbound and 1,385 outbound) forecast during the PM peak hour.

- ***Existing Plus Project Traffic Conditions*** – All eighteen (18) key study intersections currently operate and are forecast to continue to operate at acceptable service levels during the AM and PM peak hours with the addition of Project generated traffic to existing traffic.

- ***Year 2021 Cumulative Plus Project Traffic Conditions*** – All eighteen (18) key study intersections are forecast to operate at acceptable service levels during the AM and PM peak hours with the addition of Project generated traffic to Year 2021 Cumulative traffic conditions.

- ***Year 2021 Cumulative Plus Project Traffic Conditions*** – All eighteen (18) key study intersections are forecast to operate at acceptable service levels during the AM and PM peak hours with the addition of Project generated traffic to Year 2021 Cumulative Plus Project traffic conditions.

- ***Year 2035 Buildout Traffic Conditions*** – Two (2) out of the eighteen key study intersections are forecast to operate adversely during the AM and/or PM peak hours. The remaining study intersections are forecast to operate at acceptable services levels during the AM and PM peak hours under Year 2035 buildout traffic conditions. The intersections operating adversely consist of the following:

Key Intersection	AM Peak Hour ICU	AM Peak Hour LOS	PM Peak Hour ICU	PM Peak Hour LOS
1. Harbor Boulevard at MacArthur Boulevard	--	--	0.949	E
12. Fairview Road at MacArthur Boulevard	--	--	0.915	E

- ***Year 2035 Buildout Plus Project Traffic Conditions*** – Two (2) intersections are forecast to operate adversely during the AM and/or PM peak hours. The remaining study intersections are forecast to operate at acceptable service levels during the AM and PM peak hours under Year 2035 buildout traffic conditions with the addition of the proposed Project trips. The intersections operating adversely consist of the following:

Key Intersection	AM Peak Hour ICU	AM Peak Hour LOS	PM Peak Hour ICU	PM Peak Hour LOS
1. Harbor Boulevard at MacArthur Boulevard	--	--	0.958	E
12. Fairview Road at MacArthur Boulevard	--	--	0.924	E

Traffic associated with the proposed Project will not significantly impact any of the eighteen (18) key study intersections. Although the intersections of Harbor Boulevard/MacArthur Boulevard and Fairview Road/MacArthur Boulevard are forecast to operate adversely, the proposed Project adds less than 0.010 to the ICU increment and is therefore not considered significantly impacted based on the significant impact criteria defined in this report.

- ***Caltrans Existing Traffic Conditions*** – All the state-controlled study intersections currently at acceptable service levels (LOS C or better) during the AM and PM peak hour.

- ***Caltrans Existing Plus Project Traffic Conditions*** – All the state-controlled study intersections are forecast to continue to operate at acceptable service levels (LOS C or better) during the AM and PM peak hour with the addition of Project generated traffic.

- ***Caltrans Year 2021 Cumulative Traffic Conditions*** – All the state-controlled study intersections are forecast to operate at acceptable service levels (LOS C or better) during the AM and PM peak hour under Year 2021 cumulative traffic conditions.

- ***Caltrans Year 2021 Cumulative Plus Project Traffic Conditions*** – All the state-controlled study intersections are forecast to continue to operate at acceptable service levels (LOS C or better) during the AM and PM peak hour under Year 2021 cumulative traffic conditions with the addition of project traffic.

- ***Caltrans Year 2035 Buildout Traffic Conditions*** – All the state-controlled study intersections are forecast to operate at acceptable service levels (LOS D or better) during the AM and PM peak hour under Year 2035 buildout traffic conditions.

- ***Caltrans Year 2035 Buildout Plus Project Traffic Conditions*** – All the state-controlled study intersections are forecast to continue to operate at acceptable service levels (LOS D or better) during the AM and PM peak hour under Year 2035 buildout traffic conditions with the addition of project traffic.

- ***Site Access and Internal Circulation*** **–** The proposed driveways are forecast to operate at acceptable LOS D or better during both the AM and PM peak hours for Year 2021 Cumulative and Year 2035 Buildout traffic conditions.

- ***Planned Improvements*** - Based on the improvements identified in the *City of Costa Mesa General Plan*, two (2) intersections will implement the following planned improvements as part of the Year 2035 background conditions:

    - *Intersection 3 – Harbor Boulevard at Sunflower Avenue*: Construct an exclusive eastbound and westbound right-turn lane. Modify the existing traffic signal as necessary. These improvements are consistent with improvements identified in the *City of Costa Mesa General Plan.*

    - *Intersection 8 – Harbor Boulevard at Gisler Avenue*: Construct an exclusive southbound right-turn lane. Modify the existing traffic signal as necessary. These improvements are consistent with improvements identified in the *City of Costa Mesa General Plan.*

- ***Existing Plus Project Recommended Improvements*** – The proposed Project will not significantly impact any of the eighteen (18) key study intersections under Existing Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

- ***Year 2021 Cumulative Plus Project Recommended Improvements*** – The proposed Project will not significantly impact any of the eighteen (18) key study intersections under Year 2021 Cumulative Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

- ***Year 2035 Buildout Plus Project Recommended Improvements*** –The proposed Project will not significantly impact any of the eighteen (18) key study intersections under Year 2035 Buildout Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

- ***Caltrans Existing Plus Project Recommended Improvements*** – The proposed Project will not significantly impact any of the five (5) state-controlled study intersections under Existing Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

- ***Caltrans Year 2021 Cumulative Plus Project Recommended Improvements*** – The proposed Project will not significantly impact any of the five (5) state-controlled study intersections under Year 2021 Cumulative Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

- ***Caltrans Year 2035 Buildout Plus Project Recommended Improvements*** – The proposed Project will not significantly impact any of the five (5) state-controlled study intersections under Year 2035 Buildout Plus Project traffic conditions. Given there are no significant project impacts, no improvements are required under this traffic scenario.

- ***CMP Compliance Assessment*** – The three percent limit is exceeded for three (3) of the seven key roadway segments. Review of *Section 8.0* of this report indicates that the intersections located along Harbor Boulevard adjacent to these three roadway segments are forecast to operate at acceptable service levels and therefore further analysis is not needed.

APPENDIX A

TRAFFIC STUDY SCOPE OF WORK

MEMORANDUM

To:	Ms. Jennifer Rosales City of Costa Mesa	Date:	January 2, 2020
From:	Shane S. Green, P.E. LLG, Engineers	LLG Ref:	2.18.3968.1
Subject:	***Revised Traffic Study Scope of Work for The Press Site Phases 1, 2 and 3 Costa Mesa, California***		

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Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this revised Traffic Study Scope of Work for The Press Site (herein referred to as Project) in the City of Costa Mesa, California, for your review and approval. This scope has been updated to reflect refinements to Phases 1, 2 and 3. It is to our understanding that this traffic study is an update to the *Tribune Property Traffic Analysis Report*, prepared by Stantec Consulting Services Inc.

Traffic Study Scope of Work

The Traffic Impact Analysis for The Press Site will satisfy the traffic impact requirements of the City of Costa Mesa and be consistent with the requirements and procedures outlined in the current *2017 Congestion Management Program (CMP) for Orange County.*

A. Project Address/Location: The Project site is addressed at 1375 Sunflower Avenue, 1376 South Coast Drive, and 3370 Harbor Boulevard. It is generally located east of Harbor Avenue between South Coast Drive and Sunflower Avenue in the City of Costa Mesa, California. The existing building was formerly the LA Times site. ***Figure 1-1*** presents a Vicinity Map that illustrates the general location of the Project and surrounding street system. ***Figure 2-1*** is an existing aerial photograph of the Project site.

B. Project Description: The Project will be completed in three (3) phases. Phase 1 of the project is planning to renovate and occupy 345,875 SF of the former LA Times office building with office uses. Phase 2 consists of commercial uses and Phase 3 consists of additional office space. Per the direction of City staff two separate traffic studies will be completed, one for Phase 1 and one for buildout of the Project (Phases 1, 2 and 3). This scope of work is specific to Phases 1, 2 and 3.

Table 2-1 presents the project development summary for Phases 1, 2 and 3. A review of *Table 2-1* indicates that Phase 1 of the project will include the development of 346,300 SF of office, Phase 2 includes 50,909 SF of commercial space, and Phase 3 includes 107,650 SF office. The commercial space is comprised of 276 SF office space, 3,966 SF retail, 1,808 SF meeting space, 7,182 SF drinking place, 34,149 SF high turnover sit down restaurant, and 3,528 SF fast food restaurant without drive-through. Access to the project site will be provided

Philip M. Linscott, PE (1924-2000)
Jack M. Greenspan, PE (Ret.)
William A. Law, PE (Ret.)
Paul W. Wilkinson, PE
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE

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by one (1) signalized full access driveway on Harbor Boulevard, one (1) unsignalized full access driveway on Sunflower Avenue, one (1) unsignalized right-turn in/out only driveway on Sunflower Avenue, one (1) signalized full access driveway on South Coast Drive, and one (1) unsignalized right-turn in/out only driveway on South Coast Drive. ***Figure 2-2*** presents the site plan for the proposed Project Phases 1, 2 and 3.

Phases 1 and 2 of the Project are expected to be constructed over the next couple of years or so by late 2020. However, to provide a conservative assessment, Year 2021 has been utilized to assess the Project's potential opening year (full buildout/occupancy) traffic impacts within a near-term cumulative traffic setting. Phase 3 of the Project is expected to be completed within the long-term general plan buildout traffic setting.

C. Traffic Study Locations: Based on our preliminary discussions and review of the project vicinity, the following eighteen (18) key study intersections represent a list of study intersections to be evaluated in the Project's traffic impact study.

Study Intersections

1. Harbor Boulevard at MacArthur Boulevard (Santa Ana)
2. Harbor Boulevard at Scenic Avenue/Lake Center Drive (Costa Mesa)
3. Harbor Avenue at Sunflower Avenue (Costa Mesa)
4. Harbor Avenue at South Coast Drive (Costa Mesa)
5. Hyland Avenue at South Coast Drive/I-405 NB On-Ramp (Costa Mesa/Caltrans)
6. Harbor Avenue at I-405 NB Ramps (Costa Mesa/Caltrans)
7. Harbor Avenue at I-405 SB Ramps (Costa Mesa/Caltrans)
8. Harbor Avenue at Gisler Avenue (Costa Mesa)
9. Harbor Avenue at Baker Street (Costa Mesa)
10. Susan Street at Sunflower Avenue (Costa Mesa)
11. Susan Street at South Coast Drive (Costa Mesa)
12. Fairview Road at MacArthur Boulevard (Santa Ana)
13. Fairview Road at Sunflower Avenue (Costa Mesa)
14. Fairview Road at South Coast Drive (Costa Mesa)
15. Fairview Road at I-405 NB Ramps (Costa Mesa/Caltrans)
16. Fairview Road at I-405 SB Ramps (Costa Mesa/Caltrans)
17. Fairview Road at Paularino Avenue (Costa Mesa)
18. Fairview Road at Baker Street (Costa Mesa)

D. Traffic Counts: AM peak hour and PM peak hour traffic counts for the eighteen (18) key study intersections were collected on Tuesday, May 22, 2018 while schools were still in session during the AM peak period and PM peak period of a typical weekday.

E. Project Trip Generation: ***Table 5-1*** presents the trip generation rates used for forecasting project trips. The trip generation potential of the proposed Project was estimated using the average rates for ITE Land Use 710: General Office Building, ITE Land Use 925: Drinking Place, ITE Land Use 932: High Turnover Sit Down Restaurant, and ITE Land Use 933: Fast-Food Restaurant without Drive Through Window published in the *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017)*. Average rates for ITE Land Use 826: Specialty Retail were also used, based on the *Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).* The meeting space land use of the Project was estimated using empirical trip rates.

Trip Generation

Table 5-2 presents the trip generation potential for Phases 1 and 2 of the proposed Project, which is expected to be completed by Year 2021. As shown, Phases 1 and 2 of the Project are forecast to generate 8,245 daily trips, with 752 trips (541 inbound, 211 outbound) produced in the AM peak hour and 828 trips (333 inbound, 495 outbound) produced in the PM peak hour.

Table 5-3 presents the trip generation potential for Phases 1, 2, and 3 of the proposed Project, which is expected to be completed by long-term general plan buildout. As shown, the proposed Project is forecast to generate 9,293 daily trips, with 877 trips (648 inbound, 229 outbound) produced in the AM peak hour and 951 trips (353 inbound, 598 outbound) produced in the PM peak hour.

It should be noted that the entitled trip budget for the site, based on the *Tribune Property Traffic Analysis Report*, prepared by Stantec Consulting Services Inc., is 1,015 trips produced in the AM peak hour and 976 trips produced in the PM peak hour. The proposed project trips within the full general plan buildout (Project Phases 1, 2 and 3) fall within the entitled trip budget.

F. Trip Distribution: The general, directional traffic distribution pattern for the office and commercial components of the proposed Project are graphically presented in ***Figures 5-1A*** and ***5-1B,*** respectfully. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

- Trip distribution from the prior *Tribune Property Traffic Analysis Report*, prepared by Stantec Consulting Services Inc.,
- location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns,
- presence of traffic congestion in the surrounding vicinity,

- ingress/egress availability at the Project site, and
- input from City staff.

G. Analysis Methodology and Scenarios: The LOS calculations will be based on *Intersection Capacity Utilization (ICU)* methodology for signalized intersections and *Highway Capacity Manual (HCM)* methodology for unsignalized intersections. The Project's potential impact will be based on the City of Costa Mesa and/or Santa Ana significant impact criteria. The following scenarios are those for which LOS calculations will be performed using the ICU and HCM methodologies:

a. Existing Traffic,
b. Existing Plus Project Phases 1 and 2 Traffic, and
c. Scenario (b) With Mitigation, if necessary,
d. Opening Year without Project Traffic (Existing plus Ambient Growth at 1% per year to 2021 plus Related Projects),
e. Opening Year Plus Project Phase 1 and 2 Traffic, and
f. Scenario (e) with Mitigation, if necessary,
g. Long Term Buildout[1] without Project Traffic,
h. Long Term Buildout Plus Project Phases 1, 2 and 3 Traffic, and
i. Scenario (h) With Mitigation, if necessary.

Existing peak hour factors (PHF) at the study intersections will be included in the LOS analysis for all traffic conditions. Planned and/or approved projects located within the vicinity of the project site will be researched at the City of Costa Mesa for inclusion in the cumulative traffic analysis.

H. Other Issues:

- Conduct level of service analysis at the five (5) project driveways.
- Evaluate site access and internal circulation of the Project site.

* * * * * * * * * * *

We appreciate the opportunity to provide this scope of work. Should you have any questions, please call me at (949) 825-6175. Thank You.

[1] It should be noted that the Long Term Buildout volumes will be based on the *Tribune Property Traffic Analysis Report*, prepared by Stantec Consulting Services Inc.

LINSCOTT LAW & GREENSPAN engineers

Recommended by:

_____ January 3, 2020

Consultant's Representative Date

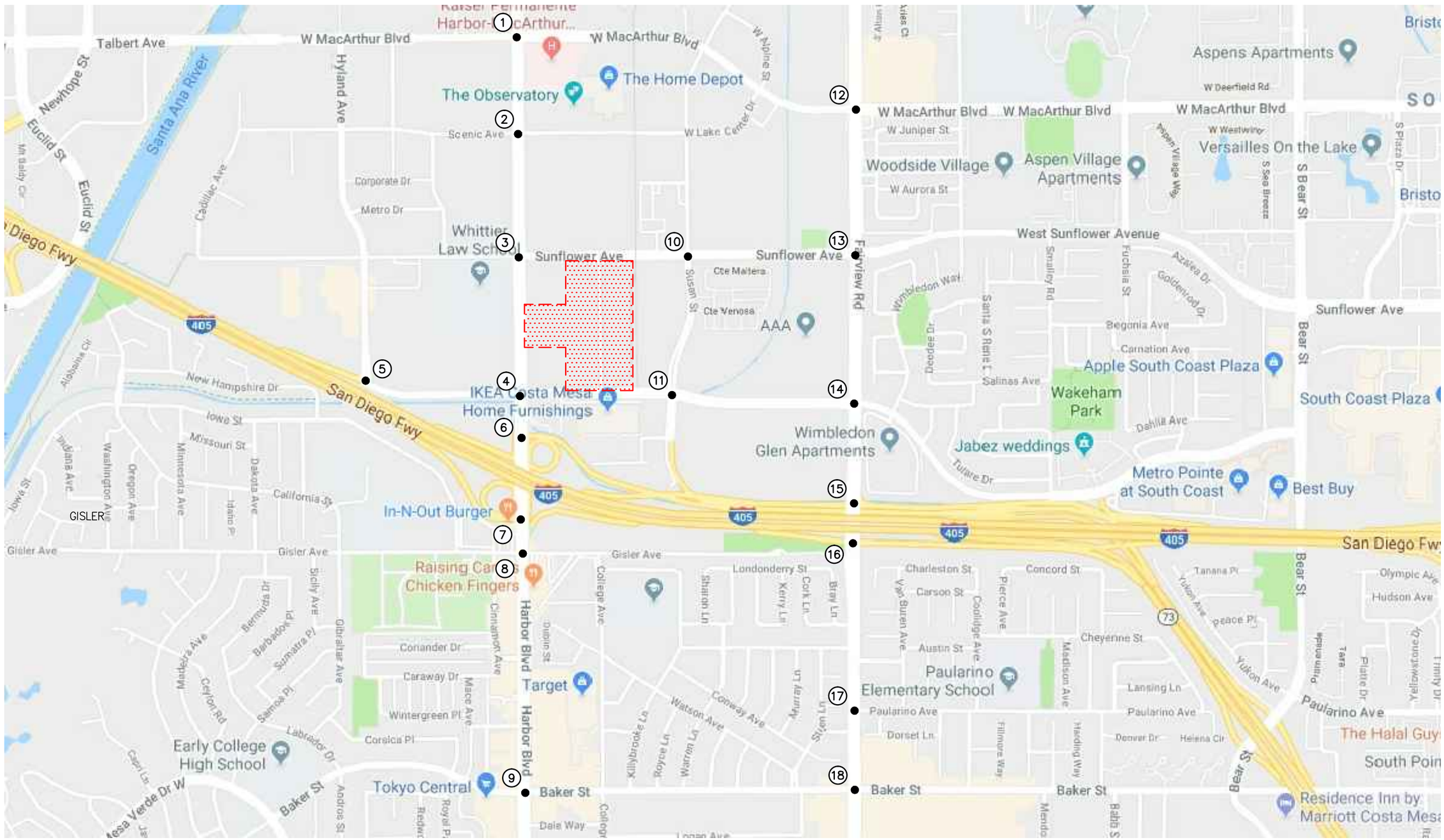
Approved by:

_____ _____

City of Costa Mesa Date

cc: File

Attachment



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

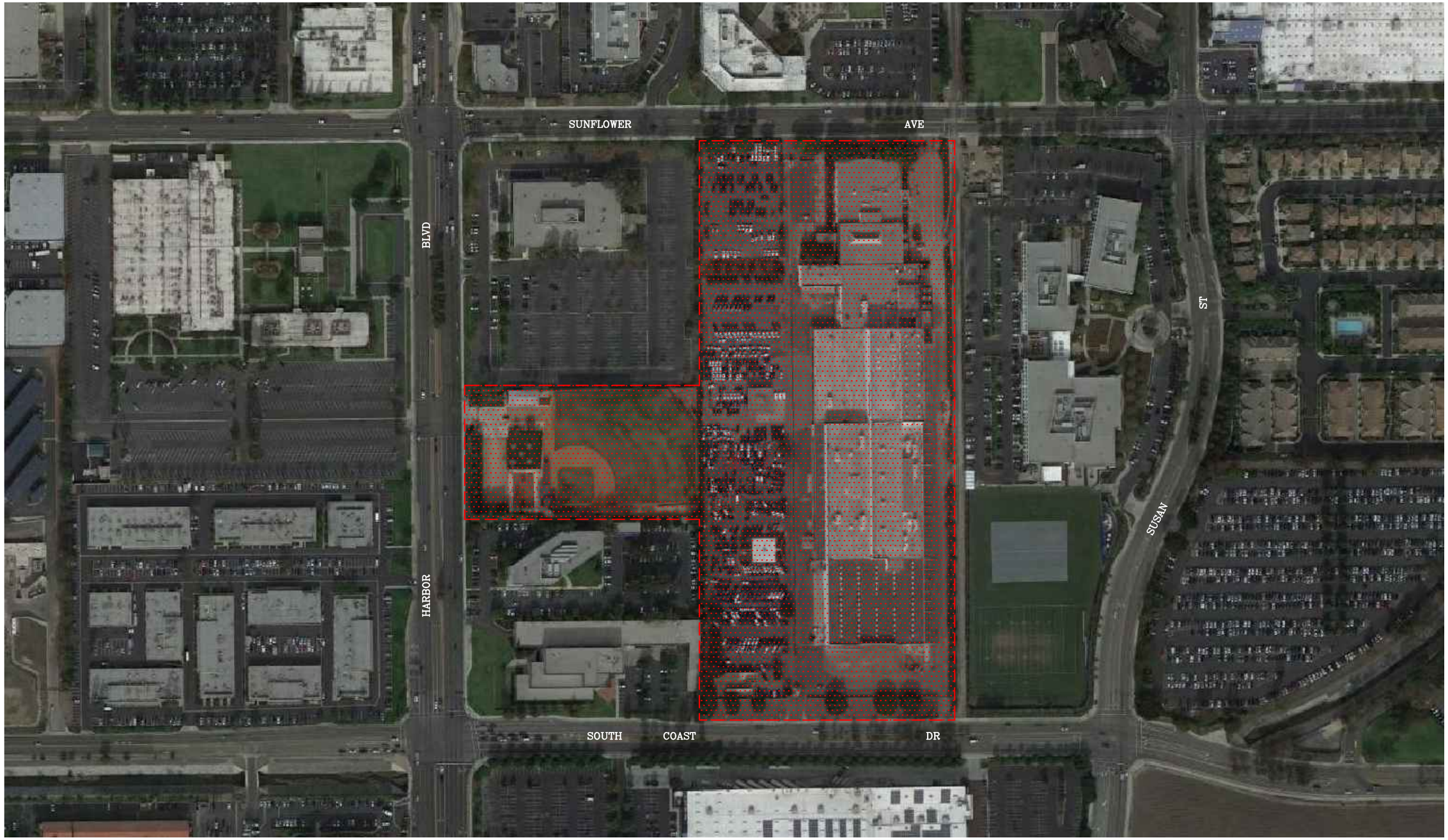
(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 1-1

VICINITY MAP

THE PRESS SITE, COSTA MESA



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N NO SCALE

SOURCE: GOOGLE

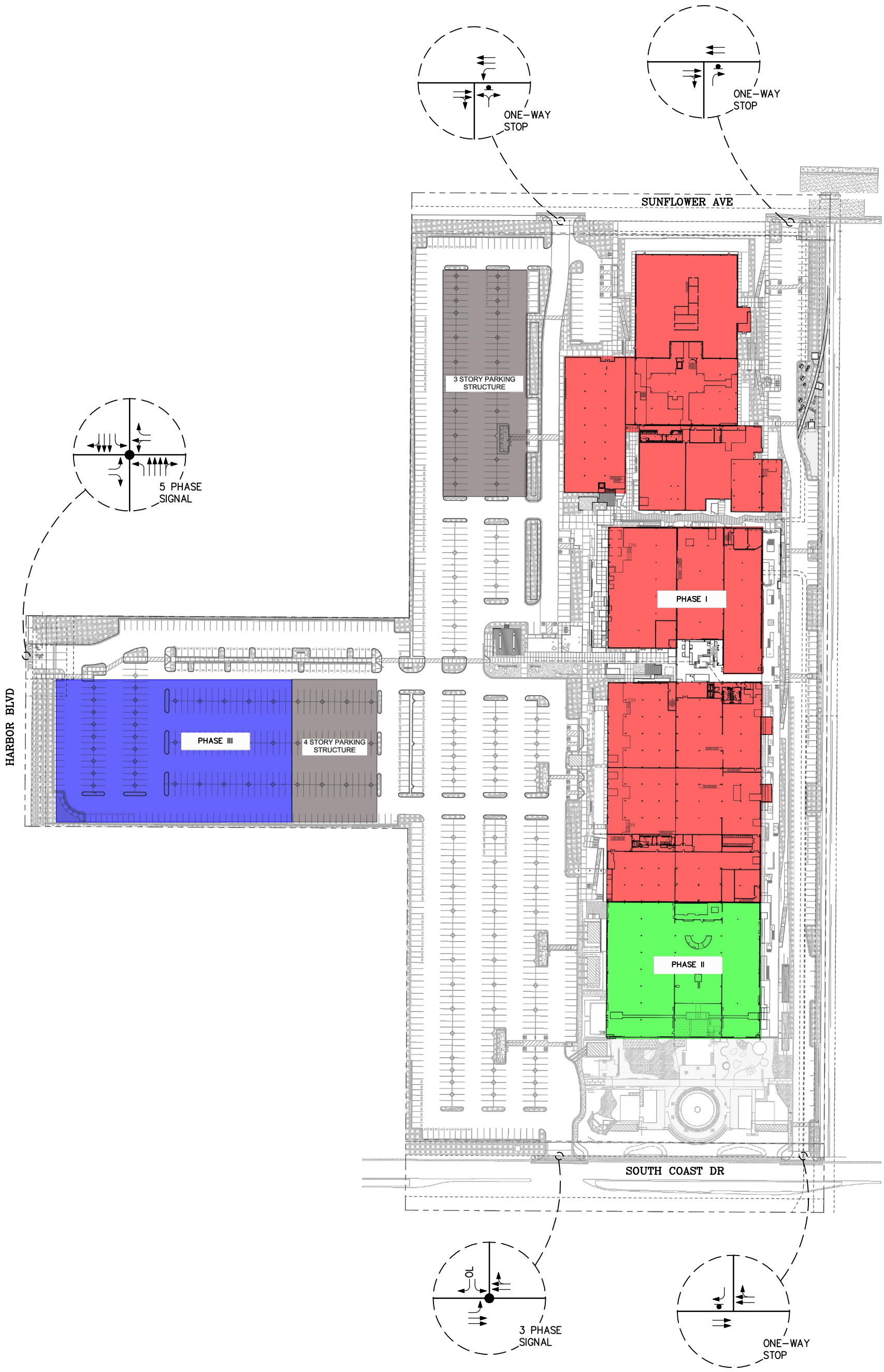
KEY

= PROJECT SITE

FIGURE 2-1

EXISTING SITE AERIAL

THE PRESS SITE, COSTA MESA



n:\3900\2183968 – the press site, costa mesa\dwg\phase 1, 2 and 3\3968 f2-2b.dwg LDP 07:54:4 01-07-2020 aguilar

SOURCE: EHRLICH YANAI RHEE CHANEY ARCHITECTS

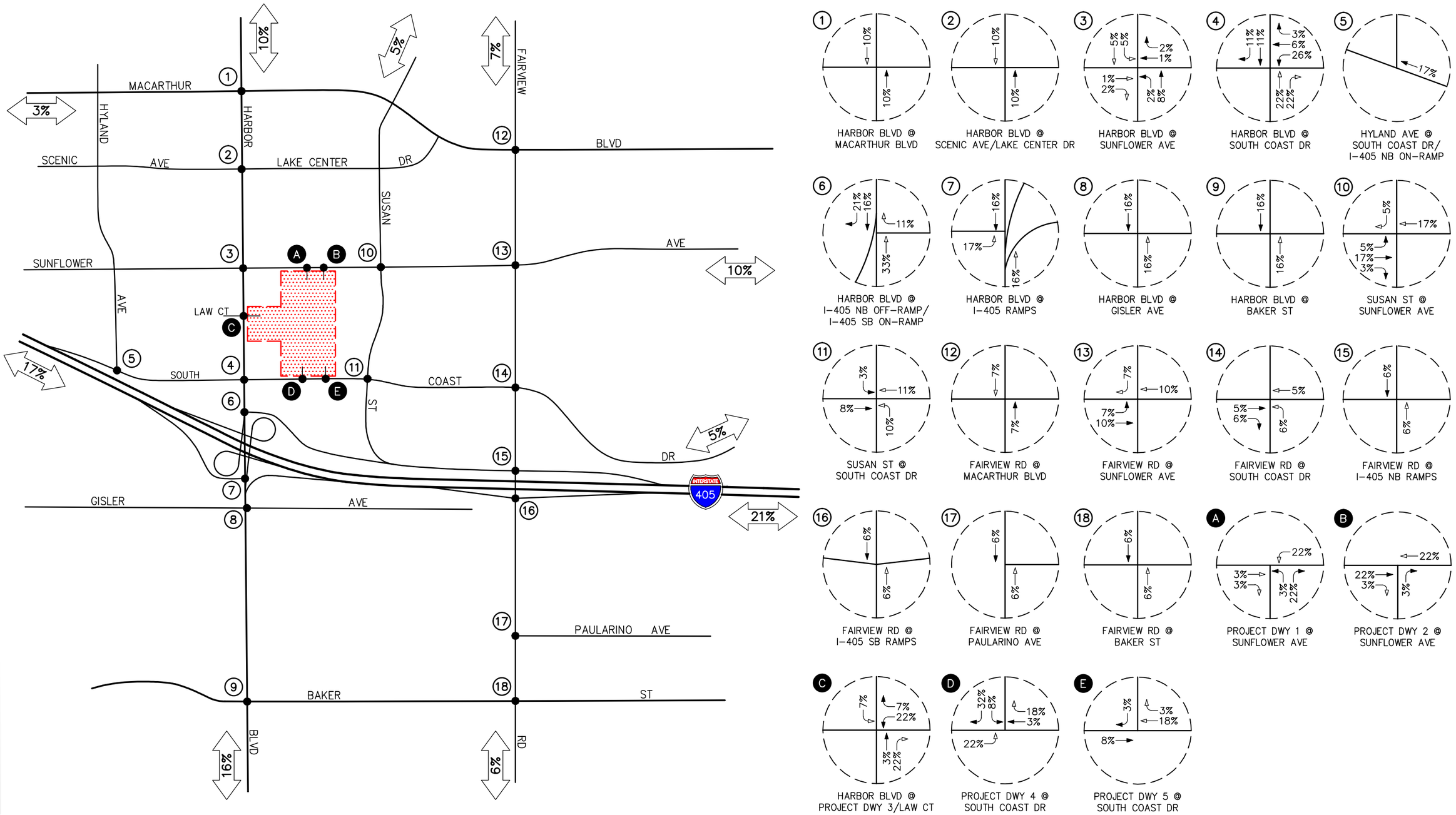
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

FIGURE 2-2

PHASE 1, 2 AND 3 SITE PLAN

THE PRESS SITE, COSTA MESA



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LINSCOTT LAW & GREENSPAN engineers

NO SCALE

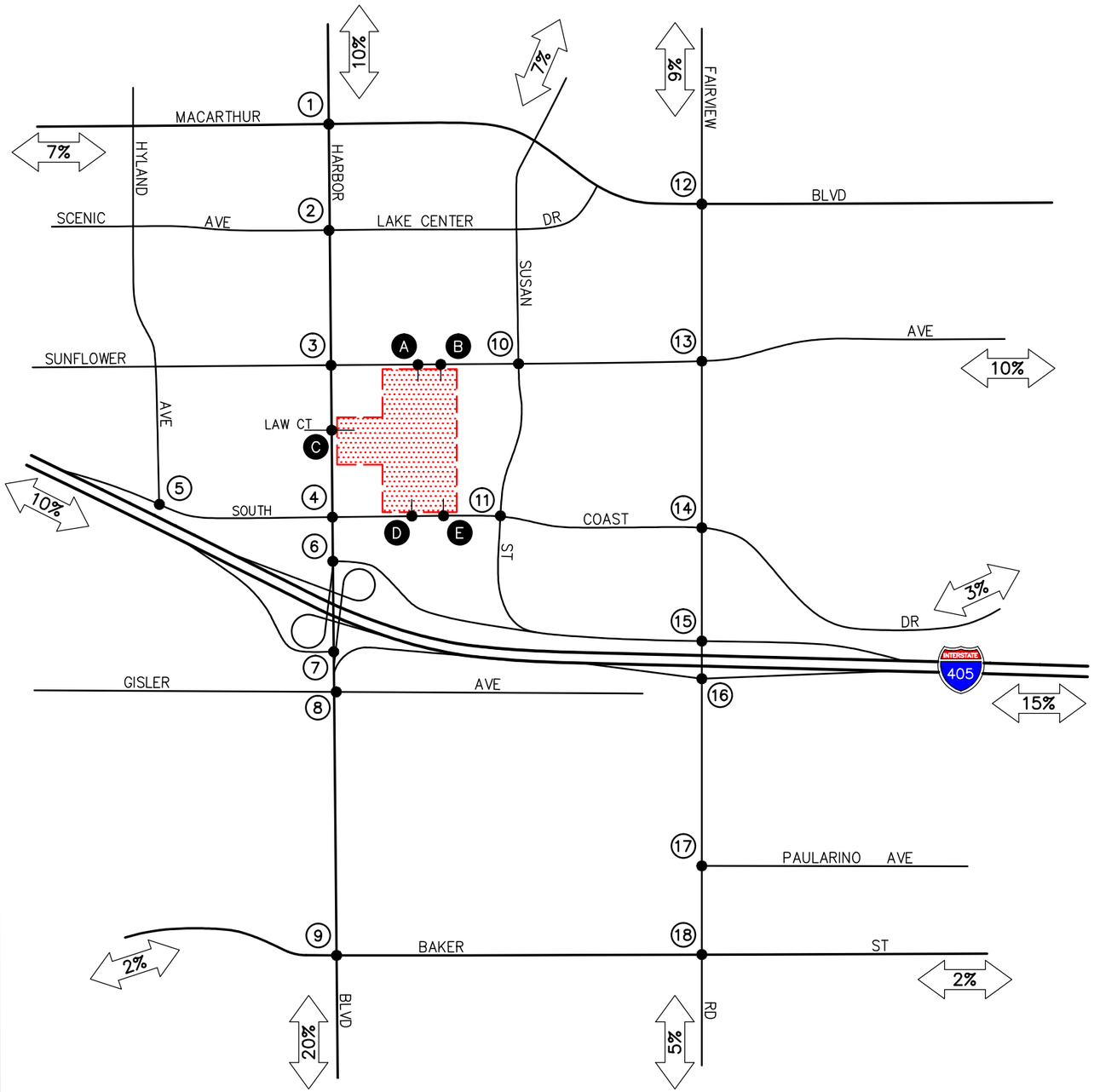
KEY

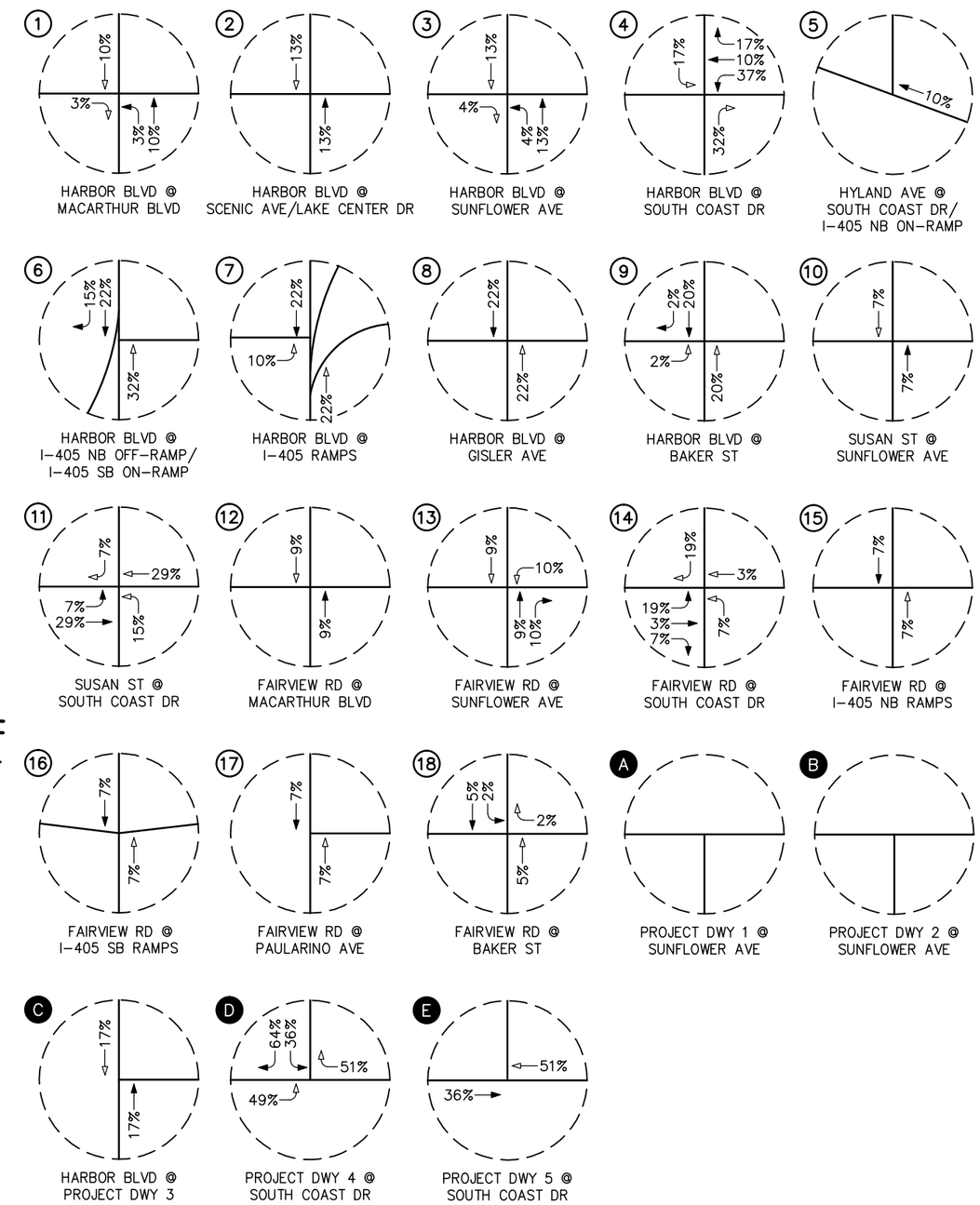
(#) = STUDY INTERSECTION
◁ = INBOUND PERCENTAGE
◀ = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-1A

PROJECT TRAFFIC DISTRIBUTION PATTERN – OFFICE

THE PRESS SITE, COSTA MESA





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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

(#) = STUDY INTERSECTION
◁— = INBOUND PERCENTAGE
◀— = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-1B

PROJECT TRAFFIC DISTRIBUTION PATTERN – COMMERCIAL

THE PRESS SITE, COSTA MESA

LINSCOTT LAW & GREENSPAN engineers

TABLE 2-1
PROJECT DEVELOPMENT SUMMARY
THE PRESS SITE PROJECT, COSTA MESA

Project Description	Allocation of Land Uses per ITE Trip Generation					
	Office	Retail	Meeting Space	Drinking Place	High Turnover Sit Down Restaurant	Fast Food Restaurant without Drive-Thru
Phase 1						
Office (345,875 SF)	346,300 SF	--	--	--	--	--
Phase 2						
Café (10,849 SF)	--	--	--	--	5,195 SF	--
Food Stall (5,939 SF)	--	--	--	--	--	3,528 SF
Bar (2,128 SF)	--	--	--	2,721 SF	--	--
Retail (1,584 SF)	--	2,423 SF	--	--	--	--
Service (1,479 SF)	--	1,543 SF	--	--	--	--
Restaurant (19,316 SF)	--	--	--	--	20,767 SF	--
Back of House/Storage (916 SF)	--	--	--	--	906 SF	--
Speakeasy (2,338 SF)	--	--	--	2,514 SF	--	--
Meeting Space (2,000 SF with 58 seats and 2 employees)	--	--	1,808 SF	--	--	--
Dedicated Patio (2,000 SF)	--	--	--	--	7,281 SF	--
Brewery (2,690 SF)	--	--	--	1,947 SF	--	--
Management Office (400 SF)	276 SF	--	--	--	--	--
Phase 3						
Office (108,065 SF)	107,650 SF	--	--	--	--	--
Project Phases 1 and 2 Total	**346,576 SF**	**3,966 SF**	**1,808 SF**	**7,182 SF**	**34,149 SF**	**3,528 SF**
Project Phases 1, 2 and 3 Total	**454,226 SF**	**3,966 SF**	**1,808 SF**	**7,182 SF**	**34,149 SF**	**3,528 SF**

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TABLE 5-1
PROJECT TRIP GENERATION RATES[2]
THE PRESS SITE PROJECT, COSTA MESA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Rates:							
▪ 710: General Office Building (TE/1000 SF)	9.74	86%	14%	1.16	16%	84%	1.15
▪ 826: Specialty Retail Center (TE/1000 SF)[3]	44.32	62%	38%	0.94	44%	56%	2.71
▪ 925: Drinking Place (TE/1000 SF)	113.19[4]	--	--	--	66%	34%	11.36
▪ 932: High Turnover Sit Down Restaurant (TE/1000 SF)	112.18	55%	45%	9.94	62%	38%	9.77
▪ 933: Fast Food Restaurant without Drive Through Window (TE/1000 SF)	346.23	60%	40%	25.10	50%	50%	28.34
▪ Meeting Space (TE/Person)[5]	0.87	--	--	--	100%	0%	0.43

Notes:
TE/1000 SF = Trip end per 1,000 SF
TE/Person = Trip end per person

2 Source: *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017)*.

3 Source: *Trip Generation, 9h Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012)*. ITE 10th Edition does not include trip rates for Specialty Retail Center. AM Peak Hour trip rates are not provided for this land use therefore the AM Peak hour rates were applied based on ITE 10th Edition LU 820: Shopping Center.

4 ITE 10th Edition does not include a daily trip rate; therefore, daily trips were estimated by applying a factor of 10 to the PM peak hour trips.

5 Capacity of the meeting space was determined by assuming 2 employees and an occupancy of one person per 35 SF of meeting space, which results in a capacity of 54 people. Empirical rates are based on trip ends per employee as well as per person with a vehicle occupancy of 2.5 people.

TABLE 5-2
PROJECT TRIP GENERATION FORECAST[6] - PHASE 1 AND 2
THE PRESS SITE PROJECT, COSTA MESA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Forecasts:							
▪ Fast Food Restaurant without Drive-Through Window (3,528 SF)	1,221	53	36	89	50	50	100
Internal Capture (10%)	-122	-5	-4	-9	-5	-5	-10
subtotal	1,099	48	32	80	45	45	90
Pass-by (25% Daily, 10% AM, 43% PM)	-275	-5	-3	-8	-19	-20	-39
Total Fast Food without Drive-Through Window Trips	824	43	29	72	26	25	51
▪ High Turnover Sit Down Restaurant (34,149 SF)	3,831	186	153	339	207	127	334
Internal Capture (10%)	-383	-19	-15	-34	-21	-12	-33
subtotal	3,448	167	138	305	186	115	301
Pass-by (10% Daily, 10% AM, 10% PM)	-345	-17	-14	-31	-19	-11	-30
Total High Turnover Sit Down Restaurant Trips	3,103	150	124	274	167	104	271
▪ Specialty Retail (3,966 SF)	176	2	2	4	5	6	11
Pass-by (10% Daily, 10% AM, 10% PM)	-18	0	0	0	-1	0	-1
Total Specialty Retail Trips	158	2	2	4	4	6	10
▪ Meeting Space (1,808 SF with 52 seats and 2 employees)	46	--	--	--	23	0	23
▪ Drinking Place (7,182 SF)	820	--	--	--	54	28	82
Internal Capture (10%)	-82	--	--	--	-5	-3	-8
Total Drinking Place Trips	738	--	--	--	49	25	74
▪ Office Component (346,576 SF)	3,376	346	56	402	64	335	399
Total Phase 1 and 2 Project Trips	**8,245**	**541**	**211**	**752**	**333**	**495**	**828**

6 Source: *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).*

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TABLE 5-3
PROJECT TRIP GENERATION FORECAST[7] - PHASE 1, 2, AND 3
THE PRESS SITE PROJECT, COSTA MESA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Forecasts:							
▪ Fast Food Restaurant without Drive-Through Window (3,528 SF)	1,221	53	36	89	50	50	100
Internal Capture (10%)	-122	-5	-4	-9	-5	-5	-10
subtotal	1,099	48	32	80	45	45	90
Pass-by (25% Daily, 10% AM, 43% PM)	-275	-5	-3	-8	-19	-20	-39
Total Fast Food without Drive-Through Window Trips	824	43	29	72	26	25	51
▪ High Turnover Sit Down Restaurant (34,149 SF)	3,831	186	153	339	207	127	334
Internal Capture (10%)	-383	-19	-15	-34	-21	-12	-33
subtotal	3,448	167	138	305	186	115	301
Pass-by (10% Daily, 10% AM, 10% PM)	-345	-17	-14	-31	-19	-11	-30
Total High Turnover Sit Down Restaurant Trips	3,103	150	124	274	167	104	271
▪ Specialty Retail (3,966 SF)	176	2	2	4	5	6	11
Pass-by (10% Daily, 10% AM, 10% PM)	-18	0	0	0	-1	0	-1
Total Specialty Retail Trips	158	2	2	4	4	6	10
▪ Meeting Space (1,808 SF with 52 seats and 2 employees)	46	--	--	--	23	0	23
▪ Drinking Place (7,182 SF)	820	--	--	--	54	28	82
Internal Capture (10%)	-82	--	--	--	-5	-3	-8
Total Drinking Place Trips	738	--	--	--	49	25	74
▪ Office Component (454,226 SF)	4,424	453	74	527	84	438	522
Total Phase 1, 2, and 3 Project Trips	**9,293**	**648**	**229**	**877**	**353**	**598**	**951**

[7] Source: *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).*

APPENDIX B

EXISTING TRAFFIC COUNT DATA

T218

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	1
	EAST & WEST:	MacArthur	CONTROL:	SIGNAL

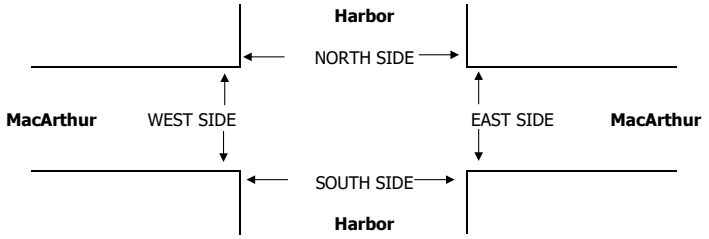
NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

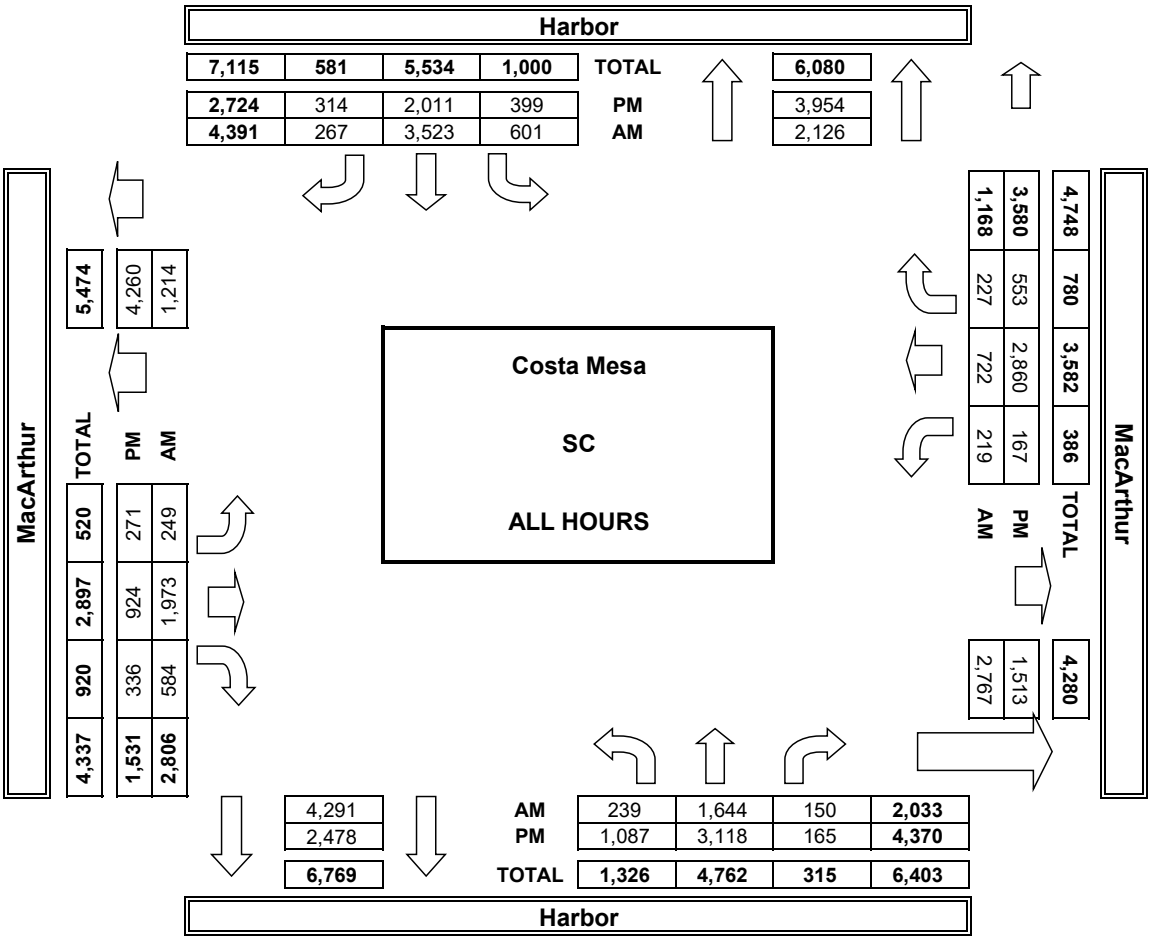
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND MacArthur			WESTBOUND MacArthur				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	21	181	7	74	415	39	33	217	36	14	54	16	1,107	0	0	0	3	3
	7:15 AM	18	188	9	70	474	26	37	249	65	16	78	28	1,258	0	2	0	3	5
	7:30 AM	27	197	19	89	468	20	36	322	102	29	93	38	1,440	3	0	0	2	5
	7:45 AM	33	212	24	79	422	34	23	293	74	39	125	29	1,387	0	3	0	10	13
	8:00 AM	41	251	24	59	454	35	32	254	76	33	119	38	1,416	1	1	0	10	12
	8:15 AM	24	220	23	82	440	34	32	249	85	29	97	24	1,339	3	0	0	6	9
	8:30 AM	39	192	21	73	412	40	30	212	68	31	80	26	1,224	3	0	0	9	12
	8:45 AM	36	203	23	75	438	39	26	177	78	28	76	28	1,227	4	0	0	6	10
	VOLUMES	239	1,644	150	601	3,523	267	249	1,973	584	219	722	227	10,398	14	6	0	49	69
	APPROACH %	12%	81%	7%	14%	80%	6%	9%	70%	21%	19%	62%	19%						
	APP/DEPART	2,033	/	2,126	4,391	/	4,291	2,806	/	2,767	1,168	/	1,214	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	125	880	90	309	1,784	123	123	1,118	337	130	434	129	5,582					
	APPROACH %	11%	80%	8%	14%	81%	6%	8%	71%	21%	19%	63%	19%						
	PEAK HR FACTOR		0.866			0.960			0.858			0.898		0.969					
	APP/DEPART	1,095	/	1,136	2,216	/	2,230	1,578	/	1,541	693	/	675	0					
PM	4:00 PM	131	418	18	47	237	38	37	138	45	26	358	73	1,566	4	4	0	7	15
	4:15 PM	138	393	32	43	250	41	23	110	41	22	362	55	1,510	3	1	2	8	14
	4:30 PM	144	377	26	48	291	32	38	125	35	32	340	81	1,569	2	7	1	9	19
	4:45 PM	144	358	23	50	244	47	30	105	47	13	370	53	1,484	0	1	0	5	6
	5:00 PM	141	355	22	64	284	67	37	126	55	18	369	61	1,599	1	2	3	2	8
	5:15 PM	147	399	15	46	232	26	32	123	40	22	359	75	1,516	1	3	2	6	12
	5:30 PM	112	407	13	50	253	29	45	99	43	20	346	86	1,503	2	3	3	6	14
	5:45 PM	130	411	16	51	220	34	29	98	30	14	356	69	1,458	0	3	1	6	10
	VOLUMES	1,087	3,118	165	399	2,011	314	271	924	336	167	2,860	553	12,205	13	24	12	49	98
	APPROACH %	25%	71%	4%	15%	74%	12%	18%	60%	22%	5%	80%	15%						
	APP/DEPART	4,370	/	3,954	2,724	/	2,478	1,531	/	1,513	3,580	/	4,260	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	576	1,489	86	208	1,051	172	137	479	177	85	1,438	270	6,168					
	APPROACH %	27%	69%	4%	15%	73%	12%	17%	60%	22%	5%	80%	15%						
	PEAK HR FACTOR		0.959			0.862			0.909			0.983		0.964					
	APP/DEPART	2,151	/	1,903	1,431	/	1,295	793	/	782	1,793	/	2,188	0					

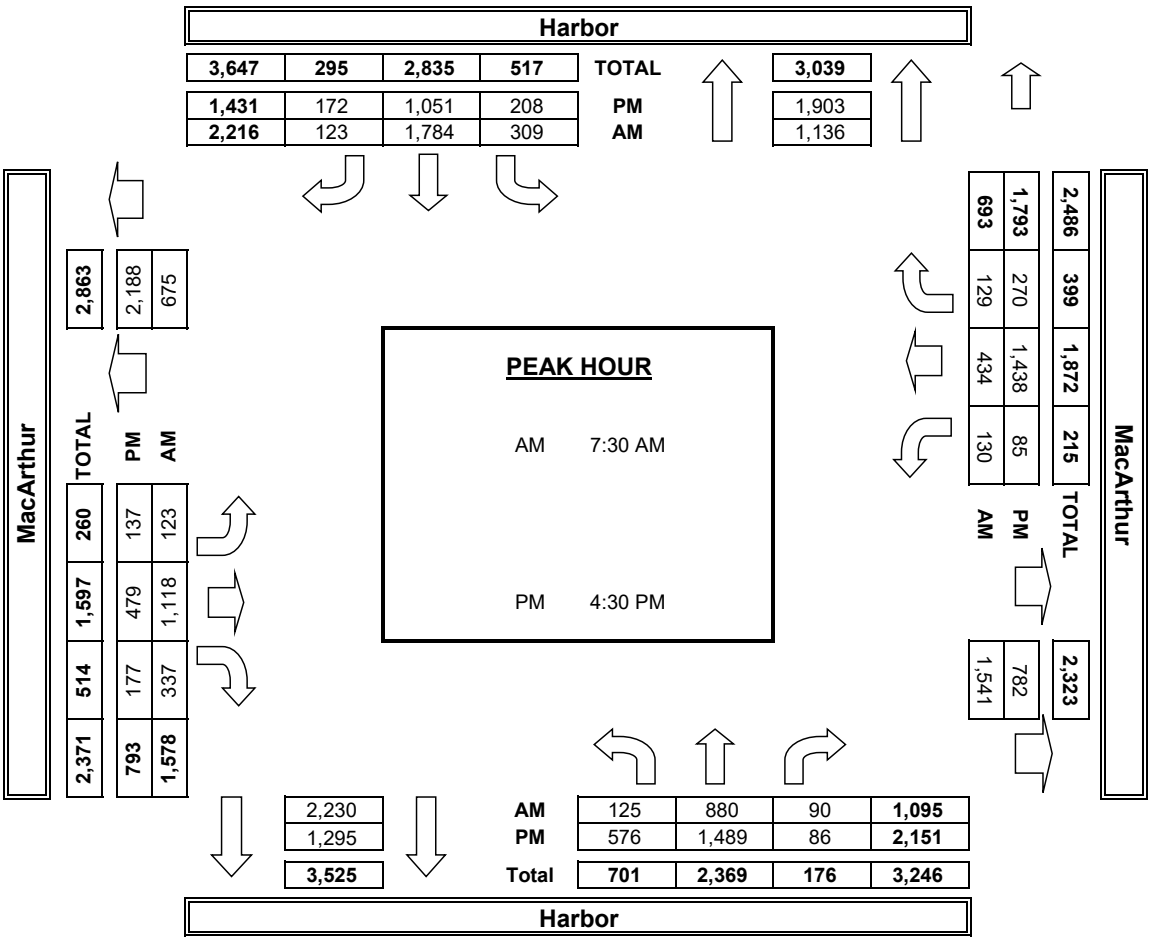


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	2
	EAST & WEST:	Lake Center	CONTROL:	SIGNAL

NOTES:

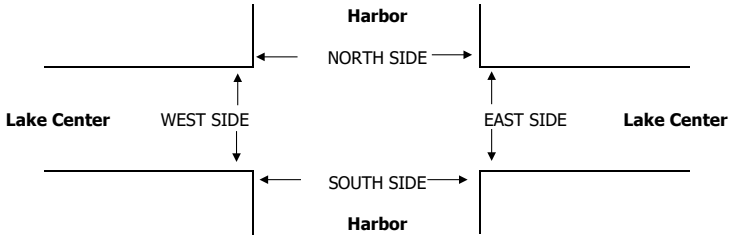
Queue NB PM

AM / PM / MD / OTHER / OTHER

◄ W E ► ▲ N S ▼

☑ Add U-Turns to Left Turns

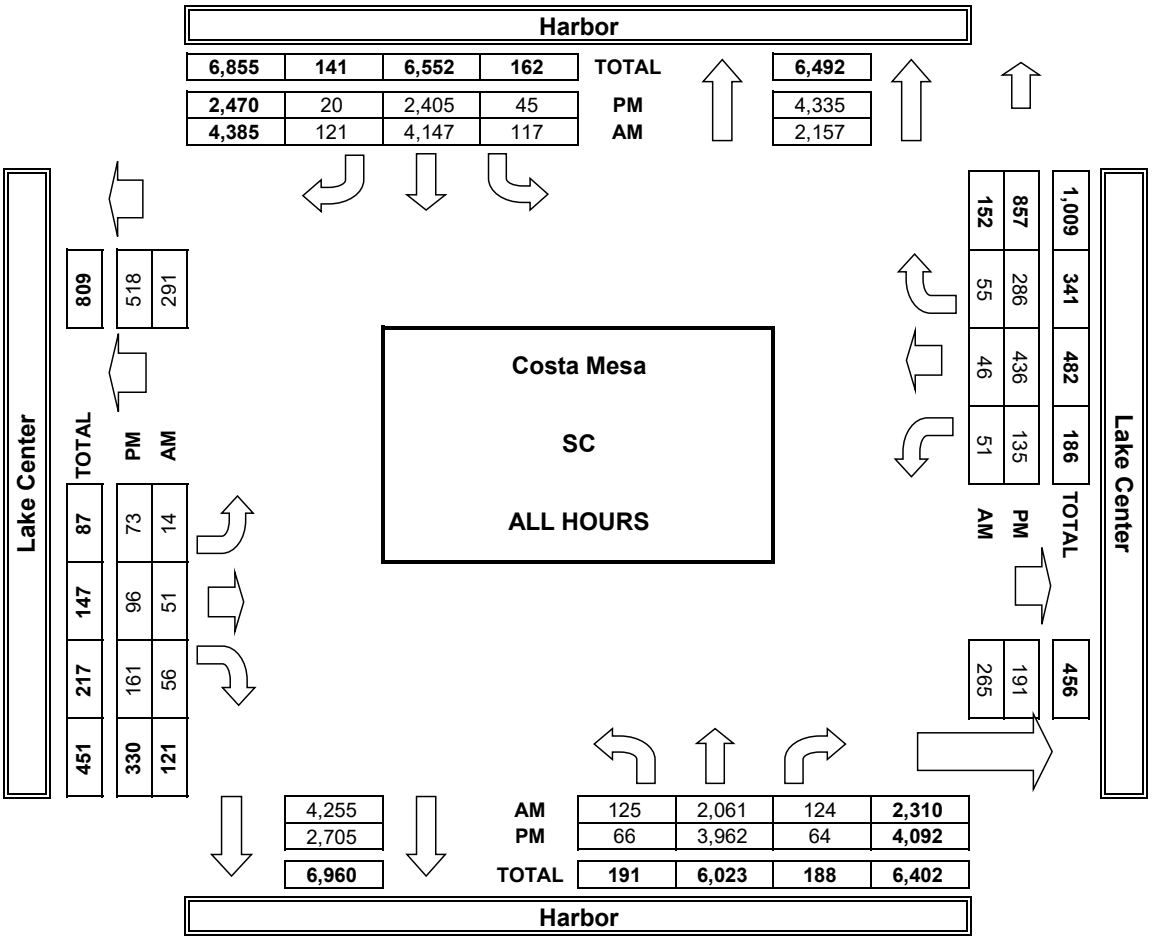
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND Lake Center			WESTBOUND Lake Center				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	9	207	5	9	444	14	2	3	6	5	6	5	715	0	2	0	0	2
	7:15 AM	15	209	9	12	541	8	3	8	4	9	3	4	825	0	1	0	0	1
	7:30 AM	18	253	20	15	595	17	2	9	3	4	9	8	953	0	4	0	0	4
	7:45 AM	14	267	31	10	514	20	1	9	10	6	9	11	902	1	2	0	0	3
	8:00 AM	16	313	25	25	515	22	0	8	3	2	8	9	946	0	6	0	0	6
	8:15 AM	14	279	14	17	524	15	2	5	11	5	4	4	894	0	7	0	0	7
	8:30 AM	17	274	12	10	496	9	3	5	11	7	3	6	853	0	3	0	0	3
	8:45 AM	22	259	8	19	518	16	1	4	8	13	4	8	880	0	2	0	0	2
	VOLUMES	125	2,061	124	117	4,147	121	14	51	56	51	46	55	6,968	1	27	0	0	28
	APPROACH %	5%	89%	5%	3%	95%	3%	12%	42%	46%	34%	30%	36%						
	APP/DEPART	2,310	/	2,157	4,385	/	4,255	121	/	265	152	/	291	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	62	1,112	90	67	2,148	74	5	31	27	17	30	32	3,695					
	APPROACH %	5%	88%	7%	3%	94%	3%	8%	49%	43%	22%	38%	41%						
	PEAK HR FACTOR		0.893			0.913			0.788			0.760		0.969					
	APP/DEPART	1,264	/	1,168	2,289	/	2,193	63	/	169	79	/	165	0					
PM	4:00 PM	7	504	4	7	290	3	10	10	18	14	61	24	952	0	2	0	0	2
	4:15 PM	14	507	13	4	301	2	5	8	14	8	62	31	969	0	2	0	0	2
	4:30 PM	10	494	11	6	341	1	14	10	23	20	49	36	1,015	0	3	0	0	3
	4:45 PM	8	479	8	3	283	4	12	8	22	21	53	20	921	1	1	0	0	2
	5:00 PM	6	471	5	8	342	0	9	25	27	33	63	42	1,031	2	1	0	0	3
	5:15 PM	6	496	6	2	295	3	7	17	21	14	57	37	961	0	1	0	0	1
	5:30 PM	6	501	5	8	301	5	8	8	17	13	45	37	954	1	4	0	0	5
	5:45 PM	9	510	12	7	252	2	8	10	19	12	46	59	946	0	0	0	0	0
	VOLUMES	66	3,962	64	45	2,405	20	73	96	161	135	436	286	7,749	4	14	0	0	18
	APPROACH %	2%	97%	2%	2%	97%	1%	22%	29%	49%	16%	51%	33%						
	APP/DEPART	4,092	/	4,335	2,470	/	2,705	330	/	191	857	/	518	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	38	1,951	37	21	1,267	7	40	51	86	82	227	129	3,936					
	APPROACH %	2%	96%	2%	2%	98%	1%	23%	29%	49%	19%	52%	29%						
	PEAK HR FACTOR		0.949			0.925			0.725			0.793		0.954					
	APP/DEPART	2,026	/	2,127	1,295	/	1,438	177	/	102	438	/	269	0					

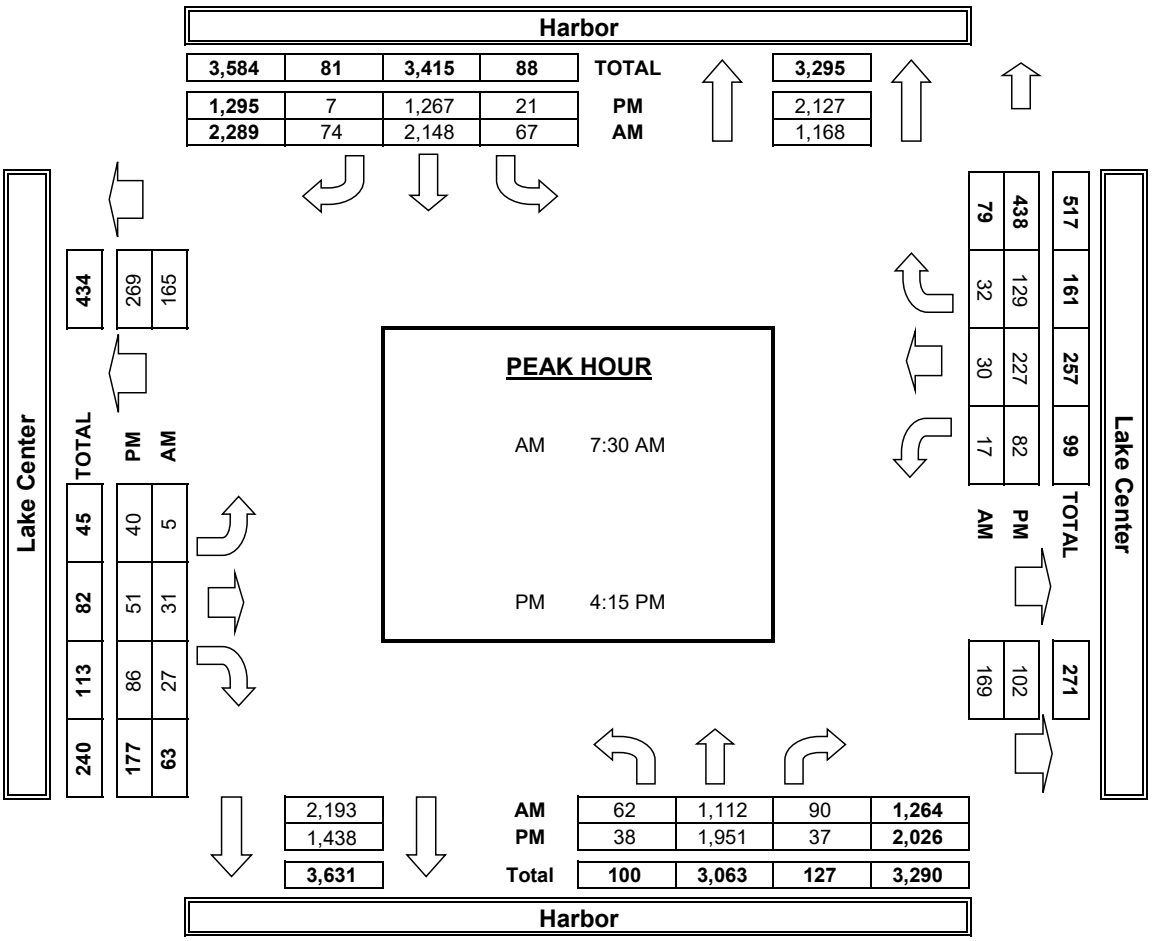


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:15 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	3
	EAST & WEST:	Sunflower	CONTROL:	SIGNAL

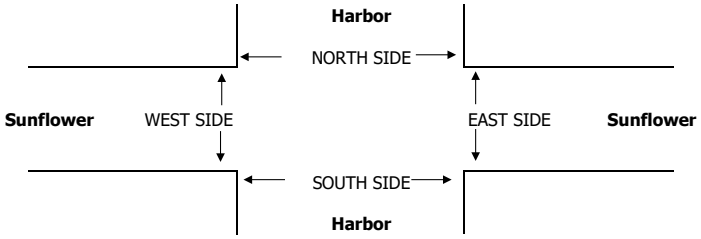
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

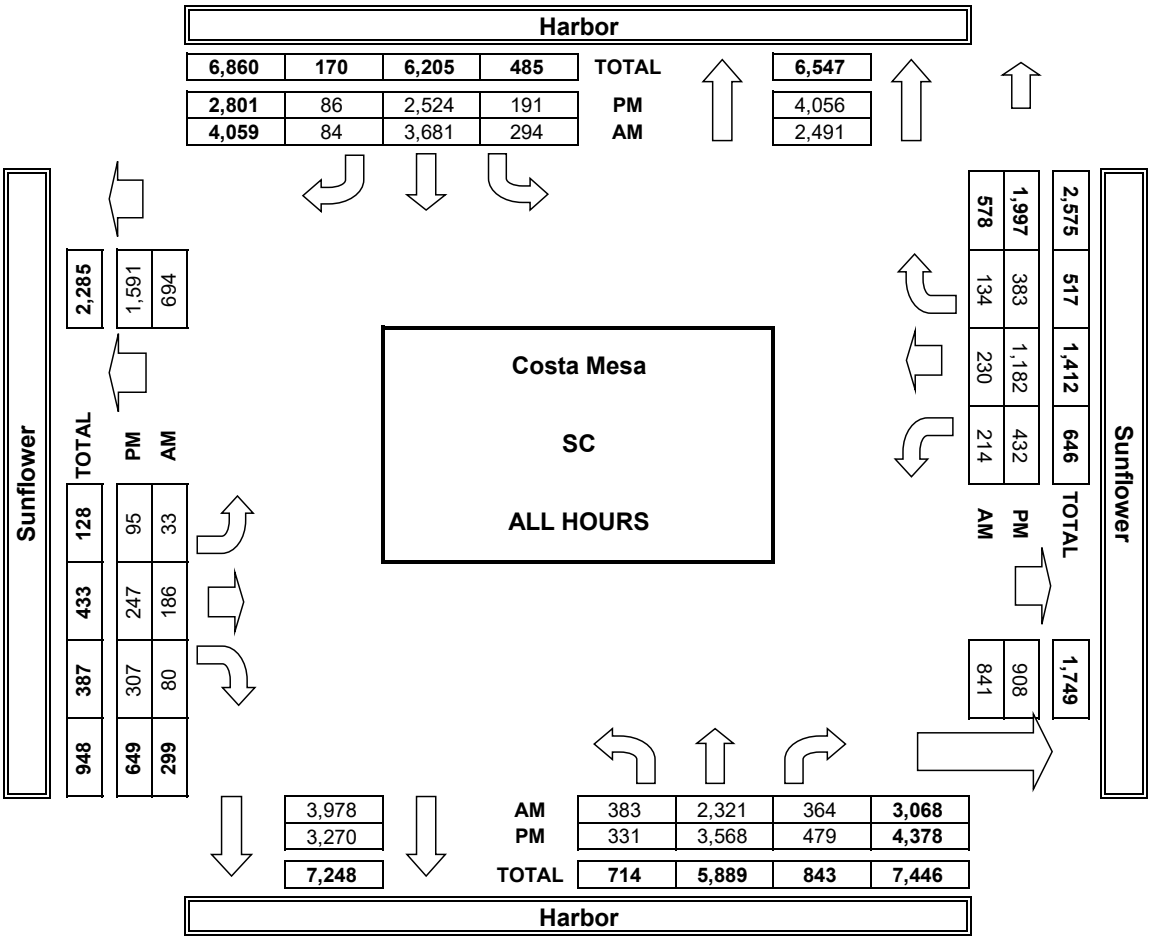
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND Sunflower			WESTBOUND Sunflower				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1.5	WT 1.5	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	26	234	34	38	412	4	3	16	5	17	10	11	810	0	1	0	0	1
	7:15 AM	30	228	24	38	432	6	4	25	6	21	26	18	858	0	0	0	0	0
	7:30 AM	36	296	51	34	519	9	3	17	10	24	28	18	1,045	1	0	0	0	1
	7:45 AM	57	308	82	46	450	12	1	41	16	40	39	26	1,118	1	1	0	0	2
	8:00 AM	57	345	59	28	471	13	5	23	11	36	42	19	1,109	0	0	0	0	0
	8:15 AM	42	312	38	35	469	13	7	21	13	29	31	19	1,029	0	0	0	0	0
	8:30 AM	71	307	34	34	453	7	3	20	11	20	21	11	992	1	1	0	0	2
	8:45 AM	64	291	42	41	475	20	7	23	8	27	33	12	1,043	0	0	0	0	0
	VOLUMES	383	2,321	364	294	3,681	84	33	186	80	214	230	134	8,004	3	3	0	0	6
	APPROACH %	12%	76%	12%	7%	91%	2%	11%	62%	27%	37%	40%	23%						
	APP/DEPART	3,068	/	2,491	4,059	/	3,978	299	/	841	578	/	694	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	192	1,261	230	143	1,909	47	16	102	50	129	140	82	4,301					
	APPROACH %	11%	75%	14%	7%	91%	2%	10%	61%	30%	37%	40%	23%						
	PEAK HR FACTOR		0.913			0.934			0.724			0.836		0.962					
	APP/DEPART	1,683	/	1,360	2,099	/	2,090	168	/	474	351	/	377	0					
PM	4:00 PM	47	462	50	27	300	9	7	28	36	42	104	43	1,155	2	1	0	0	3
	4:15 PM	38	476	46	28	310	4	7	21	27	45	119	40	1,161	0	2	0	1	3
	4:30 PM	36	480	50	25	349	11	20	38	56	45	127	39	1,276	0	1	0	0	1
	4:45 PM	42	445	49	18	321	12	7	33	44	55	161	54	1,241	0	1	0	0	1
	5:00 PM	45	425	66	22	368	17	19	48	53	71	167	35	1,336	0	1	0	0	1
	5:15 PM	35	431	71	27	319	13	18	28	46	63	200	59	1,310	2	2	0	0	4
	5:30 PM	35	413	69	18	302	9	9	27	27	59	149	58	1,175	2	1	0	0	3
	5:45 PM	53	436	78	26	255	11	8	24	18	52	155	55	1,171	2	1	0	0	3
	VOLUMES	331	3,568	479	191	2,524	86	95	247	307	432	1,182	383	9,825	8	10	0	1	19
	APPROACH %	8%	81%	11%	7%	90%	3%	15%	38%	47%	22%	59%	19%						
	APP/DEPART	4,378	/	4,056	2,801	/	3,270	649	/	908	1,997	/	1,591	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	158	1,781	236	92	1,357	53	64	147	199	234	655	187	5,163					
	APPROACH %	7%	82%	11%	6%	90%	4%	16%	36%	49%	22%	61%	17%						
	PEAK HR FACTOR		0.961			0.923			0.854			0.835		0.966					
	APP/DEPART	2,175	/	2,037	1,502	/	1,792	410	/	470	1,076	/	864	0					

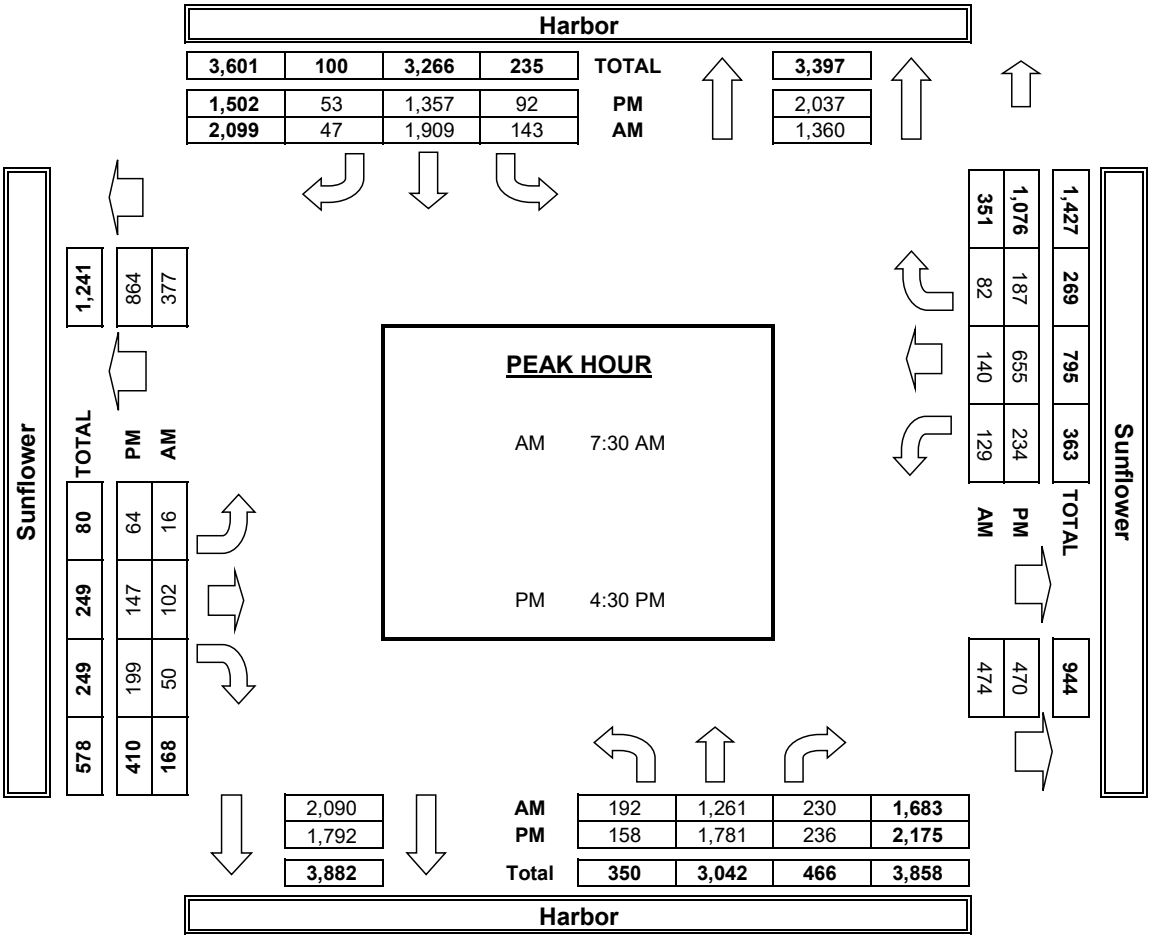


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

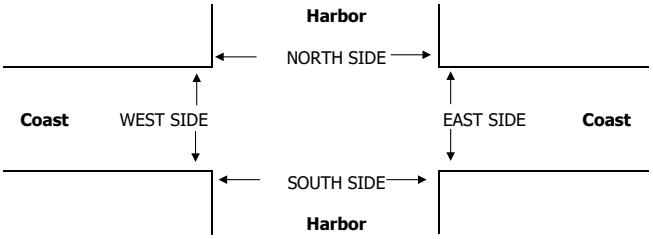
DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	4
	EAST & WEST:	Coast	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ◄ W — ▲ N — E ► — S ▼

☑ Add U-Turns to Left Turns

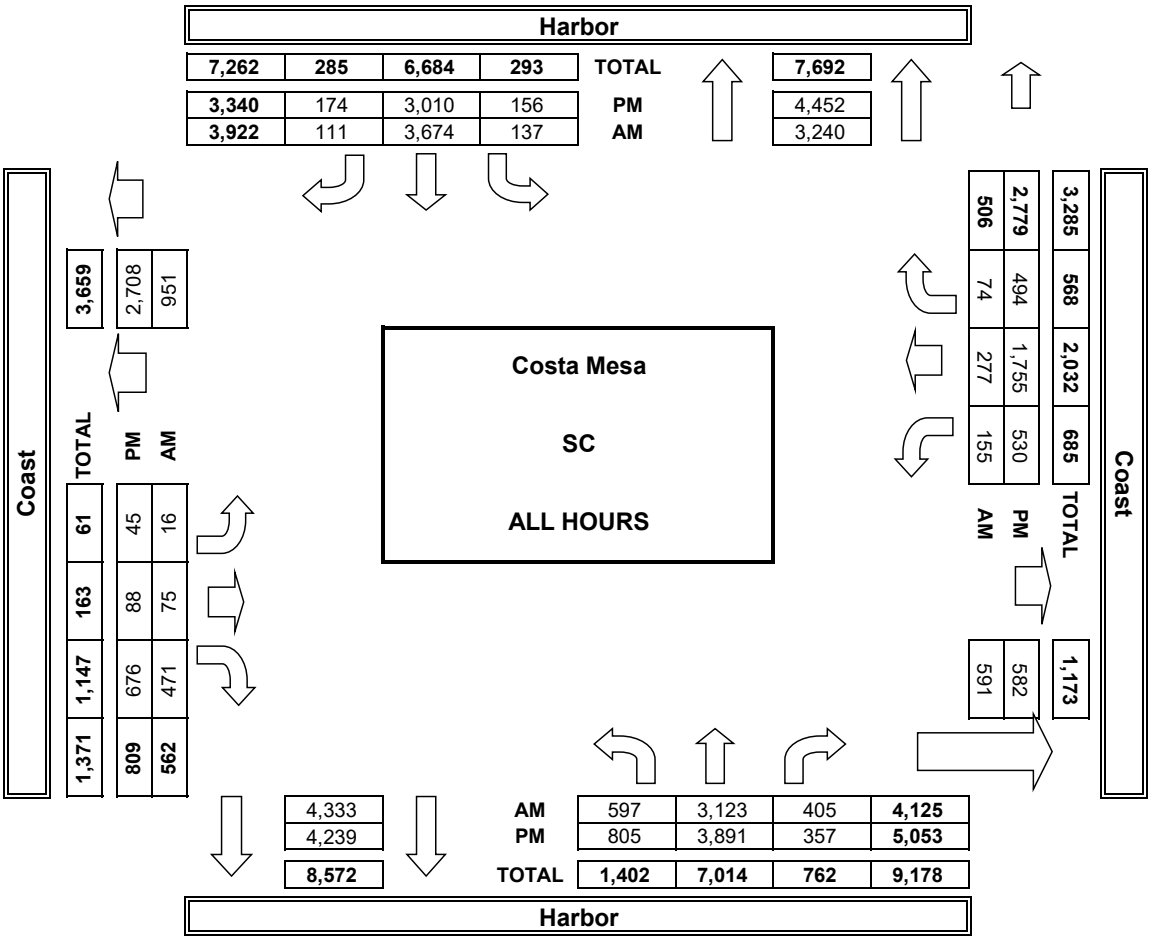
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND Coast			WESTBOUND Coast				U-TURNS				
	LANES:	NL 2	NT 3.5	NR 1.5	SL 2	ST 4	SR 1	EL 1	ET 0.5	ER 1.5	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	46	284	27	9	407	12	3	6	43	9	15	8	869	2	1	0	0	3
	7:15 AM	42	277	40	17	416	11	1	10	69	16	14	6	919	3	2	0	2	7
	7:30 AM	55	378	55	21	529	13	2	11	80	13	35	10	1,202	6	1	0	0	7
	7:45 AM	80	480	62	14	474	11	2	18	63	37	46	8	1,295	4	1	0	0	5
	8:00 AM	83	460	55	18	476	14	1	10	44	23	51	11	1,246	8	2	0	0	10
	8:15 AM	86	402	50	19	471	6	2	7	61	15	54	11	1,184	5	4	0	0	9
	8:30 AM	97	410	54	21	449	22	3	5	49	13	30	11	1,164	2	10	1	0	13
	8:45 AM	108	432	62	18	452	22	2	8	62	29	32	9	1,236	5	7	0	0	12
	VOLUMES	597	3,123	405	137	3,674	111	16	75	471	155	277	74	9,115	35	28	1	2	66
	APPROACH %	14%	76%	10%	3%	94%	3%	3%	13%	84%	31%	55%	15%						
	APP/DEPART	4,125	/	3,240	3,922	/	4,333	562	/	591	506	/	951	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	304	1,720	222	72	1,950	44	7	46	248	88	186	40	4,927					
	APPROACH %	14%	77%	10%	3%	94%	2%	2%	15%	82%	28%	59%	13%						
	PEAK HR FACTOR		0.903			0.917			0.809			0.863		0.951					
	APP/DEPART	2,246	/	1,775	2,066	/	2,309	301	/	332	314	/	511	0					
PM	4:00 PM	96	474	43	21	352	17	9	12	74	56	266	63	1,483	4	5	0	0	9
	4:15 PM	100	480	40	16	356	18	3	6	58	55	257	60	1,449	1	2	0	0	3
	4:30 PM	100	500	41	17	394	19	5	13	83	62	227	66	1,527	7	2	0	1	10
	4:45 PM	96	488	46	18	401	15	4	7	81	77	228	76	1,537	3	3	0	1	7
	5:00 PM	96	498	44	24	429	33	7	17	126	90	202	66	1,632	4	2	0	1	7
	5:15 PM	101	489	47	11	428	19	3	12	103	63	185	46	1,507	2	0	0	0	2
	5:30 PM	116	485	45	31	355	26	7	11	80	50	191	45	1,442	3	6	0	0	9
	5:45 PM	100	477	51	18	295	27	7	10	71	77	199	72	1,404	2	2	0	0	4
	VOLUMES	805	3,891	357	156	3,010	174	45	88	676	530	1,755	494	11,981	26	22	0	3	51
	APPROACH %	16%	77%	7%	5%	90%	5%	6%	11%	84%	19%	63%	18%						
	APP/DEPART	5,053	/	4,452	3,340	/	4,239	809	/	582	2,779	/	2,708	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	393	1,975	178	70	1,652	86	19	49	393	292	842	254	6,203					
	APPROACH %	15%	78%	7%	4%	91%	5%	4%	11%	85%	21%	61%	18%						
	PEAK HR FACTOR		0.993			0.930			0.768			0.911		0.950					
	APP/DEPART	2,546	/	2,255	1,808	/	2,350	461	/	293	1,388	/	1,305	0					

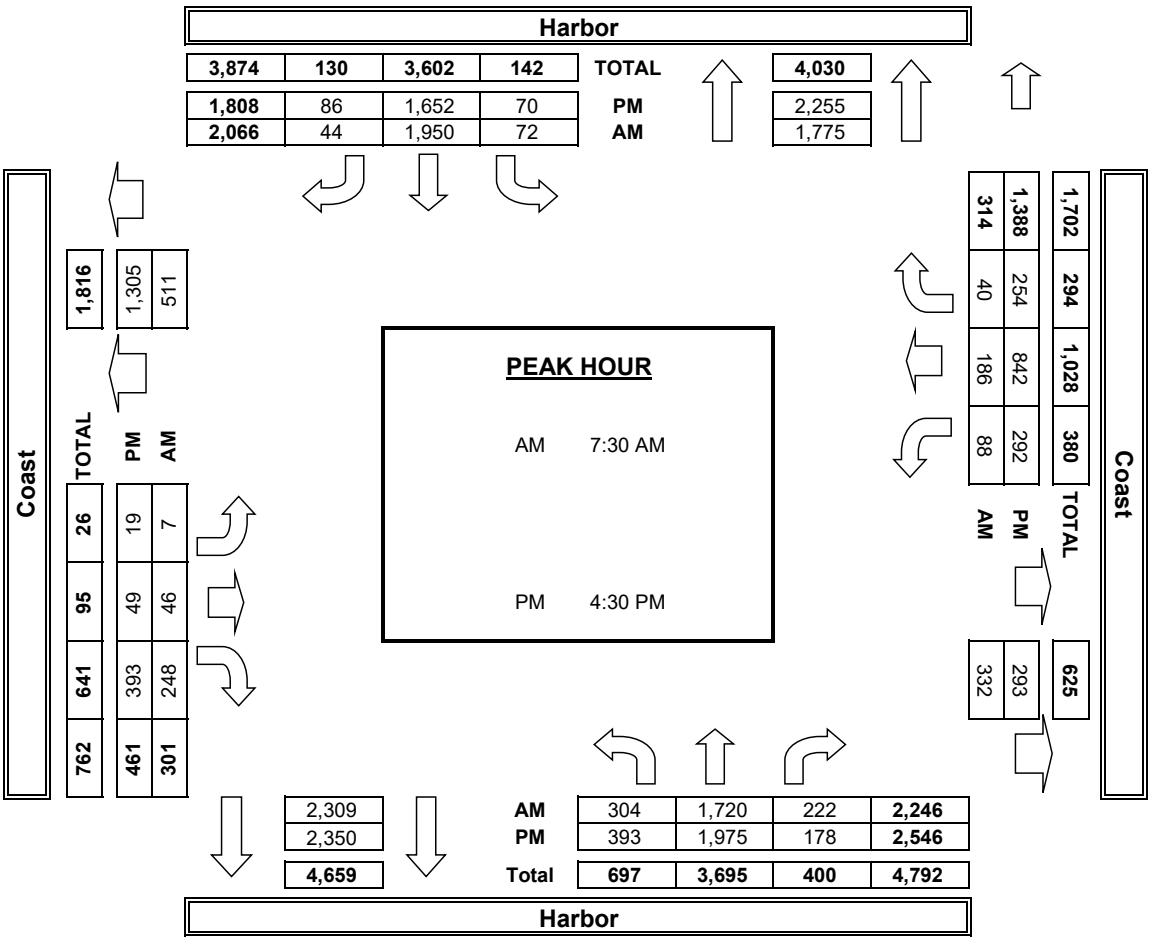


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Hyland	LOCATION #:	5
	EAST & WEST:	Coast	CONTROL:	SIGNAL

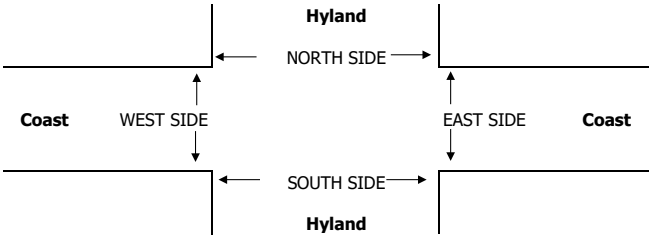
NOTES:

Queue WB PM

AM / PM / MD / OTHER / OTHER — ◄ W — ▲ N — S ▼ — E ►

☑ Add U-Turns to Left Turns

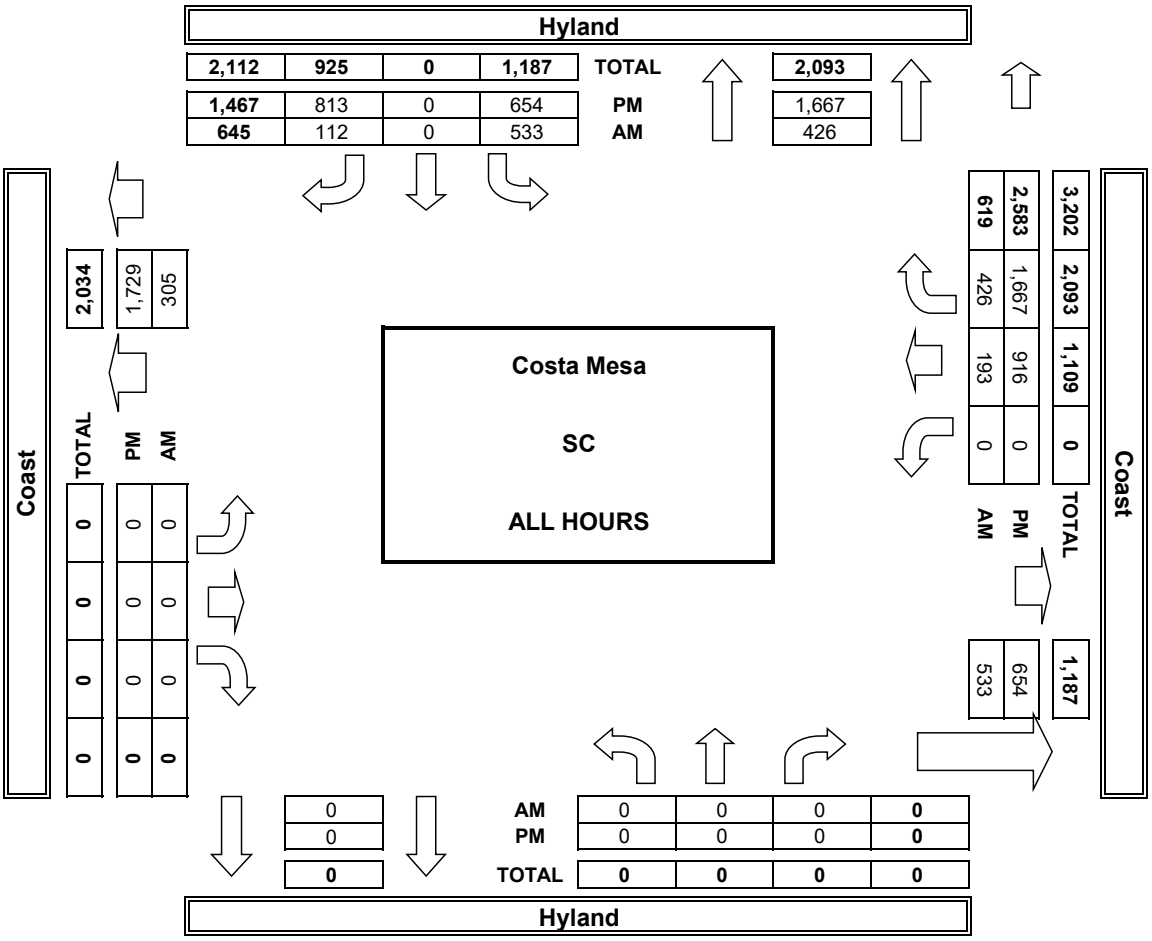
		NORTHBOUND Hyland			SOUTHBOUND Hyland			EASTBOUND Coast			WESTBOUND Coast				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 1	ST X	SR 1	EL X	ET X	ER X	WL X	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	0	41	0	12	0	0	0	0	24	28	105	0	0	0	0	0
	7:15 AM	0	0	0	76	0	10	0	0	0	0	17	28	131	0	0	0	0	0
	7:30 AM	0	0	0	91	0	8	0	0	0	0	19	50	168	0	0	0	0	0
	7:45 AM	0	0	0	83	0	18	0	0	0	0	21	71	193	0	0	0	0	0
	8:00 AM	0	0	0	54	0	19	0	0	0	0	27	70	170	0	0	0	0	0
	8:15 AM	0	0	0	67	0	10	0	0	0	0	24	57	158	0	0	0	0	0
	8:30 AM	0	0	0	52	0	10	0	0	0	0	32	54	148	0	0	0	0	0
	8:45 AM	0	0	0	69	0	25	0	0	0	0	29	68	191	0	0	0	0	0
	VOLUMES	0	0	0	533	0	112	0	0	0	0	193	426	1,264	0	0	0	0	0
	APPROACH %	0%	0%	0%	83%	0%	17%	0%	0%	0%	0%	31%	69%						
	APP/DEPART	0	/	426	645	/	0	0	/	533	619	/	305	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	0	0	295	0	55	0	0	0	0	91	248	689					
	APPROACH %	0%	0%	0%	84%	0%	16%	0%	0%	0%	0%	27%	73%						
	PEAK HR FACTOR		0.000			0.866			0.000			0.874		0.892					
	APP/DEPART	0	/	248	350	/	0	0	/	295	339	/	146	0					
PM	4:00 PM	0	0	0	68	0	91	0	0	0	0	143	187	489	0	0	0	0	0
	4:15 PM	0	0	0	56	0	95	0	0	0	0	127	230	508	0	0	0	0	0
	4:30 PM	0	0	0	82	0	115	0	0	0	0	116	216	529	0	0	0	0	0
	4:45 PM	0	0	0	85	0	86	0	0	0	0	113	201	485	0	0	0	0	0
	5:00 PM	0	0	0	130	0	118	0	0	0	0	112	209	569	0	0	0	0	0
	5:15 PM	0	0	0	93	0	103	0	0	0	0	97	210	503	0	0	0	0	0
	5:30 PM	0	0	0	74	0	104	0	0	0	0	102	196	476	0	0	0	0	0
	5:45 PM	0	0	0	66	0	101	0	0	0	0	106	218	491	0	0	0	0	0
	VOLUMES	0	0	0	654	0	813	0	0	0	0	916	1,667	4,050	0	0	0	0	0
	APPROACH %	0%	0%	0%	45%	0%	55%	0%	0%	0%	0%	35%	65%						
	APP/DEPART	0	/	1,667	1,467	/	0	0	/	654	2,583	/	1,729	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	0	0	0	353	0	414	0	0	0	0	468	856	2,091					
	APPROACH %	0%	0%	0%	46%	0%	54%	0%	0%	0%	0%	35%	65%						
	PEAK HR FACTOR		0.000			0.773			0.000			0.927		0.919					
	APP/DEPART	0	/	856	767	/	0	0	/	353	1,324	/	882	0					

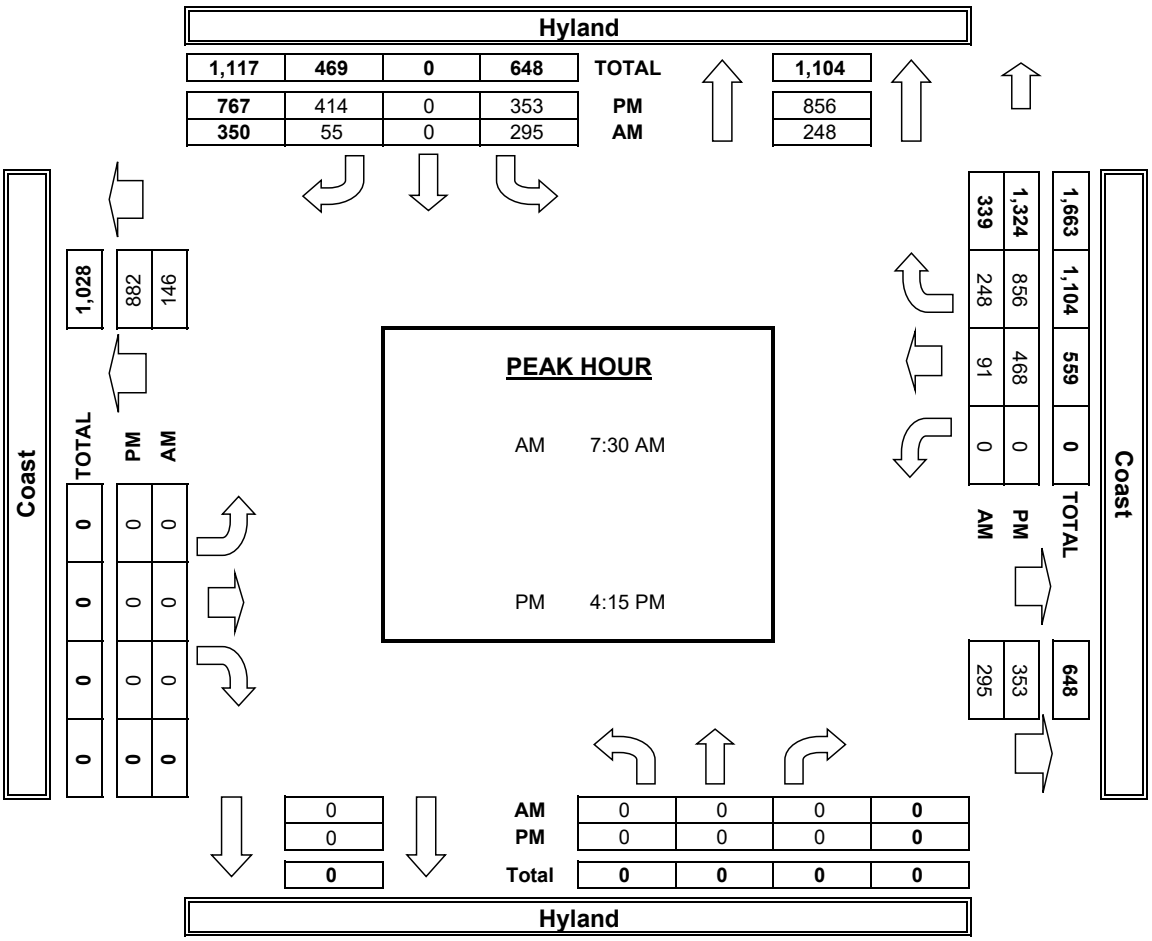


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:15 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





T218

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	6
	EAST & WEST:	I-405 NB Ramps	CONTROL:	SIGNAL

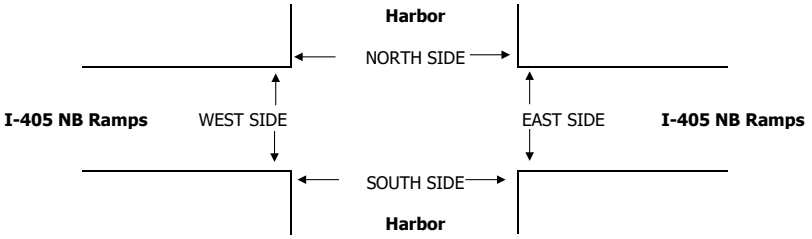
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

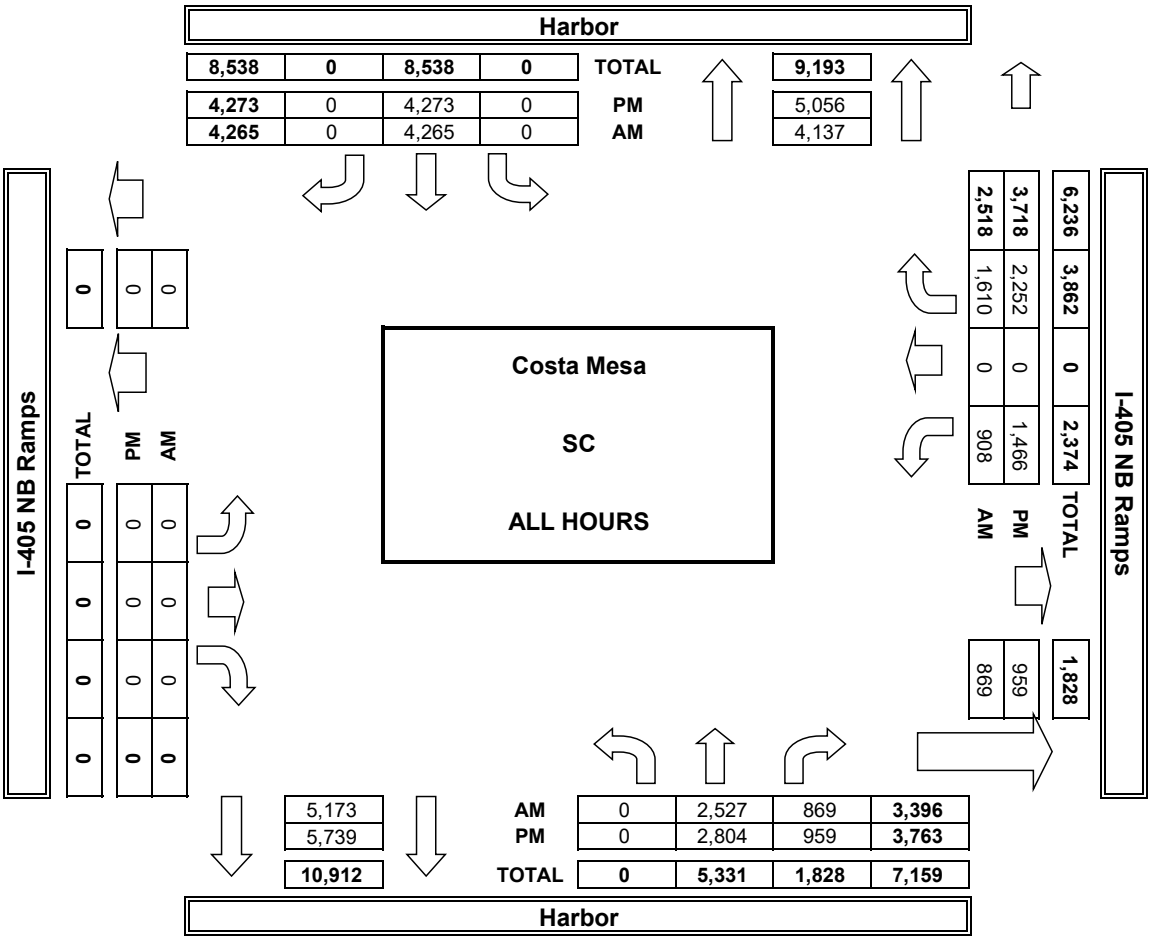
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND I-405 NB Ramps			WESTBOUND I-405 NB Ramps				U-TURNS				
	LANES:	NL X	NT 4	NR 1	SL X	ST 5	SR X	EL X	ET X	ER X	WL 1.5	WT X	WR 1.5	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	189	104	0	431	0	0	0	0	97	0	159	980	0	0	0	0	0
	7:15 AM	0	222	103	0	535	0	0	0	0	104	0	162	1,126	0	0	0	0	0
	7:30 AM	0	295	109	0	619	0	0	0	0	104	0	209	1,336	0	0	0	0	0
	7:45 AM	0	402	106	0	584	0	0	0	0	106	0	213	1,411	0	0	0	0	0
	8:00 AM	0	354	121	0	536	0	0	0	0	109	0	236	1,356	0	0	0	0	0
	8:15 AM	0	336	109	0	539	0	0	0	0	120	0	209	1,313	0	0	0	0	0
	8:30 AM	0	367	120	0	507	0	0	0	0	141	0	188	1,323	0	0	0	0	0
	8:45 AM	0	362	97	0	514	0	0	0	0	127	0	234	1,334	0	0	0	0	0
	VOLUMES	0	2,527	869	0	4,265	0	0	0	0	908	0	1,610	10,179	0	0	0	0	0
	APPROACH %	0%	74%	26%	0%	100%	0%	0%	0%	0%	36%	0%	64%						
	APP/DEPART	3,396	/	4,137	4,265	/	5,173	0	/	869	2,518	/	0	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	1,387	445	0	2,278	0	0	0	0	439	0	867	5,416					
	APPROACH %	0%	76%	24%	0%	100%	0%	0%	0%	0%	34%	0%	66%						
	PEAK HR FACTOR		0.902			0.920			0.000			0.946		0.960					
	APP/DEPART	1,832	/	2,254	2,278	/	2,717	0	/	445	1,306	/	0	0					
PM	4:00 PM	0	345	87	0	475	0	0	0	0	177	0	269	1,353	0	0	0	0	0
	4:15 PM	0	343	116	0	473	0	0	0	0	171	0	300	1,403	0	0	0	0	0
	4:30 PM	0	353	118	0	554	0	0	0	0	191	0	278	1,494	0	0	0	0	0
	4:45 PM	0	346	139	0	570	0	0	0	0	177	0	307	1,539	0	0	0	0	0
	5:00 PM	0	335	126	0	666	0	0	0	0	181	0	296	1,604	0	0	0	0	0
	5:15 PM	0	388	150	0	611	0	0	0	0	204	0	251	1,604	0	0	0	0	0
	5:30 PM	0	348	122	0	482	0	0	0	0	165	0	284	1,401	0	0	0	0	0
	5:45 PM	0	346	101	0	442	0	0	0	0	200	0	267	1,356	0	0	0	0	0
	VOLUMES	0	2,804	959	0	4,273	0	0	0	0	1,466	0	2,252	11,754	0	0	0	0	0
	APPROACH %	0%	75%	25%	0%	100%	0%	0%	0%	0%	39%	0%	61%						
	APP/DEPART	3,763	/	5,056	4,273	/	5,739	0	/	959	3,718	/	0	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	1,422	533	0	2,401	0	0	0	0	753	0	1,132	6,241					
	APPROACH %	0%	73%	27%	0%	100%	0%	0%	0%	0%	40%	0%	60%						
	PEAK HR FACTOR		0.908			0.901			0.000			0.974		0.973					
	APP/DEPART	1,955	/	2,554	2,401	/	3,154	0	/	533	1,885	/	0	0					

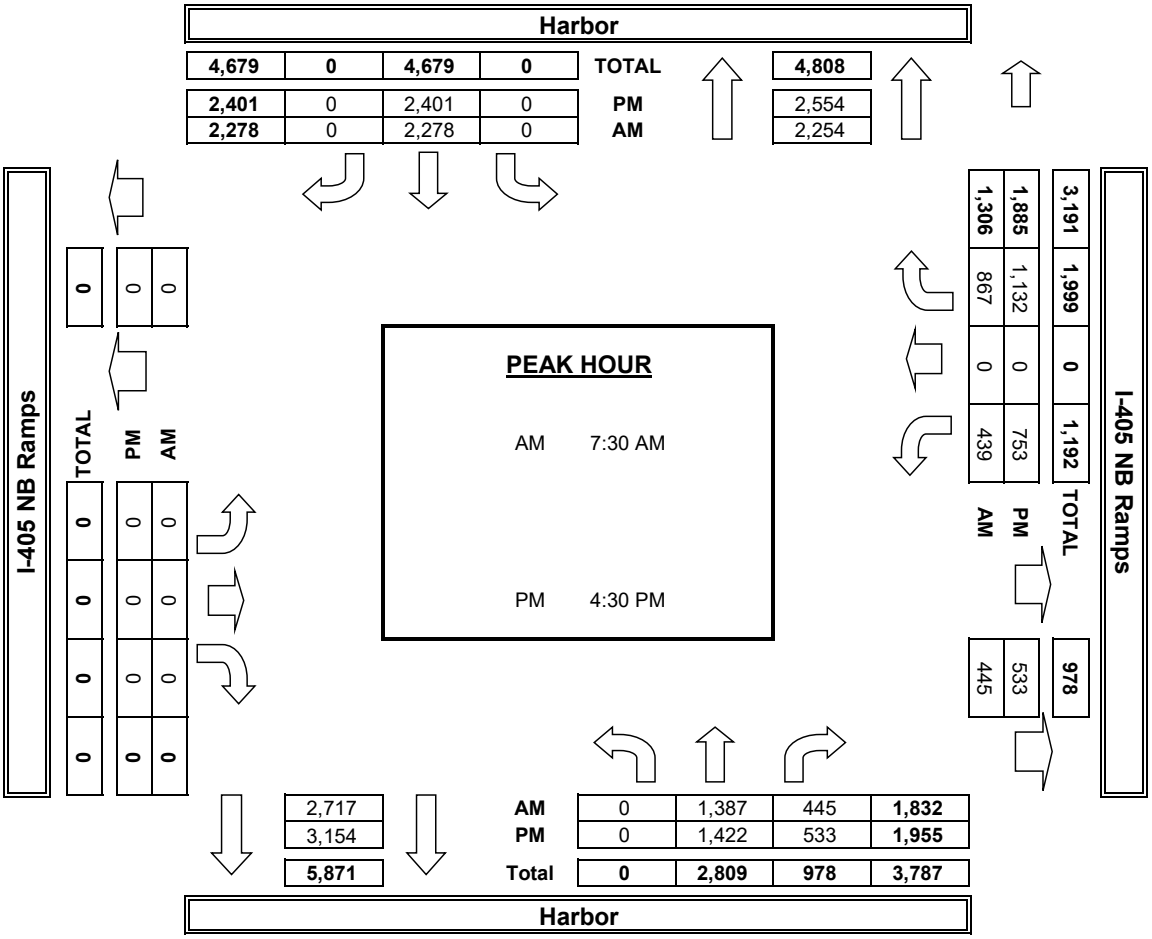


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





T218

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

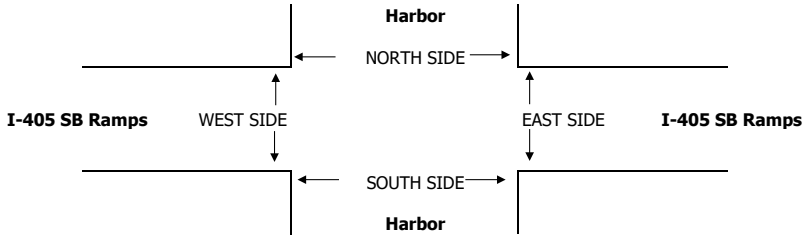
DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	7
	EAST & WEST:	I-405 SB Ramps	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

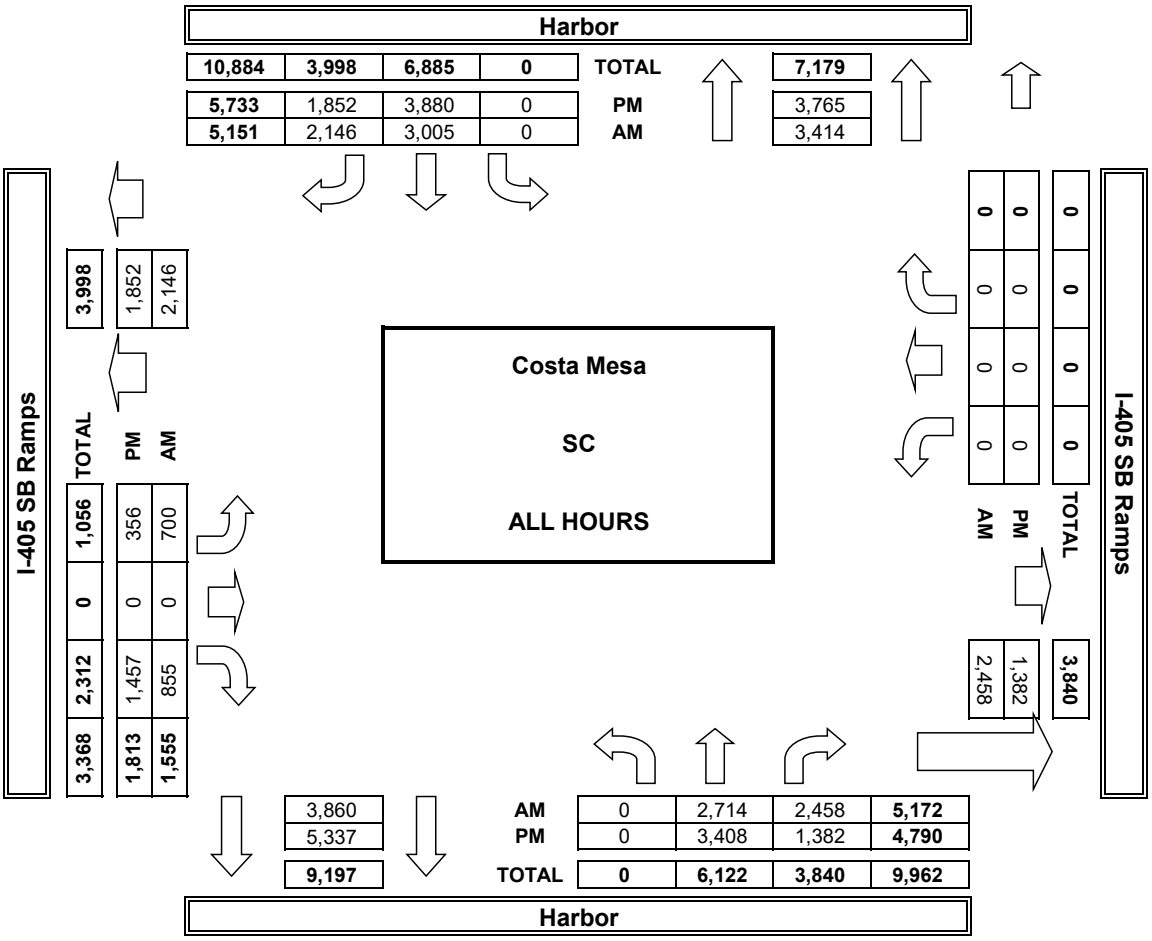
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND I-405 SB Ramps			WESTBOUND I-405 SB Ramps				U-TURNS				
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL
	LANES:	X	3.5	1.5	X	4	1	1.5	X	1.5	X	X	X		0	0	0	0	
AM	7:00 AM	0	245	284	0	269	258	51	0	98	0	0	0	1,205	0	0	0	0	0
	7:15 AM	0	266	312	0	340	295	62	0	85	0	0	0	1,360	0	0	0	0	0
	7:30 AM	0	318	323	0	345	376	88	0	109	0	0	0	1,559	0	0	0	0	0
	7:45 AM	0	400	319	0	422	268	109	0	108	0	0	0	1,626	0	0	0	0	0
	8:00 AM	0	383	304	0	394	251	94	0	116	0	0	0	1,542	0	0	0	0	0
	8:15 AM	0	358	312	0	421	237	87	0	102	0	0	0	1,517	0	0	0	0	0
	8:30 AM	0	387	333	0	406	239	100	0	110	0	0	0	1,575	0	0	0	0	0
	8:45 AM	0	357	271	0	408	222	109	0	127	0	0	0	1,494	0	0	0	0	0
	VOLUMES	0	2,714	2,458	0	3,005	2,146	700	0	855	0	0	0	11,878	0	0	0	0	0
	APPROACH %	0%	52%	48%	0%	58%	42%	45%	0%	55%	0%	0%	0%						
	APP/DEPART	5,172	/	3,414	5,151	/	3,860	1,555	/	2,458	0	/	2,146	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	1,528	1,268	0	1,643	995	390	0	436	0	0	0	6,260					
	APPROACH %	0%	55%	45%	0%	62%	38%	47%	0%	53%	0%	0%	0%						
	PEAK HR FACTOR		0.971			0.956			0.952			0.000		0.962					
	APP/DEPART	2,796	/	1,918	2,638	/	2,079	826	/	1,268	0	/	995	0					
PM	4:00 PM	0	374	196	0	451	192	40	0	146	0	0	0	1,399	0	0	0	0	0
	4:15 PM	0	414	182	0	450	194	46	0	183	0	0	0	1,469	0	0	0	0	0
	4:30 PM	0	422	161	0	441	303	50	0	201	0	0	0	1,578	0	1	0	0	1
	4:45 PM	0	433	186	0	498	246	54	0	181	0	0	0	1,598	0	0	0	0	0
	5:00 PM	0	418	160	0	530	317	44	0	184	0	0	0	1,653	0	0	0	0	0
	5:15 PM	0	489	197	0	571	244	50	0	175	0	0	0	1,726	0	0	0	0	0
	5:30 PM	0	437	156	0	476	180	35	0	219	0	0	0	1,503	0	0	0	0	0
	5:45 PM	0	421	144	0	463	176	37	0	168	0	0	0	1,409	0	0	0	0	0
	VOLUMES	0	3,408	1,382	0	3,880	1,852	356	0	1,457	0	0	0	12,336	0	1	0	0	1
	APPROACH %	0%	71%	29%	0%	68%	32%	20%	0%	80%	0%	0%	0%						
	APP/DEPART	4,790	/	3,765	5,733	/	5,337	1,813	/	1,382	0	/	1,852	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	1,762	704	0	2,040	1,110	198	0	741	0	0	0	6,556					
	APPROACH %	0%	71%	29%	0%	65%	35%	21%	0%	79%	0%	0%	0%						
	PEAK HR FACTOR		0.899			0.930			0.935			0.000		0.950					
	APP/DEPART	2,466	/	1,961	3,151	/	2,781	939	/	704	0	/	1,110	0					

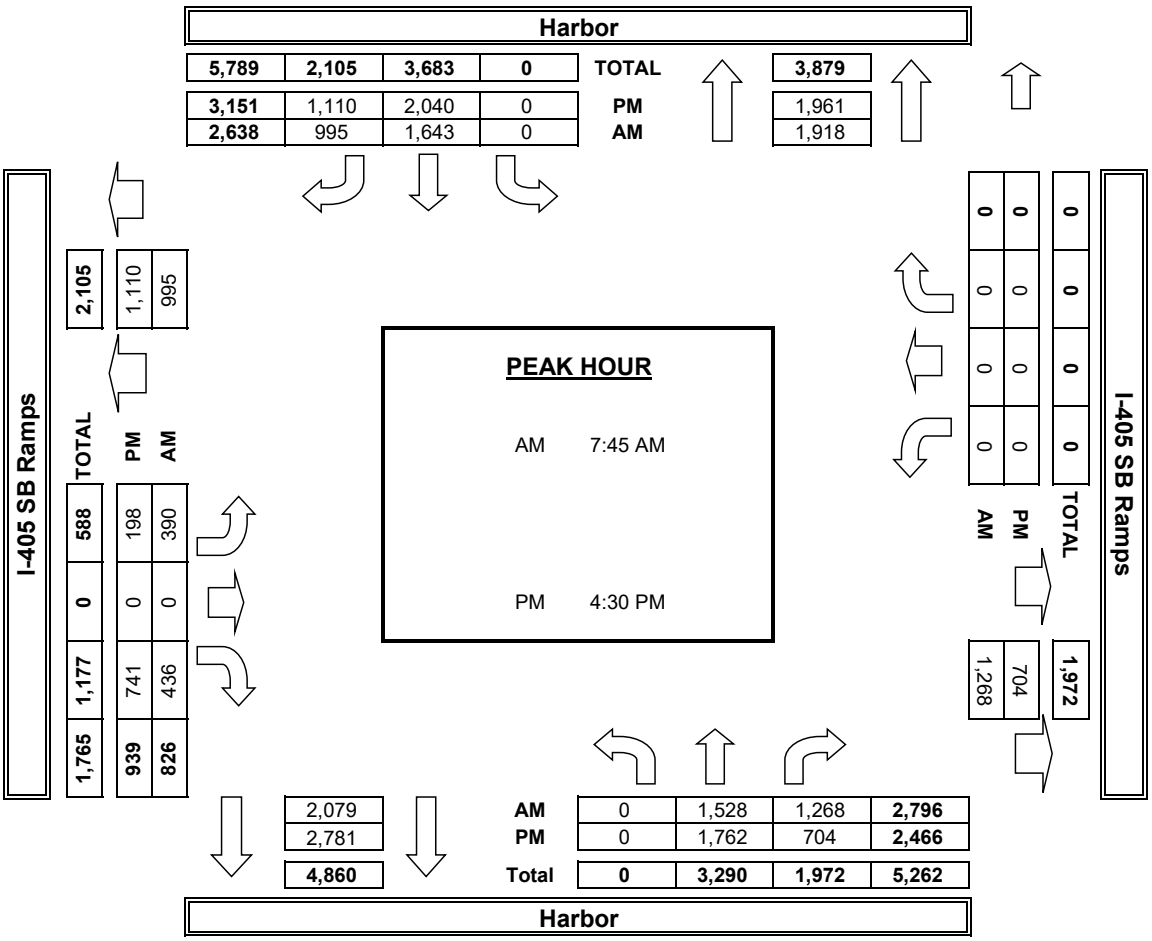


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:45 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

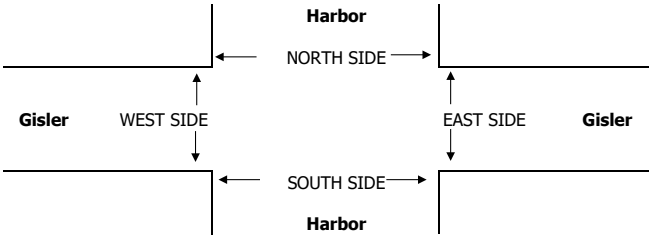
DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	8
	EAST & WEST:	Gisler	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

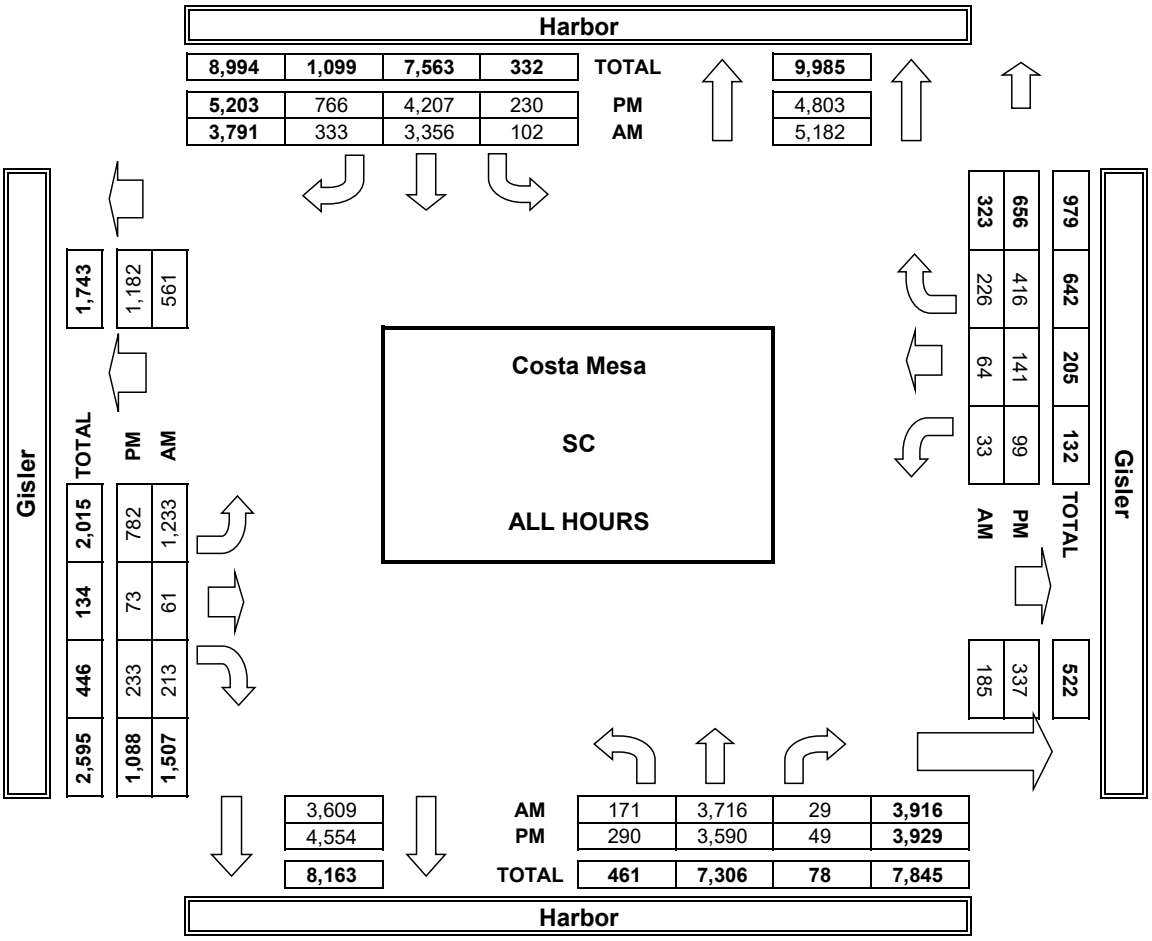
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND Gisler			WESTBOUND Gisler				U-TURNS				
	LANES:	NL 1	NT 4.5	NR 0.5	SL 1	ST 4	SR 0	EL 2	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	9	379	3	10	305	34	138	6	13	2	5	21	925	2	0	0	0	2
AM	7:15 AM	15	399	4	11	376	34	155	4	17	6	7	26	1,054	1	2	0	0	3
AM	7:30 AM	21	439	1	9	385	42	174	12	29	6	8	26	1,152	2	0	0	0	2
AM	7:45 AM	28	501	3	11	470	44	169	10	33	5	10	37	1,321	0	1	0	0	1
AM	8:00 AM	26	480	4	14	448	43	185	7	35	1	9	25	1,277	0	1	0	0	1
AM	8:15 AM	38	512	4	14	446	49	140	9	33	6	9	21	1,281	0	1	0	0	1
AM	8:30 AM	24	522	5	13	443	48	154	10	32	3	14	45	1,313	1	0	0	0	1
AM	8:45 AM	10	484	5	20	483	39	118	3	21	4	2	25	1,214	1	2	0	0	3
AM	VOLUMES	171	3,716	29	102	3,356	333	1,233	61	213	33	64	226	9,537	7	7	0	0	14
AM	APPROACH %	4%	95%	1%	3%	89%	9%	82%	4%	14%	10%	20%	70%						
AM	APP/DEPART	3,916	/	5,182	3,791	/	3,609	1,507	/	185	323	/	561	0					
AM	BEGIN PEAK HR		7:45 AM																
AM	VOLUMES	116	2,015	16	52	1,807	184	648	36	133	15	42	128	5,192					
AM	APPROACH %	5%	94%	1%	3%	88%	9%	79%	4%	16%	8%	23%	69%						
AM	PEAK HR FACTOR		0.969			0.973			0.900			0.746		0.983					
AM	APP/DEPART	2,147	/	2,794	2,043	/	1,956	817	/	101	185	/	341	0					
PM	4:00 PM	37	437	3	25	477	84	87	16	41	15	17	46	1,285	2	2	0	0	4
PM	4:15 PM	37	447	8	22	506	95	104	6	32	12	16	47	1,332	2	0	0	0	2
PM	4:30 PM	33	427	8	30	499	93	104	9	32	13	21	57	1,326	1	1	0	0	2
PM	4:45 PM	47	456	6	34	546	92	97	13	25	12	19	55	1,402	2	3	0	0	5
PM	5:00 PM	30	441	4	32	548	104	104	5	23	13	17	56	1,377	2	0	0	0	2
PM	5:15 PM	34	496	6	39	591	106	95	7	23	16	15	66	1,494	1	3	0	0	4
PM	5:30 PM	35	460	5	23	552	91	91	12	32	8	13	45	1,367	2	3	0	0	5
PM	5:45 PM	37	426	9	25	488	101	100	5	25	10	23	44	1,293	3	3	0	0	6
PM	VOLUMES	290	3,590	49	230	4,207	766	782	73	233	99	141	416	10,876	15	15	0	0	30
PM	APPROACH %	7%	91%	1%	4%	81%	15%	72%	7%	21%	15%	21%	63%						
PM	APP/DEPART	3,929	/	4,803	5,203	/	4,554	1,088	/	337	656	/	1,182	0					
PM	BEGIN PEAK HR		4:45 PM																
PM	VOLUMES	146	1,853	21	128	2,237	393	387	37	103	49	64	222	5,640					
PM	APPROACH %	7%	92%	1%	5%	81%	14%	73%	7%	20%	15%	19%	66%						
PM	PEAK HR FACTOR		0.942			0.937			0.976			0.863		0.944					
PM	APP/DEPART	2,020	/	2,471	2,758	/	2,396	527	/	177	335	/	596	0					

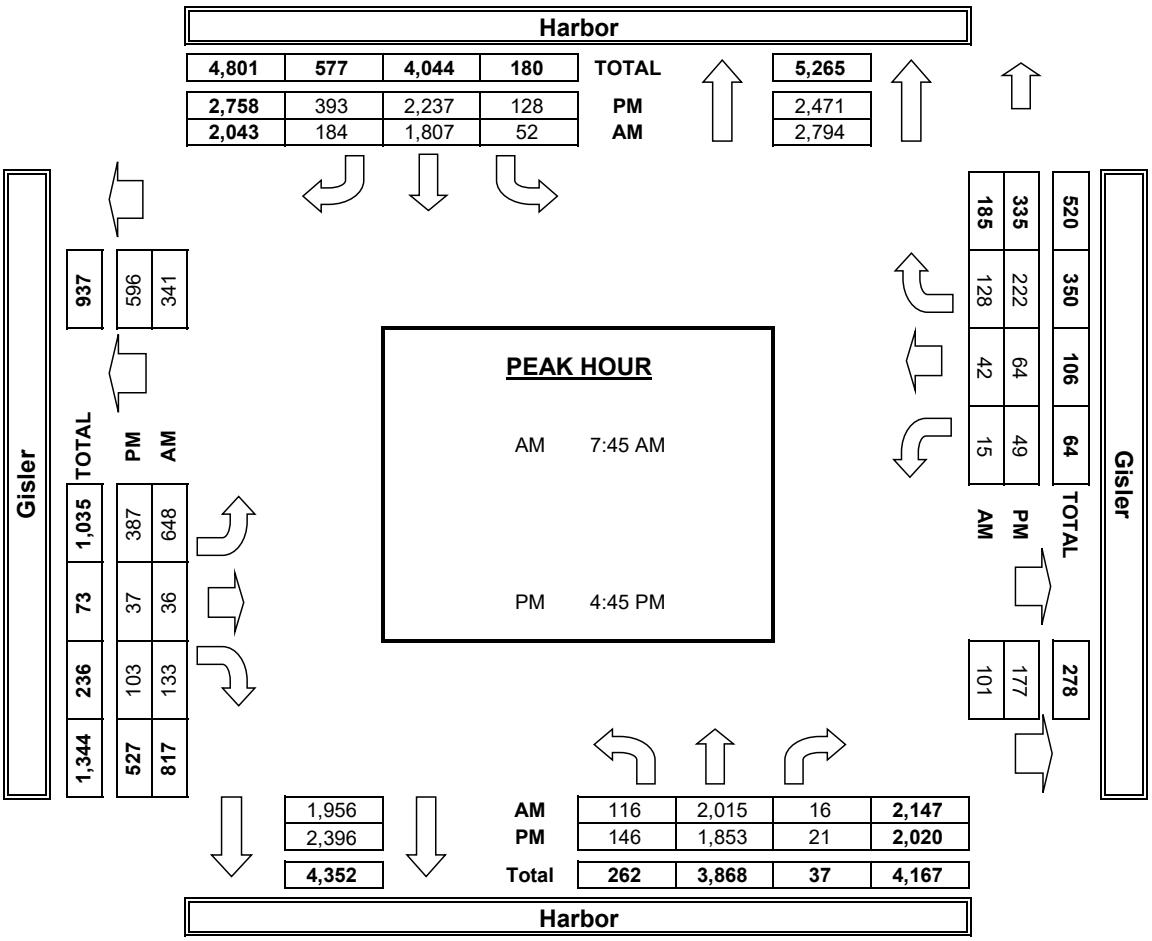


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:45 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:45 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Harbor	LOCATION #:	9
	EAST & WEST:	Baker	CONTROL:	SIGNAL

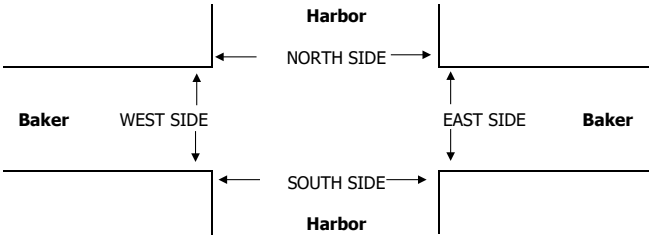
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

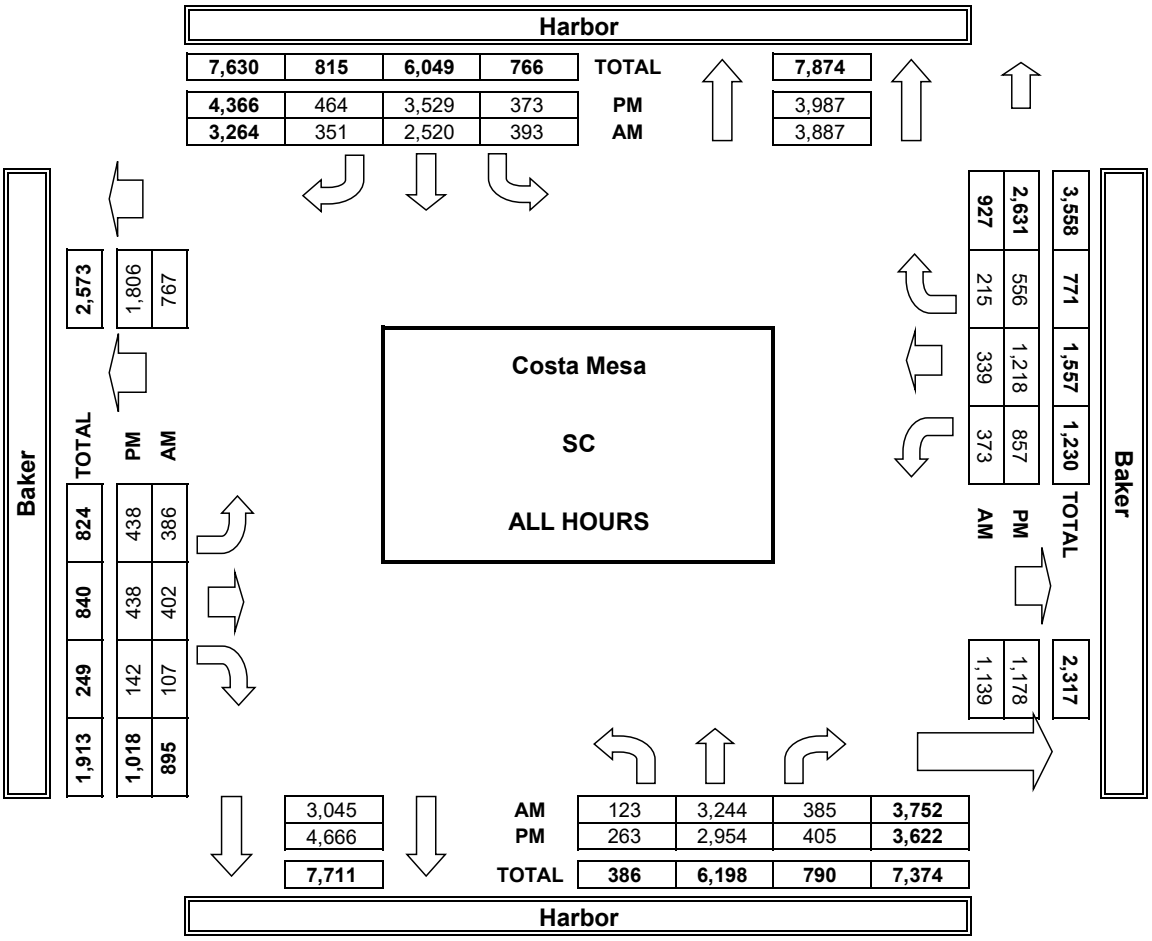
		NORTHBOUND Harbor			SOUTHBOUND Harbor			EASTBOUND Baker			WESTBOUND Baker				U-TURNS				
	LANES:	NL 2	NT 4	NR 1	SL 2	ST 4	SR 1	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	17	354	29	41	213	22	28	22	7	32	16	22	803	10	4	0	0	14
	7:15 AM	7	365	29	52	266	42	44	39	10	32	36	24	946	1	3	0	1	5
	7:30 AM	10	399	50	58	314	35	33	65	20	37	25	22	1,068	2	2	0	0	4
	7:45 AM	17	439	55	63	359	51	57	68	23	55	55	31	1,273	10	4	0	0	14
	8:00 AM	15	426	58	44	385	36	55	59	6	48	51	29	1,212	5	8	0	0	13
	8:15 AM	10	438	76	54	345	43	67	59	8	57	60	27	1,244	5	9	0	0	14
	8:30 AM	18	451	52	43	309	54	53	49	20	62	49	32	1,192	6	8	0	0	14
	8:45 AM	29	372	36	38	329	68	49	41	13	50	47	28	1,100	7	4	0	0	11
	VOLUMES	123	3,244	385	393	2,520	351	386	402	107	373	339	215	8,838	46	42	0	1	89
	APPROACH %	3%	86%	10%	12%	77%	11%	43%	45%	12%	40%	37%	23%						
	APP/DEPART	3,752	/	3,887	3,264	/	3,045	895	/	1,139	927	/	767	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	60	1,754	241	204	1,398	184	232	235	57	222	215	119	4,921					
	APPROACH %	3%	85%	12%	11%	78%	10%	44%	45%	11%	40%	39%	21%						
	PEAK HR FACTOR		0.980			0.944			0.885			0.965		0.966					
	APP/DEPART	2,055	/	2,134	1,786	/	1,703	524	/	651	556	/	433	0					
PM	4:00 PM	36	369	61	41	421	62	54	52	14	103	140	57	1,410	21	6	0	0	27
	4:15 PM	32	394	38	36	439	38	56	55	29	97	140	75	1,429	15	2	0	1	18
	4:30 PM	33	364	49	54	393	43	64	62	28	105	140	74	1,409	17	6	0	0	23
	4:45 PM	36	373	52	52	465	56	56	66	18	110	138	56	1,478	16	5	0	0	21
	5:00 PM	35	376	48	46	423	66	64	51	16	99	165	77	1,466	20	2	0	0	22
	5:15 PM	28	350	53	51	465	80	49	59	15	102	166	82	1,500	12	8	0	0	20
	5:30 PM	29	350	51	39	479	67	50	53	10	124	171	67	1,490	18	5	0	0	23
	5:45 PM	34	378	53	54	444	52	45	40	12	117	158	68	1,455	20	5	0	0	25
	VOLUMES	263	2,954	405	373	3,529	464	438	438	142	857	1,218	556	11,637	139	39	0	1	179
	APPROACH %	7%	82%	11%	9%	81%	11%	43%	43%	14%	33%	46%	21%						
	APP/DEPART	3,622	/	3,987	4,366	/	4,666	1,018	/	1,178	2,631	/	1,806	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	128	1,449	204	188	1,832	269	219	229	59	435	640	282	5,934					
	APPROACH %	7%	81%	11%	8%	80%	12%	43%	45%	12%	32%	47%	21%						
	PEAK HR FACTOR		0.966			0.960			0.905			0.937		0.989					
	APP/DEPART	1,781	/	1,970	2,289	/	2,392	507	/	601	1,357	/	971	0					

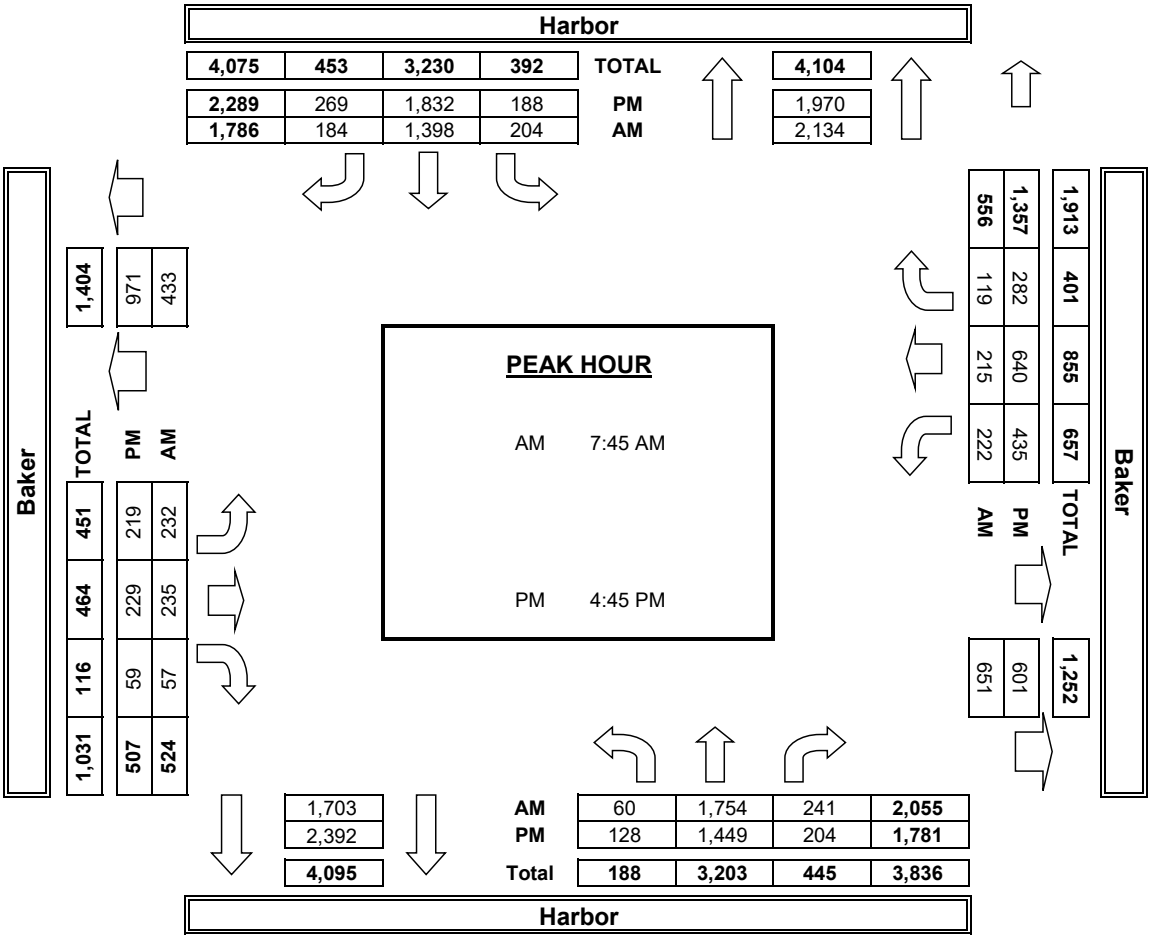


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:45 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:45 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Susan	LOCATION #:	10
	EAST & WEST:	Sunflower	CONTROL:	SIGNAL

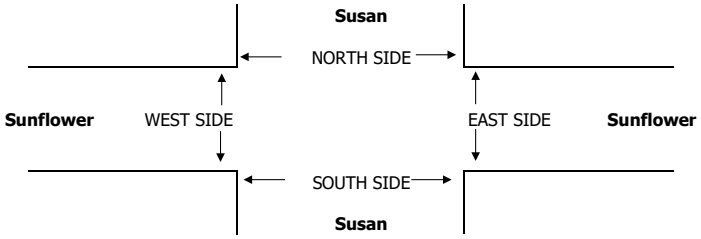
NOTES:

AM / PM / MD / OTHER / OTHER

◄ W E ► ▲ N S ▼

☑ Add U-Turns to Left Turns

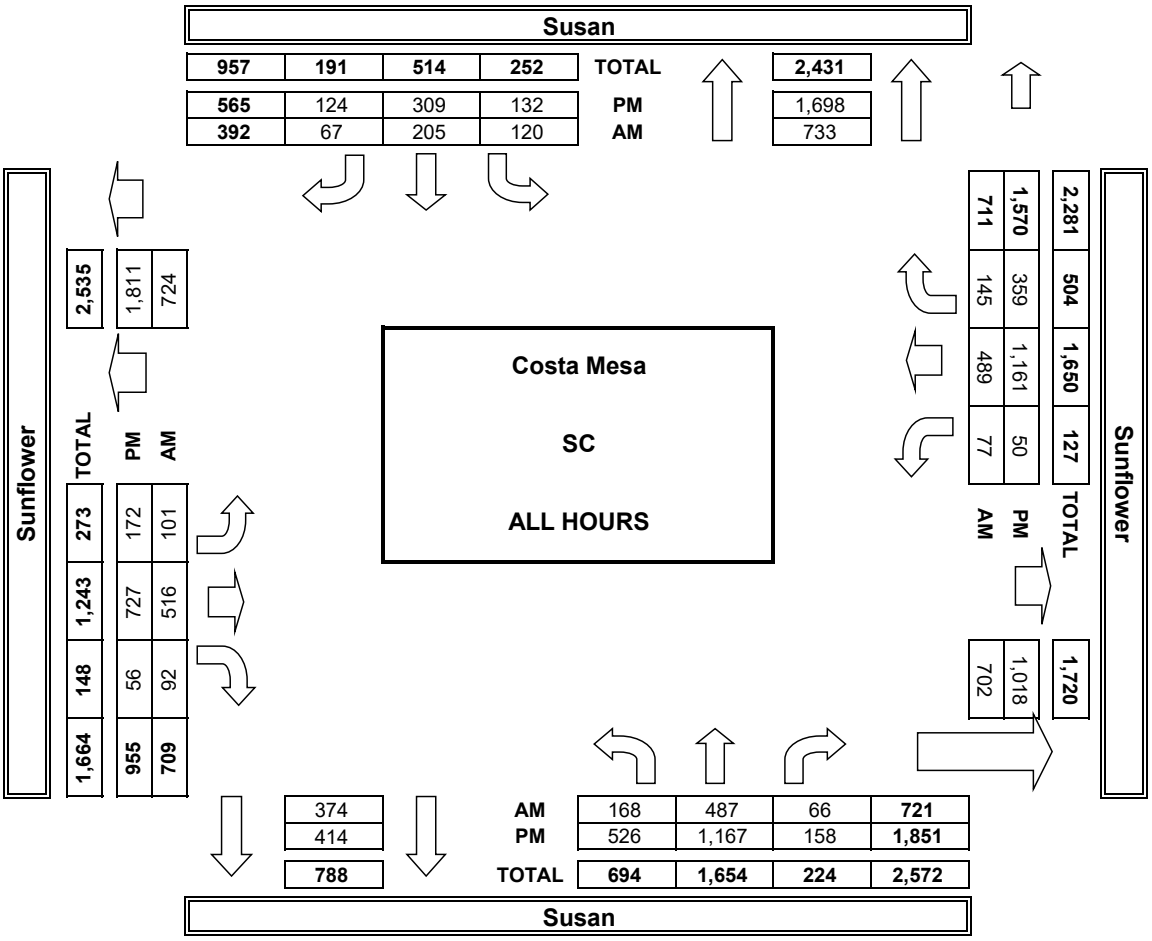
		NORTHBOUND Susan			SOUTHBOUND Susan			EASTBOUND Sunflower			WESTBOUND Sunflower				U-TURNS				
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	12	36	6	9	9	8	7	58	5	4	33	11	198	0	0	0	0	0
	7:15 AM	21	43	4	12	21	7	8	52	8	5	50	11	242	0	0	0	0	0
	7:30 AM	12	77	6	20	21	6	17	76	4	4	52	12	307	0	0	0	0	0
	7:45 AM	30	87	19	20	45	15	29	96	7	11	81	23	463	0	0	0	0	0
	8:00 AM	26	86	12	18	34	9	13	61	15	22	97	38	431	0	0	0	0	0
	8:15 AM	25	52	8	10	24	6	12	60	18	9	64	21	309	0	0	0	0	0
	8:30 AM	17	61	6	17	18	8	4	50	16	12	51	14	274	0	0	0	0	0
	8:45 AM	25	45	5	14	33	8	11	63	19	10	61	15	309	0	0	0	0	0
	VOLUMES	168	487	66	120	205	67	101	516	92	77	489	145	2,533	0	0	0	0	0
	APPROACH %	23%	68%	9%	31%	52%	17%	14%	73%	13%	11%	69%	20%						
	APP/DEPART	721	/	733	392	/	374	709	/	702	711	/	724	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	93	302	45	68	124	36	71	293	44	46	294	94	1,510					
	APPROACH %	21%	69%	10%	30%	54%	16%	17%	72%	11%	11%	68%	22%						
	PEAK HR FACTOR		0.809			0.713			0.773			0.691		0.815					
	APP/DEPART	440	/	467	228	/	214	408	/	406	434	/	423	0					
PM	4:00 PM	35	125	7	17	34	13	28	94	8	4	114	41	520	0	0	0	0	0
	4:15 PM	60	158	11	20	37	13	12	82	6	5	124	52	580	0	0	0	0	0
	4:30 PM	37	118	15	11	38	20	24	83	6	5	141	38	536	0	0	0	0	0
	4:45 PM	68	146	21	13	54	12	17	83	6	8	167	45	640	0	0	0	1	1
	5:00 PM	71	143	27	19	36	23	27	106	9	8	153	54	676	0	0	0	0	0
	5:15 PM	84	153	30	20	41	17	27	93	4	6	183	42	700	0	0	0	0	0
	5:30 PM	76	147	27	12	40	16	20	86	6	5	133	42	610	0	0	0	0	0
	5:45 PM	95	177	20	20	29	10	17	100	11	9	146	45	679	0	0	0	0	0
	VOLUMES	526	1,167	158	132	309	124	172	727	56	50	1,161	359	4,941	0	0	0	1	1
	APPROACH %	28%	63%	9%	23%	55%	22%	18%	76%	6%	3%	74%	23%						
	APP/DEPART	1,851	/	1,698	565	/	414	955	/	1,018	1,570	/	1,811	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	326	620	104	71	146	66	91	385	30	28	615	183	2,665					
	APPROACH %	31%	59%	10%	25%	52%	23%	18%	76%	6%	3%	74%	22%						
	PEAK HR FACTOR		0.899			0.907			0.891			0.894		0.952					
	APP/DEPART	1,050	/	894	283	/	204	506	/	560	826	/	1,007	0					

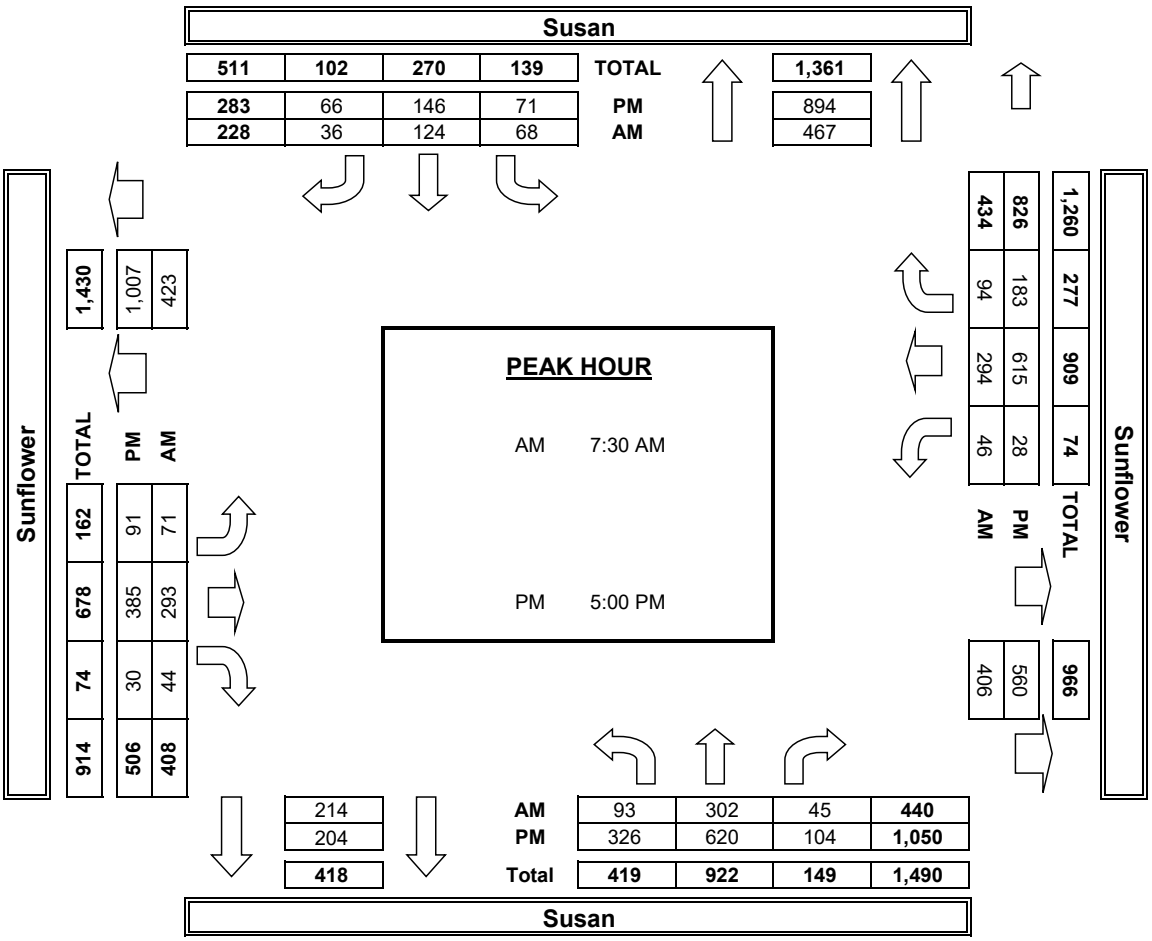


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			5:00 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Susan	LOCATION #:	11
	EAST & WEST:	Coast	CONTROL:	SIGNAL

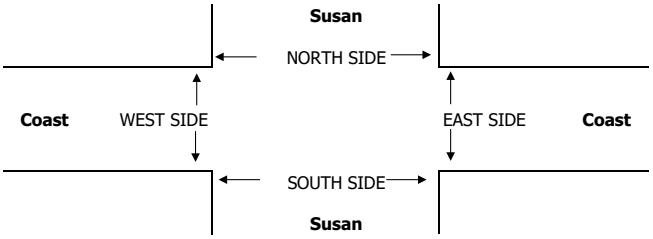
NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

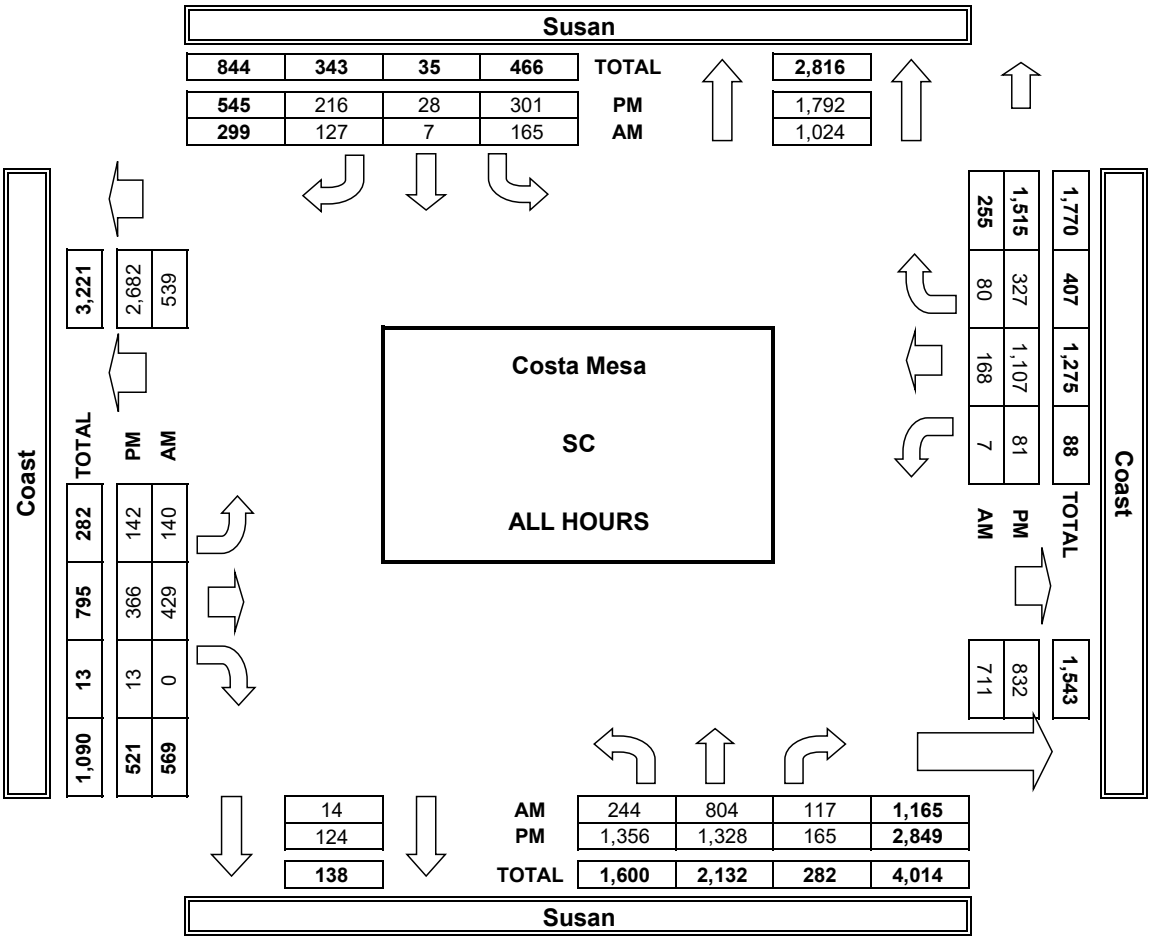
		NORTHBOUND Susan			SOUTHBOUND Susan			EASTBOUND Coast			WESTBOUND Coast				U-TURNS				
	LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	13	65	7	10	1	11	4	33	0	0	9	9	162	0	0	0	0	0
	7:15 AM	12	85	13	20	0	9	5	60	0	0	14	3	221	0	0	0	0	0
	7:30 AM	30	92	20	24	0	16	18	66	0	2	14	8	290	0	0	0	0	0
	7:45 AM	33	140	15	30	2	30	27	66	0	0	38	15	396	0	0	0	0	0
	8:00 AM	52	119	16	26	1	18	14	59	0	2	21	14	342	0	0	0	0	0
	8:15 AM	46	110	12	15	1	19	19	50	0	1	21	11	305	0	0	0	0	0
	8:30 AM	29	97	22	20	1	9	25	42	0	2	22	8	277	0	0	0	0	0
	8:45 AM	29	96	12	20	1	15	28	53	0	0	29	12	295	0	0	0	0	0
	VOLUMES	244	804	117	165	7	127	140	429	0	7	168	80	2,288	0	0	0	0	0
	APPROACH %	21%	69%	10%	55%	2%	42%	25%	75%	0%	3%	66%	31%						
	APP/DEPART	1,165	/	1,024	299	/	14	569	/	711	255	/	539	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	161	461	63	95	4	83	78	241	0	5	94	48	1,333					
	APPROACH %	24%	67%	9%	52%	2%	46%	24%	76%	0%	3%	64%	33%						
	PEAK HR FACTOR		0.911			0.734			0.858			0.693		0.842					
	APP/DEPART	685	/	587	182	/	9	319	/	399	147	/	338	0					
PM	4:00 PM	233	141	13	25	3	21	12	52	1	10	149	32	692	2	0	1	0	3
	4:15 PM	175	172	27	33	3	17	19	43	1	6	141	38	675	0	0	1	0	1
	4:30 PM	188	138	22	32	2	19	20	42	1	12	135	25	636	0	0	2	0	2
	4:45 PM	173	150	27	58	5	36	22	51	1	6	159	33	721	0	0	0	0	0
	5:00 PM	134	170	22	48	4	44	15	46	0	10	143	41	677	0	0	1	0	1
	5:15 PM	180	190	22	40	1	31	16	35	3	6	135	42	701	0	0	0	0	0
	5:30 PM	150	164	17	38	2	21	11	50	3	15	123	63	657	0	0	0	0	0
	5:45 PM	123	203	15	27	8	27	27	47	3	16	122	53	671	0	0	0	0	0
	VOLUMES	1,356	1,328	165	301	28	216	142	366	13	81	1,107	327	5,430	2	0	5	0	7
	APPROACH %	48%	47%	6%	55%	5%	40%	27%	70%	2%	5%	73%	22%						
	APP/DEPART	2,849	/	1,792	545	/	124	521	/	832	1,515	/	2,682	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	637	674	88	184	12	132	64	182	7	37	560	179	2,756					
	APPROACH %	46%	48%	6%	56%	4%	40%	25%	72%	3%	5%	72%	23%						
	PEAK HR FACTOR		0.892			0.828			0.855			0.965		0.956					
	APP/DEPART	1,399	/	916	328	/	56	253	/	454	776	/	1,330	0					

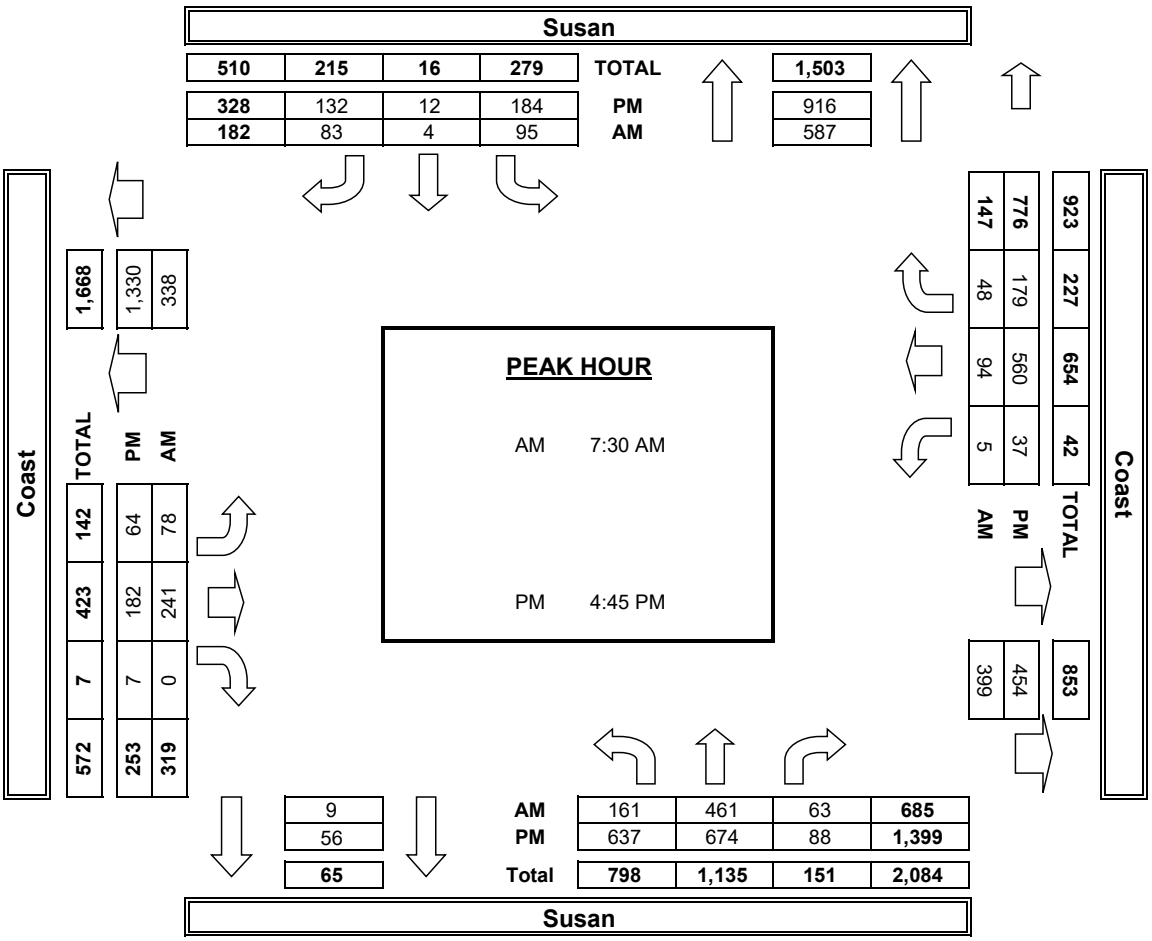


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:45 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	12
	EAST & WEST:	MacArthur	CONTROL:	SIGNAL

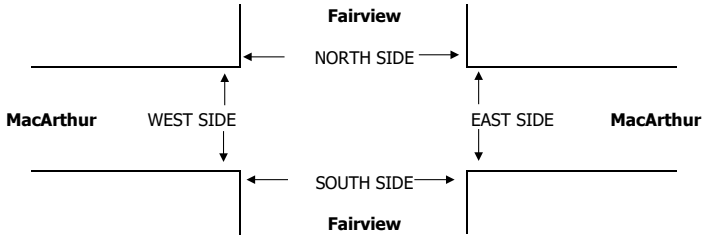
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

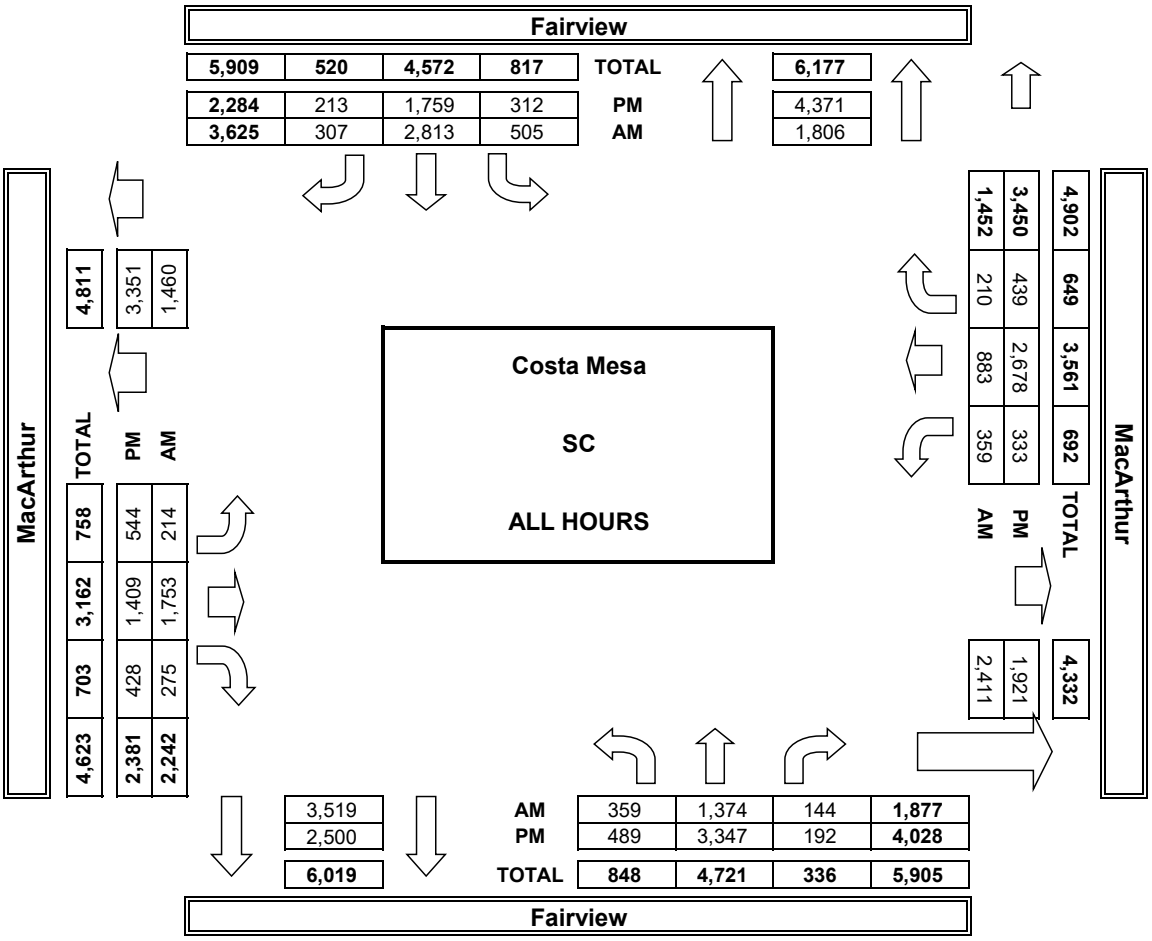
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND MacArthur			WESTBOUND MacArthur				U-TURNS				
	LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	25	132	11	50	336	28	16	194	35	37	76	11	951	3	0	0	1	4
	7:15 AM	36	169	16	57	397	25	17	223	38	51	101	23	1,153	12	0	0	1	13
	7:30 AM	62	197	20	66	400	34	33	251	41	44	115	45	1,308	27	0	0	1	28
	7:45 AM	72	210	22	80	360	57	29	240	40	70	145	34	1,359	33	1	0	6	40
	8:00 AM	49	179	29	91	364	49	36	253	29	50	115	32	1,276	8	4	0	4	16
	8:15 AM	42	190	16	46	299	52	29	223	34	32	124	28	1,115	2	2	0	1	5
	8:30 AM	40	143	12	63	340	25	26	204	35	36	98	21	1,043	3	1	1	3	8
	8:45 AM	33	154	18	52	317	37	28	165	23	39	109	16	991	2	1	0	1	4
	VOLUMES	359	1,374	144	505	2,813	307	214	1,753	275	359	883	210	9,196	90	9	1	18	118
	APPROACH %	19%	73%	8%	14%	78%	8%	10%	78%	12%	25%	61%	14%						
	APP/DEPART	1,877	/	1,806	3,625	/	3,519	2,242	/	2,411	1,452	/	1,460	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	219	755	87	294	1,521	165	115	967	148	215	476	134	5,096					
	APPROACH %	21%	71%	8%	15%	77%	8%	9%	79%	12%	26%	58%	16%						
	PEAK HR FACTOR		0.873			0.982			0.946			0.828		0.937					
	APP/DEPART	1,061	/	1,009	1,980	/	1,952	1,230	/	1,355	825	/	780	0					
PM	4:00 PM	69	377	28	47	213	37	78	177	62	36	347	40	1,511	5	8	0	4	17
	4:15 PM	66	446	16	36	211	26	68	167	55	40	306	50	1,487	4	3	0	3	10
	4:30 PM	59	432	20	32	226	22	75	183	40	38	324	51	1,502	5	1	0	6	12
	4:45 PM	65	451	25	25	227	22	52	174	50	31	364	68	1,554	6	2	0	8	16
	5:00 PM	47	362	19	52	228	19	83	210	76	43	352	67	1,558	2	11	0	6	19
	5:15 PM	56	432	23	45	243	27	65	178	61	54	324	49	1,557	0	6	1	8	15
	5:30 PM	59	419	32	43	213	26	73	162	45	45	350	64	1,531	5	10	0	8	23
	5:45 PM	68	428	29	32	198	34	50	158	39	46	311	50	1,443	3	1	0	7	11
	VOLUMES	489	3,347	192	312	1,759	213	544	1,409	428	333	2,678	439	12,143	30	42	1	50	123
	APPROACH %	12%	83%	5%	14%	77%	9%	23%	59%	18%	10%	78%	13%						
	APP/DEPART	4,028	/	4,371	2,284	/	2,500	2,381	/	1,921	3,450	/	3,351	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	227	1,664	99	165	911	94	273	724	232	173	1,390	248	6,200					
	APPROACH %	11%	84%	5%	14%	78%	8%	22%	59%	19%	10%	77%	14%						
	PEAK HR FACTOR		0.920			0.929			0.833			0.978		0.995					
	APP/DEPART	1,990	/	2,213	1,170	/	1,299	1,229	/	989	1,811	/	1,699	0					

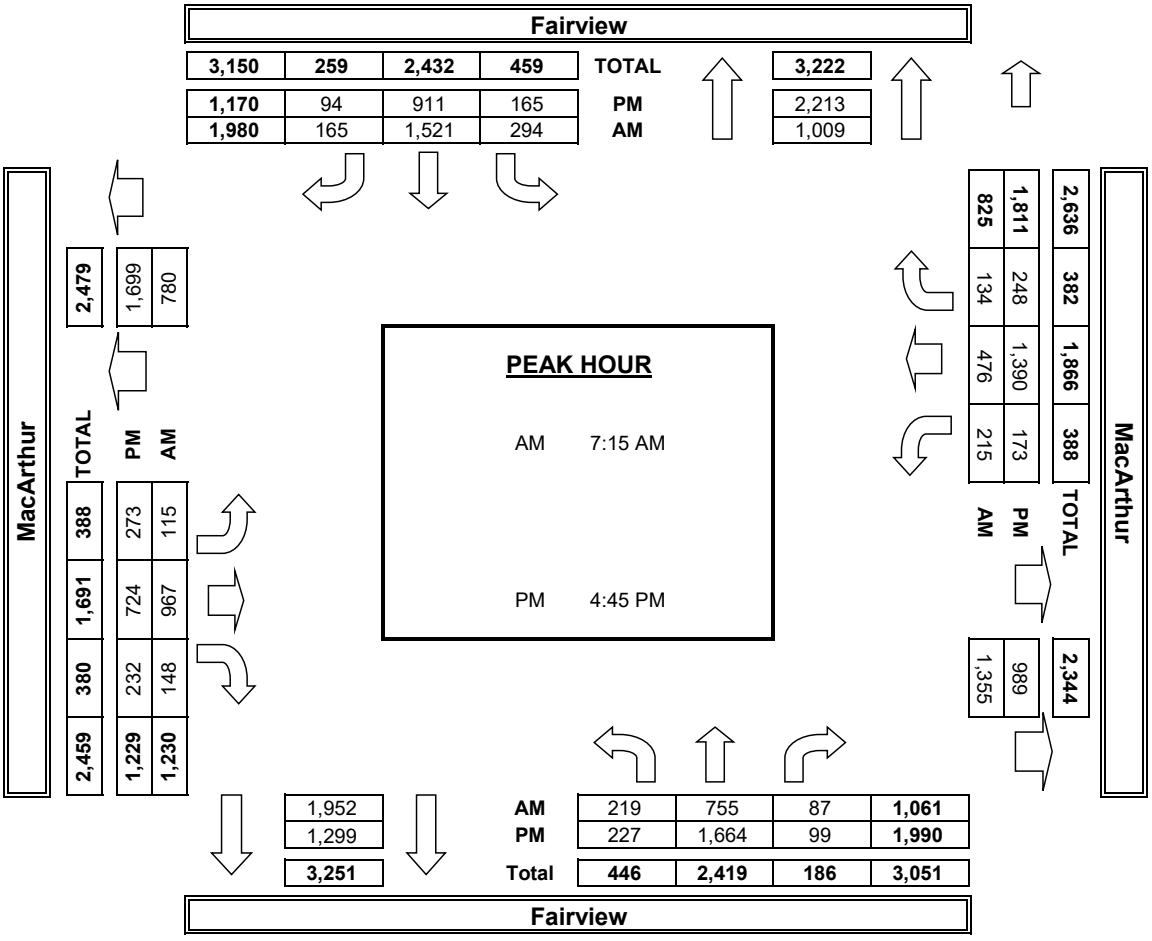


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:15 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:45 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	13
	EAST & WEST:	Sunflower	CONTROL:	SIGNAL

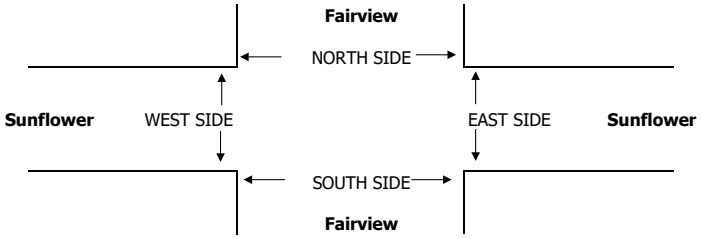
NOTES:

AM / PM / MD / OTHER / OTHER

◄ W ▲ N S ▼ E ►

☑ Add U-Turns to Left Turns

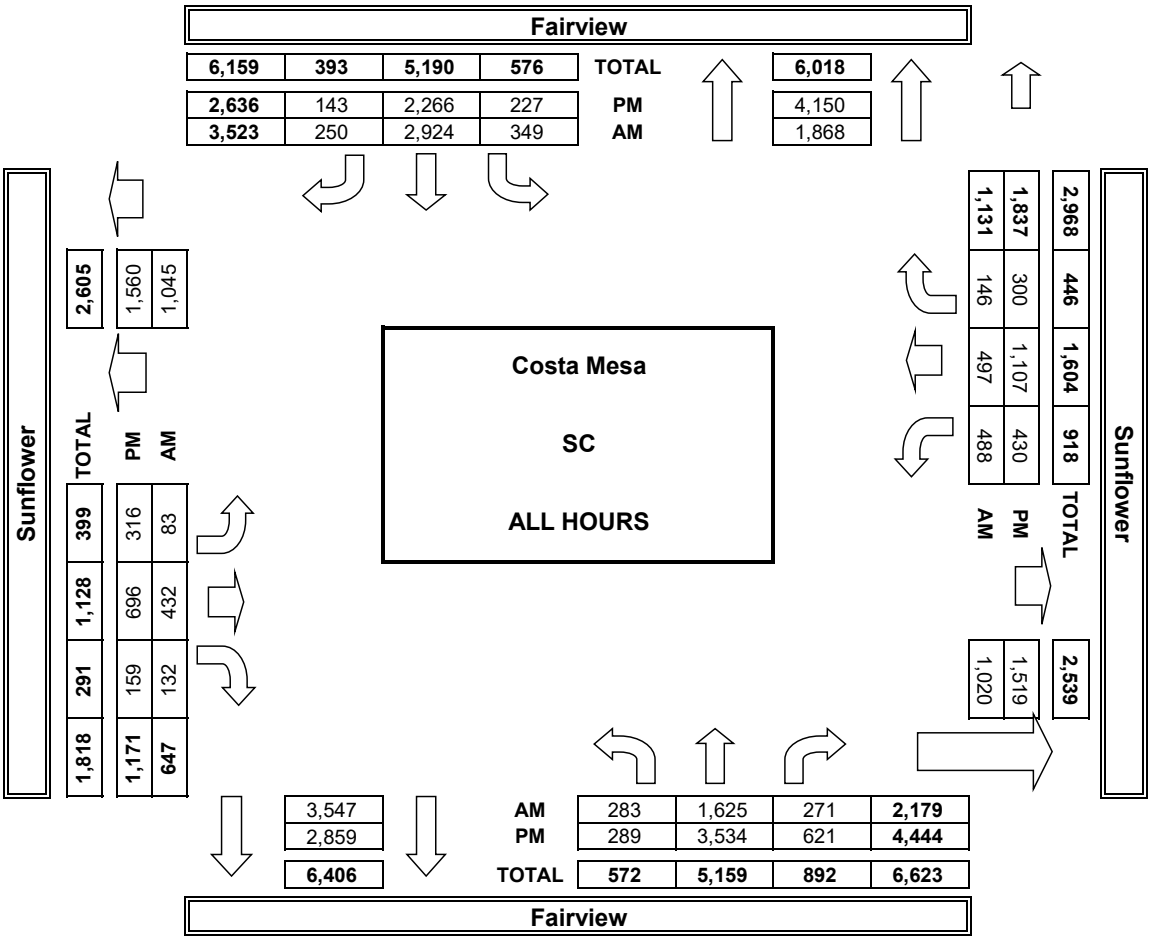
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND Sunflower			WESTBOUND Sunflower				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	19	186	17	35	350	19	10	39	18	65	34	7	799	0	2	0	0	2
	7:15 AM	34	193	39	29	429	29	7	46	11	66	60	17	960	0	0	2	0	2
	7:30 AM	52	260	29	45	420	20	5	65	13	57	73	22	1,061	0	4	2	0	6
	7:45 AM	67	227	43	73	364	50	19	78	16	78	96	33	1,144	0	7	7	0	14
	8:00 AM	51	197	43	65	386	40	8	59	22	62	71	24	1,028	1	7	2	0	10
	8:15 AM	25	215	35	46	297	36	10	57	15	49	59	17	861	1	6	2	0	9
	8:30 AM	18	169	32	35	347	28	10	39	22	62	47	12	821	1	5	0	0	6
	8:45 AM	17	178	33	21	331	28	14	49	15	49	57	14	806	0	1	3	0	4
	VOLUMES	283	1,625	271	349	2,924	250	83	432	132	488	497	146	7,480	3	32	18	0	53
	APPROACH %	13%	75%	12%	10%	83%	7%	13%	67%	20%	43%	44%	13%						
	APP/DEPART	2,179	/	1,868	3,523	/	3,547	647	/	1,020	1,131	/	1,045	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	204	877	154	212	1,599	139	39	248	62	263	300	96	4,193					
	APPROACH %	17%	71%	12%	11%	82%	7%	11%	71%	18%	40%	46%	15%						
	PEAK HR FACTOR		0.905			0.993			0.772			0.796		0.916					
	APP/DEPART	1,235	/	1,017	1,950	/	1,925	349	/	596	659	/	655	0					
PM	4:00 PM	33	448	79	25	305	12	32	70	16	49	115	37	1,221	3	5	3	0	11
	4:15 PM	35	440	68	34	263	18	31	72	19	49	128	37	1,194	2	1	2	0	5
	4:30 PM	38	477	61	28	288	18	27	84	20	47	117	36	1,241	0	6	4	1	11
	4:45 PM	48	440	74	22	275	17	41	90	19	46	155	31	1,258	0	2	4	0	6
	5:00 PM	33	436	96	21	319	20	49	100	25	67	158	39	1,363	1	4	1	0	6
	5:15 PM	35	427	79	31	312	18	52	122	20	60	175	46	1,377	0	2	5	0	7
	5:30 PM	35	396	91	38	268	17	49	68	18	57	132	35	1,204	0	2	6	1	9
	5:45 PM	32	470	73	28	236	23	35	90	22	55	127	39	1,230	0	5	2	0	7
	VOLUMES	289	3,534	621	227	2,266	143	316	696	159	430	1,107	300	10,088	6	27	27	2	62
	APPROACH %	7%	80%	14%	9%	86%	5%	27%	59%	14%	23%	60%	16%						
	APP/DEPART	4,444	/	4,150	2,636	/	2,859	1,171	/	1,519	1,837	/	1,560	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	154	1,780	310	102	1,194	73	169	396	84	220	605	152	5,239					
	APPROACH %	7%	79%	14%	7%	87%	5%	26%	61%	13%	23%	62%	16%						
	PEAK HR FACTOR		0.974			0.948			0.836			0.869		0.951					
	APP/DEPART	2,244	/	2,101	1,369	/	1,498	649	/	795	977	/	845	0					

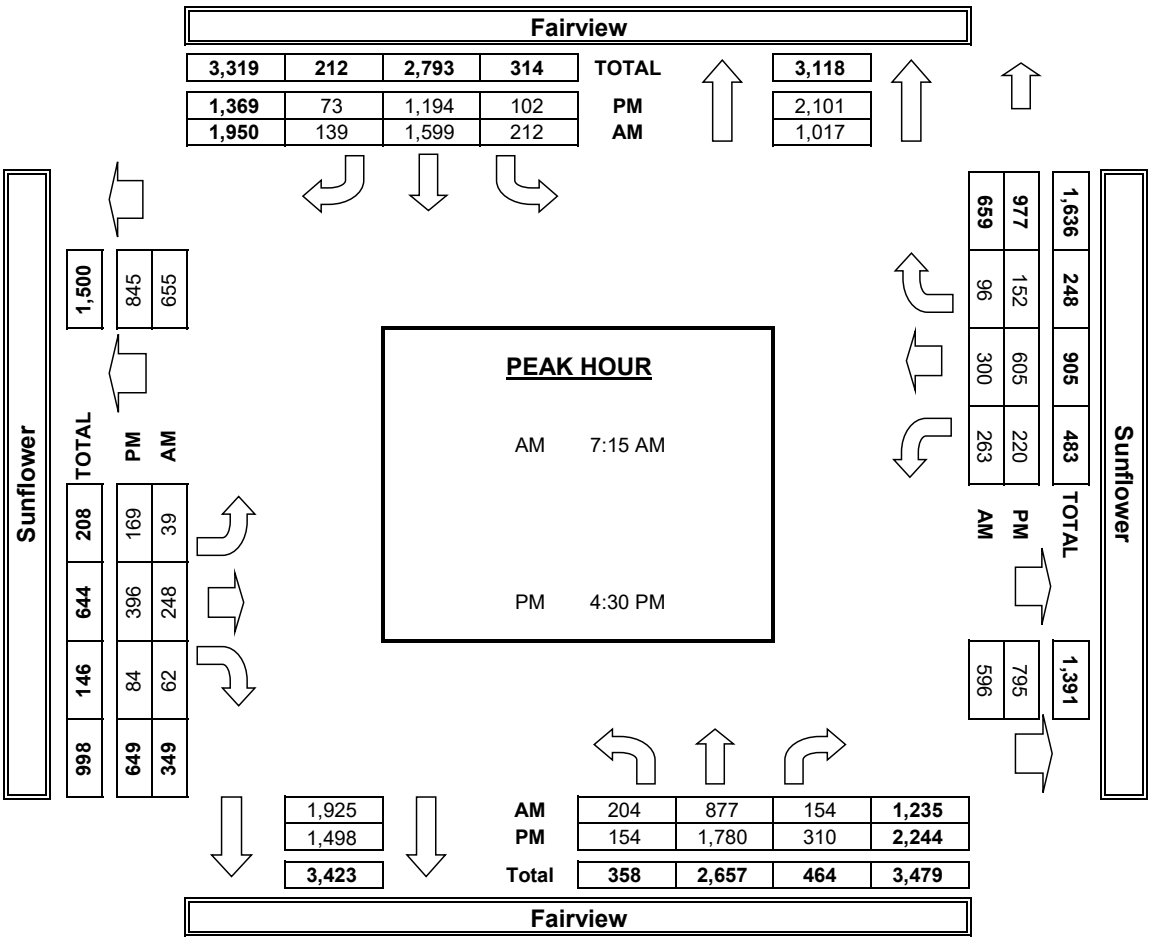


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:15 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	14
	EAST & WEST:	Coast	CONTROL:	SIGNAL

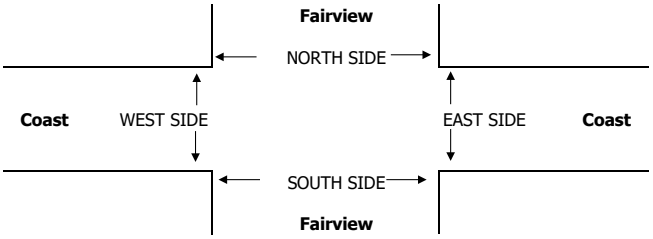
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

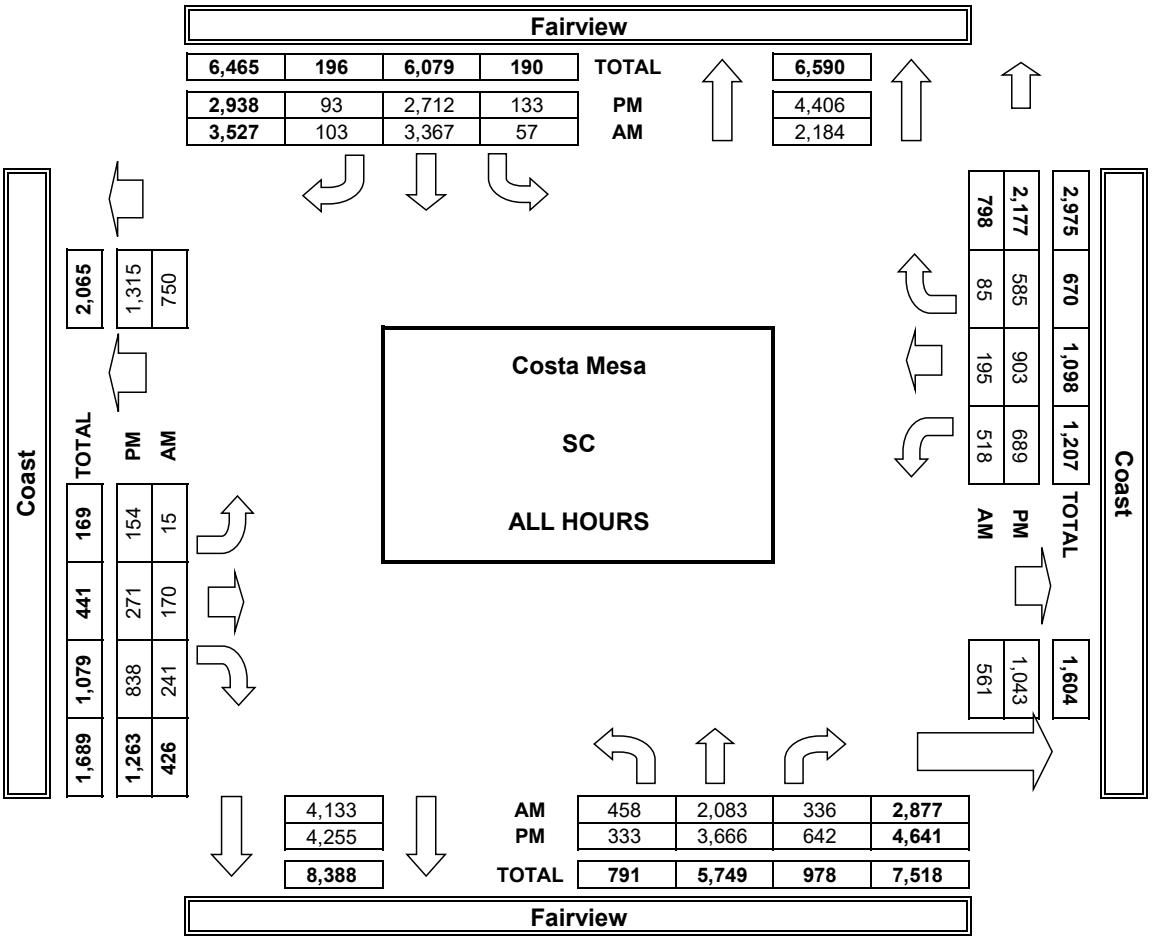
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND Coast			WESTBOUND Coast				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 0	EL 1	ET 1.5	ER 1.5	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	28	201	25	7	417	6	3	10	17	57	22	16	809	1	1	0	0	2
	7:15 AM	44	258	27	4	464	8	1	22	32	52	22	17	951	2	0	0	0	2
	7:30 AM	56	324	40	2	463	4	0	29	34	93	24	10	1,079	0	0	0	0	0
	7:45 AM	60	339	56	7	463	16	2	23	54	86	46	11	1,163	0	0	0	0	0
	8:00 AM	78	262	59	10	468	17	3	18	34	64	18	13	1,044	1	0	0	0	1
	8:15 AM	76	256	38	12	335	13	5	23	21	66	19	11	875	1	1	0	0	2
	8:30 AM	61	225	54	9	364	23	0	20	24	52	19	2	853	0	0	0	0	0
	8:45 AM	55	218	37	6	393	16	1	25	25	48	25	5	854	2	0	1	0	3
	VOLUMES	458	2,083	336	57	3,367	103	15	170	241	518	195	85	7,628	7	2	1	0	10
	APPROACH %	16%	72%	12%	2%	95%	3%	4%	40%	57%	65%	24%	11%						
	APP/DEPART	2,877	/	2,184	3,527	/	4,133	426	/	561	798	/	750	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	238	1,183	182	23	1,858	45	6	92	154	295	110	51	4,237					
	APPROACH %	15%	74%	11%	1%	96%	2%	2%	37%	61%	65%	24%	11%						
	PEAK HR FACTOR		0.881			0.973			0.797			0.797		0.911					
	APP/DEPART	1,603	/	1,240	1,926	/	2,310	252	/	297	456	/	390	0					
PM	4:00 PM	40	463	74	12	356	8	17	27	79	76	123	67	1,342	1	1	0	0	2
	4:15 PM	46	449	84	16	301	17	16	30	81	81	125	82	1,328	3	1	0	0	4
	4:30 PM	35	483	71	18	354	14	11	28	102	67	92	76	1,351	0	0	1	0	1
	4:45 PM	32	458	91	12	320	10	25	45	136	102	117	81	1,429	2	0	1	0	3
	5:00 PM	35	447	83	10	363	11	22	41	132	104	102	58	1,408	0	0	0	0	0
	5:15 PM	40	456	73	27	392	11	25	31	117	97	124	90	1,483	2	0	0	0	2
	5:30 PM	53	433	99	14	330	10	19	32	103	73	117	52	1,335	3	0	0	0	3
	5:45 PM	52	477	67	24	296	12	19	37	88	89	103	79	1,343	5	1	0	0	6
	VOLUMES	333	3,666	642	133	2,712	93	154	271	838	689	903	585	11,019	16	3	2	0	21
	APPROACH %	7%	79%	14%	5%	92%	3%	12%	21%	66%	32%	41%	27%						
	APP/DEPART	4,641	/	4,406	2,938	/	4,255	1,263	/	1,043	2,177	/	1,315	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	142	1,844	318	67	1,429	46	83	145	487	370	435	305	5,671					
	APPROACH %	6%	80%	14%	4%	93%	3%	12%	20%	68%	33%	39%	27%						
	PEAK HR FACTOR		0.978			0.897			0.868			0.892		0.956					
	APP/DEPART	2,304	/	2,230	1,542	/	2,290	715	/	530	1,110	/	621	0					

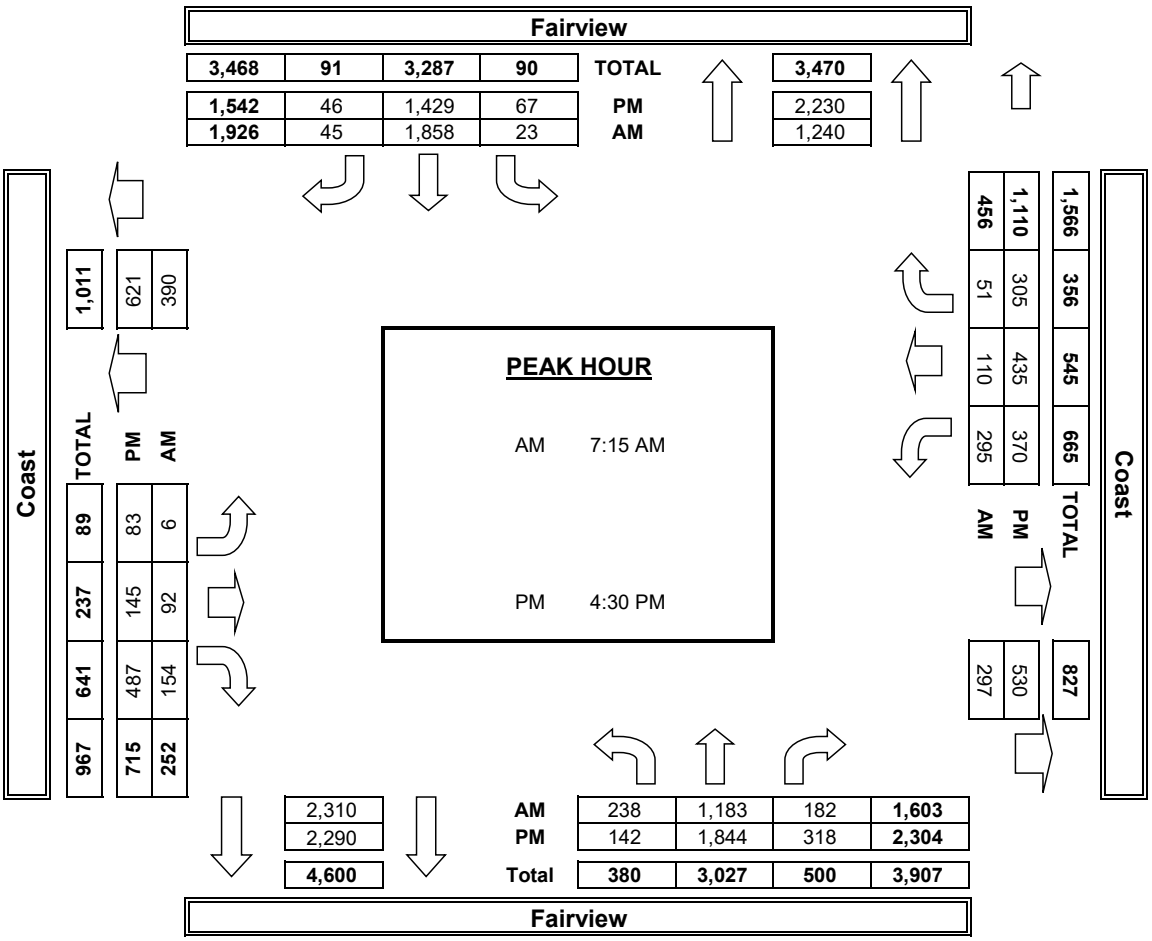


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:15 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





T218

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	15
	EAST & WEST:	I-405 NB Ramps	CONTROL:	SIGNAL

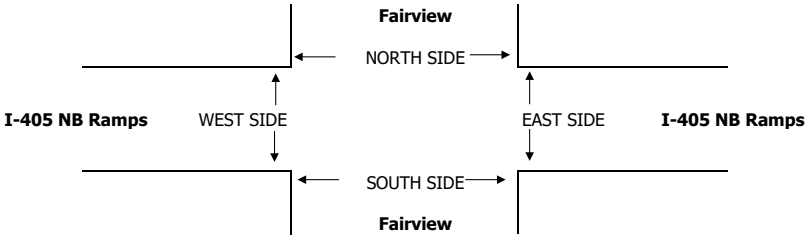
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

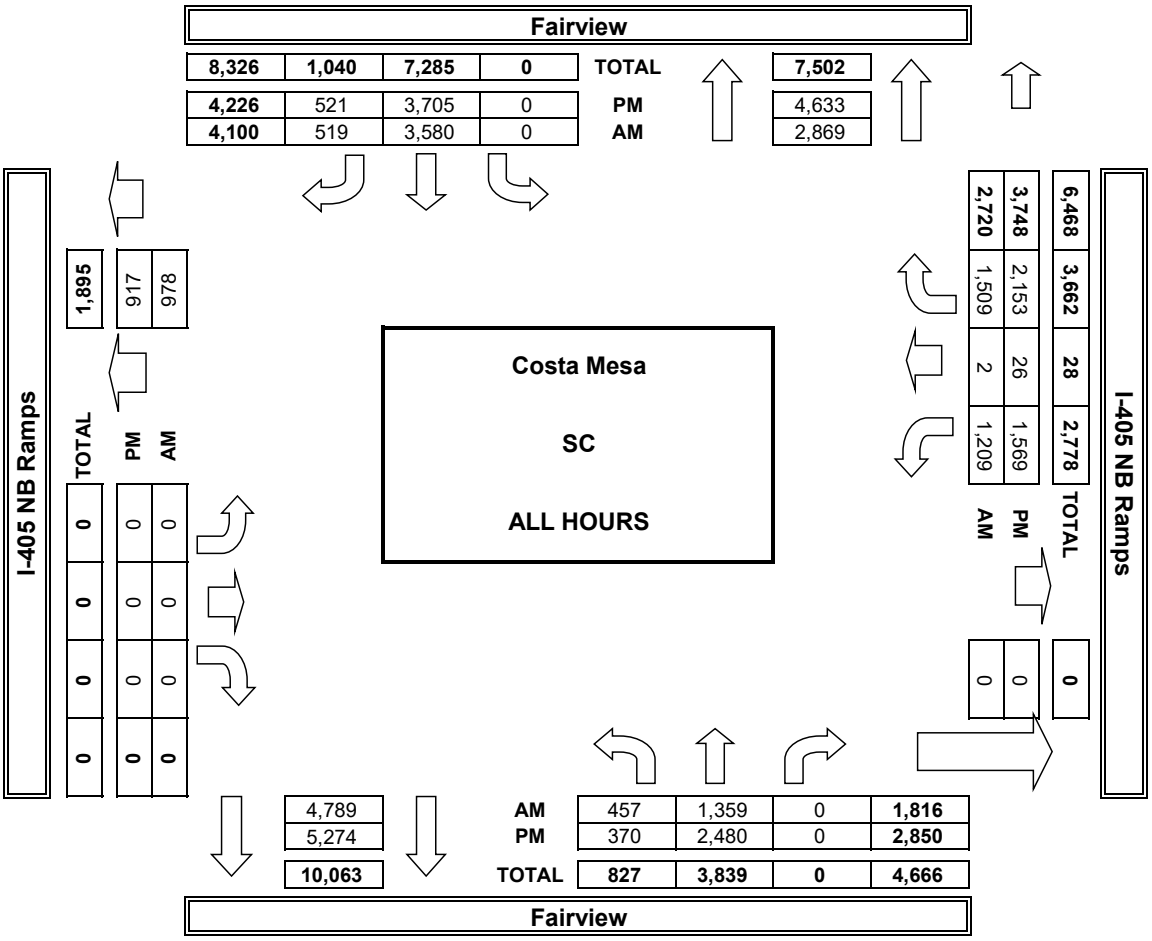
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND I-405 NB Ramps			WESTBOUND I-405 NB Ramps				U-TURNS				
	LANES:	NL 1	NT 3	NR X	SL X	ST 6	SR 1	EL X	ET X	ER X	WL 2	WT 0	WR 2	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	35	100	0	0	386	78	0	0	0	86	0	152	837	0	0	0	0	0
	7:15 AM	48	137	0	0	496	69	0	0	0	120	0	190	1,060	0	0	0	0	0
	7:30 AM	64	194	0	0	494	73	0	0	0	173	0	241	1,239	0	0	0	0	0
	7:45 AM	73	217	0	0	524	56	0	0	0	188	0	220	1,278	0	1	0	0	1
	8:00 AM	70	222	0	0	469	91	0	0	0	168	0	173	1,193	0	0	0	0	0
	8:15 AM	56	189	0	0	387	48	0	0	0	155	2	190	1,027	0	0	0	0	0
	8:30 AM	51	164	0	0	416	53	0	0	0	161	0	170	1,015	0	0	0	0	0
	8:45 AM	60	136	0	0	408	51	0	0	0	158	0	173	986	0	0	0	0	0
	VOLUMES	457	1,359	0	0	3,580	519	0	0	0	1,209	2	1,509	8,636	0	1	0	0	1
	APPROACH %	25%	75%	0%	0%	87%	13%	0%	0%	0%	44%	0%	55%						
	APP/DEPART	1,816	/	2,869	4,100	/	4,789	0	/	0	2,720	/	978	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	255	770	0	0	1,983	289	0	0	0	649	0	824	4,771					
	APPROACH %	25%	75%	0%	0%	87%	13%	0%	0%	0%	44%	0%	56%						
	PEAK HR FACTOR		0.878			0.978			0.000			0.889		0.933					
	APP/DEPART	1,025	/	1,595	2,273	/	2,632	0	/	0	1,473	/	544	0					
PM	4:00 PM	51	328	0	0	452	54	0	0	0	174	1	266	1,326	0	0	0	0	0
	4:15 PM	32	293	0	0	412	53	0	0	0	205	5	272	1,272	0	0	0	0	0
	4:30 PM	50	316	0	0	472	59	0	0	0	197	3	294	1,391	0	0	0	0	0
	4:45 PM	50	296	0	0	460	92	0	0	0	203	2	260	1,363	0	0	0	0	0
	5:00 PM	44	346	0	0	501	80	0	0	0	162	6	234	1,373	0	0	0	0	0
	5:15 PM	45	300	0	0	556	69	0	0	0	208	2	282	1,462	0	0	0	0	0
	5:30 PM	55	329	0	0	432	60	0	0	0	203	2	245	1,326	0	0	0	0	0
	5:45 PM	43	272	0	0	420	54	0	0	0	217	5	300	1,311	0	0	0	0	0
	VOLUMES	370	2,480	0	0	3,705	521	0	0	0	1,569	26	2,153	10,824	0	0	0	0	0
	APPROACH %	13%	87%	0%	0%	88%	12%	0%	0%	0%	42%	1%	57%						
	APP/DEPART	2,850	/	4,633	4,226	/	5,274	0	/	0	3,748	/	917	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	189	1,258	0	0	1,989	300	0	0	0	770	13	1,070	5,589					
	APPROACH %	13%	87%	0%	0%	87%	13%	0%	0%	0%	42%	1%	58%						
	PEAK HR FACTOR		0.928			0.916			0.000			0.938		0.956					
	APP/DEPART	1,447	/	2,328	2,289	/	2,759	0	/	0	1,853	/	502	0					

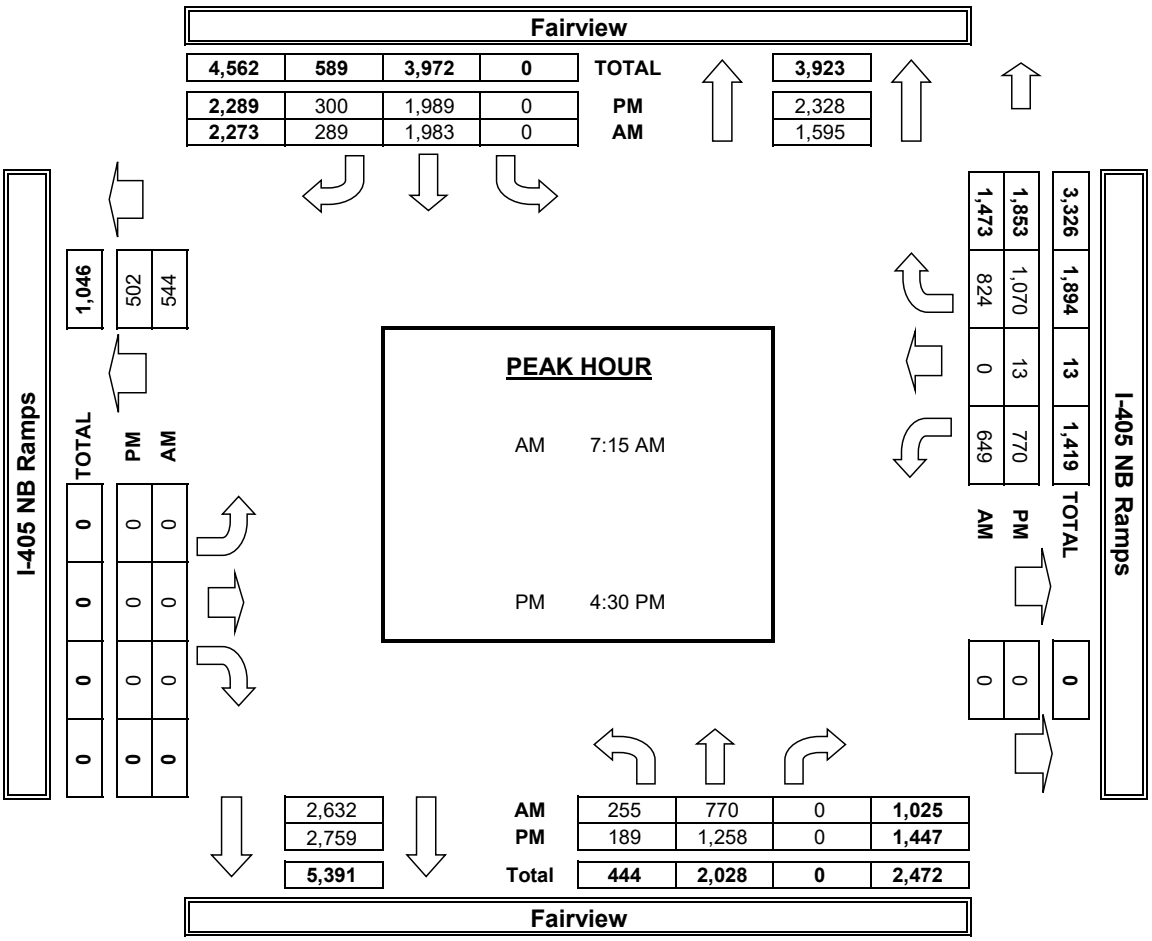


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:15 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	16
	EAST & WEST:	I-405 SB Ramps	CONTROL:	SIGNAL

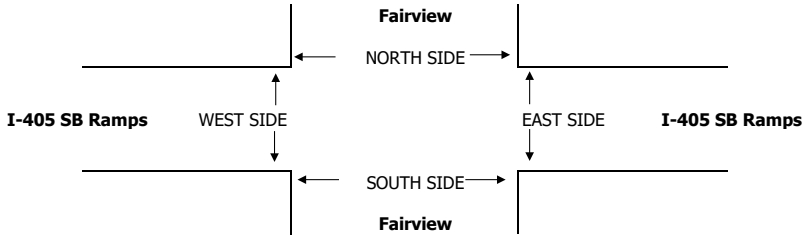
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

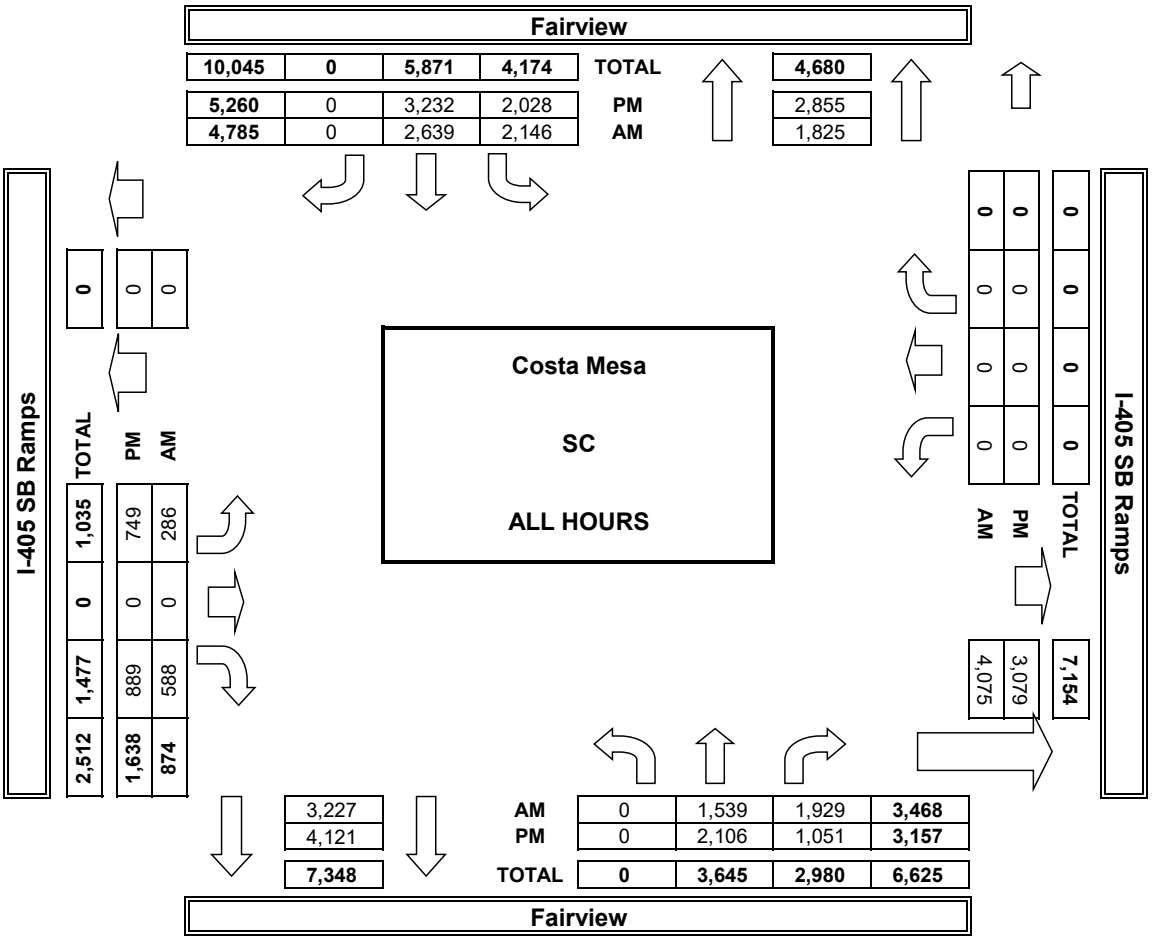
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND I-405 SB Ramps			WESTBOUND I-405 SB Ramps				U-TURNS				
	LANES:	NL X	NT 3.5	NR 1.5	SL 2	ST 3	SR X	EL 2	ET 0	ER 2	WL X	WT X	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	109	191	256	216	0	26	0	55	0	0	0	853	0	0	0	0	0
	7:15 AM	0	160	246	316	300	0	27	0	62	0	0	0	1,111	0	0	0	0	0
	7:30 AM	0	231	292	298	367	0	29	0	81	0	0	0	1,298	0	0	0	0	0
	7:45 AM	0	232	263	298	414	0	58	0	100	0	0	0	1,365	0	0	0	0	0
	8:00 AM	0	259	239	266	370	0	35	0	78	0	0	0	1,247	0	0	0	0	0
	8:15 AM	0	213	249	226	315	0	33	0	65	0	0	0	1,101	0	0	0	0	0
	8:30 AM	0	181	255	263	314	0	36	0	64	0	0	0	1,113	0	0	0	0	0
	8:45 AM	0	154	194	223	343	0	42	0	83	0	0	0	1,039	0	0	0	0	0
	VOLUMES	0	1,539	1,929	2,146	2,639	0	286	0	588	0	0	0	9,127	0	0	0	0	0
	APPROACH %	0%	44%	56%	45%	55%	0%	33%	0%	67%	0%	0%	0%						
	APP/DEPART	3,468	/	1,825	4,785	/	3,227	874	/	4,075	0	/	0	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	0	882	1,040	1,178	1,451	0	149	0	321	0	0	0	5,021					
	APPROACH %	0%	46%	54%	45%	55%	0%	32%	0%	68%	0%	0%	0%						
	PEAK HR FACTOR		0.919			0.923			0.744			0.000		0.920					
	APP/DEPART	1,922	/	1,031	2,629	/	1,772	470	/	2,218	0	/	0	0					
PM	4:00 PM	0	287	159	236	387	0	93	0	100	0	0	0	1,262	0	0	0	0	0
	4:15 PM	0	229	140	247	370	0	96	0	115	0	0	0	1,197	0	0	0	0	0
	4:30 PM	0	275	145	276	392	0	92	0	108	0	0	0	1,288	0	0	0	0	0
	4:45 PM	0	261	112	251	409	0	85	0	92	0	0	0	1,210	0	0	0	0	0
	5:00 PM	0	297	150	268	392	0	93	0	121	0	0	0	1,321	0	0	0	0	0
	5:15 PM	0	260	123	300	464	0	86	0	108	0	0	0	1,341	0	0	0	0	0
	5:30 PM	0	265	122	251	381	0	121	0	126	0	0	0	1,266	0	0	0	0	0
	5:45 PM	0	232	100	199	437	0	83	0	119	0	0	0	1,170	0	0	0	0	0
	VOLUMES	0	2,106	1,051	2,028	3,232	0	749	0	889	0	0	0	10,055	0	0	0	0	0
	APPROACH %	0%	67%	33%	39%	61%	0%	46%	0%	54%	0%	0%	0%						
	APP/DEPART	3,157	/	2,855	5,260	/	4,121	1,638	/	3,079	0	/	0	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	1,093	530	1,095	1,657	0	356	0	429	0	0	0	5,160					
	APPROACH %	0%	67%	33%	40%	60%	0%	45%	0%	55%	0%	0%	0%						
	PEAK HR FACTOR		0.908			0.901			0.917			0.000		0.962					
	APP/DEPART	1,623	/	1,449	2,752	/	2,086	785	/	1,625	0	/	0	0					

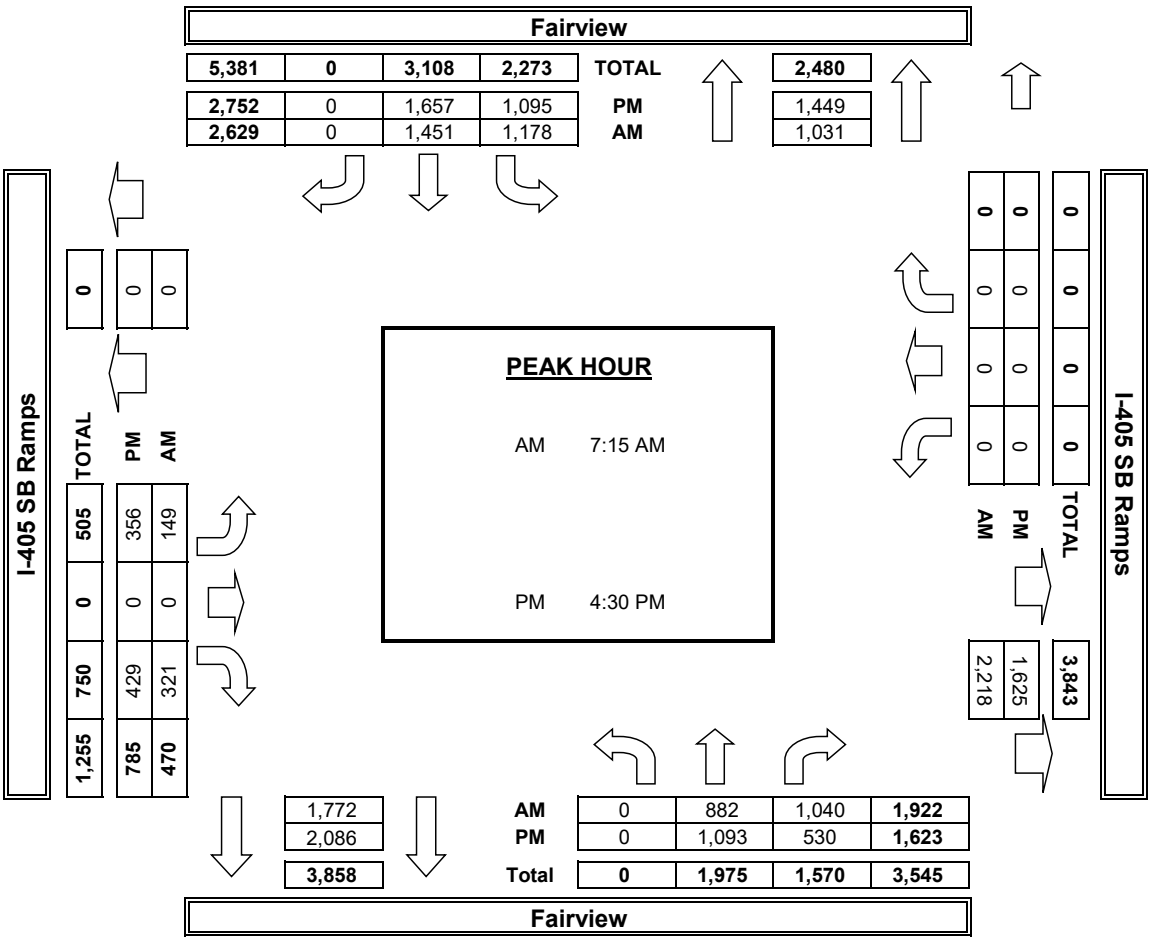


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:15 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:30 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	17
	EAST & WEST:	Paularino	CONTROL:	SIGNAL

NOTES:

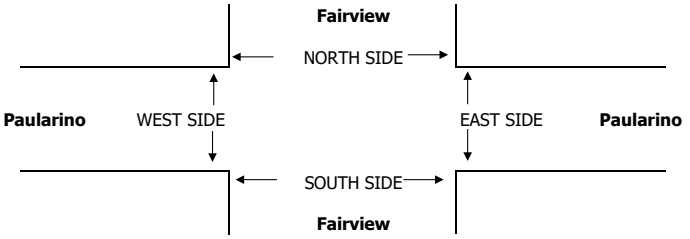
Queue SB PM

AM / PM / MD / OTHER / OTHER

◄ W E ► ▲ N S ▼

☑ Add U-Turns to Left Turns

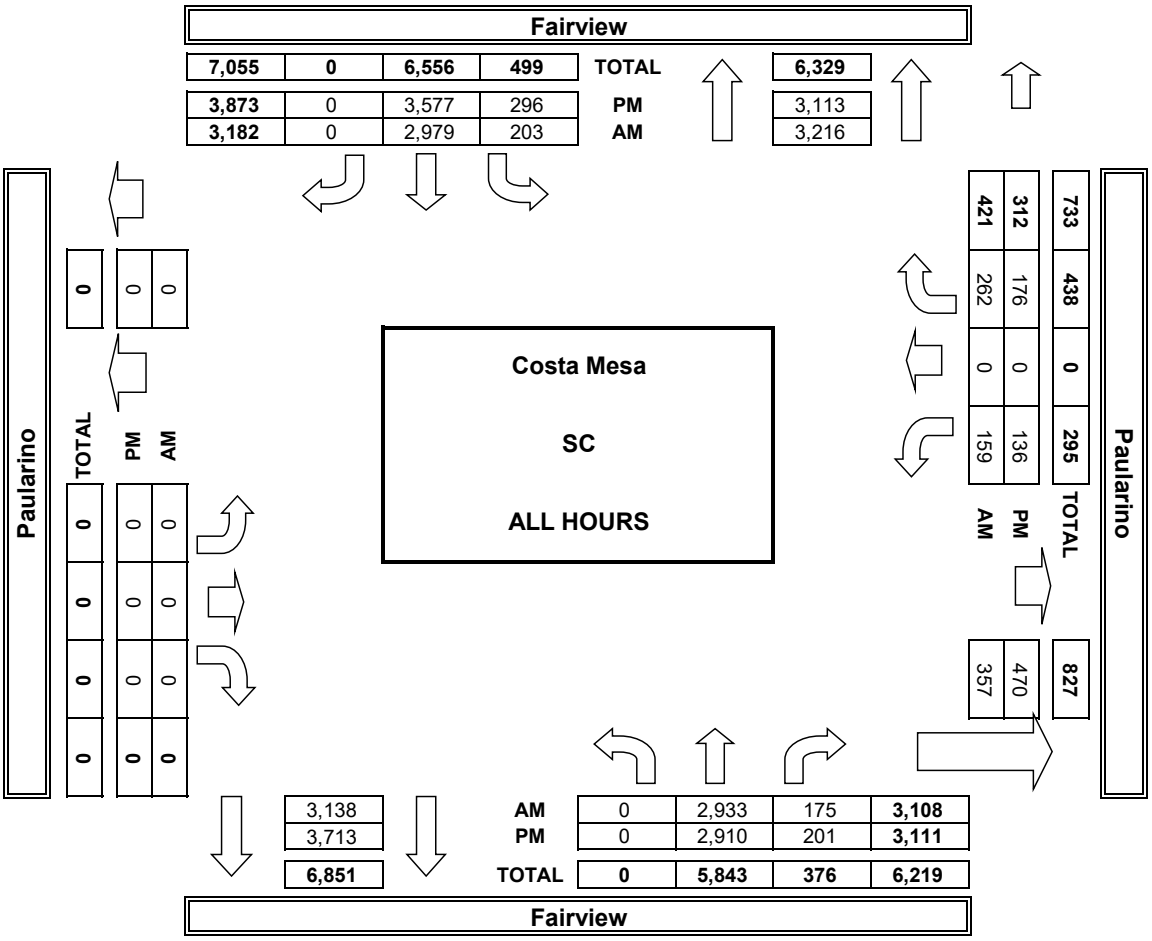
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND Paularino			WESTBOUND Paularino				U-TURNS				
	LANES:	NL X	NT 3	NR 0	SL 1	ST 3	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	253	11	10	256	0	0	0	0	6	0	23	559	0	0	0	0	0
	7:15 AM	0	355	18	16	327	0	0	0	0	16	0	26	758	0	1	0	0	1
	7:30 AM	0	453	23	33	421	0	0	0	0	27	0	31	988	0	2	0	0	2
	7:45 AM	0	426	51	47	450	0	0	0	0	39	0	52	1,065	0	4	0	0	4
	8:00 AM	0	398	35	31	422	0	0	0	0	38	0	45	969	0	3	0	0	3
	8:15 AM	0	383	11	22	339	0	0	0	0	12	0	36	803	0	2	0	0	2
	8:30 AM	0	374	14	22	338	0	0	0	0	9	0	20	777	0	7	0	0	7
	8:45 AM	0	291	12	22	426	0	0	0	0	12	0	29	792	0	2	0	0	2
	VOLUMES	0	2,933	175	203	2,979	0	0	0	0	159	0	262	6,711	0	21	0	0	21
	APPROACH %	0%	94%	6%	6%	94%	0%	0%	0%	0%	38%	0%	62%						
	APP/DEPART	3,108	/	3,216	3,182	/	3,138	0	/	357	421	/	0	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	1,660	120	133	1,632	0	0	0	0	116	0	164	3,825					
	APPROACH %	0%	93%	7%	8%	92%	0%	0%	0%	0%	41%	0%	59%						
	PEAK HR FACTOR		0.933			0.888			0.000			0.769		0.898					
	APP/DEPART	1,780	/	1,835	1,765	/	1,748	0	/	242	280	/	0	0					
PM	4:00 PM	0	409	26	30	426	0	0	0	0	19	0	19	929	0	4	0	0	4
	4:15 PM	0	346	24	47	428	0	0	0	0	24	0	27	896	0	6	0	0	6
	4:30 PM	0	383	29	28	467	0	0	0	0	17	0	16	940	0	4	0	0	4
	4:45 PM	0	354	22	36	434	0	0	0	0	15	0	16	877	0	5	0	0	5
	5:00 PM	0	411	30	36	444	0	0	0	0	13	0	23	957	0	3	0	0	3
	5:15 PM	0	316	26	41	460	0	0	0	0	15	0	23	881	0	1	0	0	1
	5:30 PM	0	353	19	37	448	0	0	0	0	14	0	23	894	0	4	0	0	4
	5:45 PM	0	338	25	41	470	0	0	0	0	19	0	29	922	0	0	0	0	0
	VOLUMES	0	2,910	201	296	3,577	0	0	0	0	136	0	176	7,296	0	27	0	0	27
	APPROACH %	0%	94%	6%	8%	92%	0%	0%	0%	0%	44%	0%	56%						
	APP/DEPART	3,111	/	3,113	3,873	/	3,713	0	/	470	312	/	0	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	0	1,494	105	147	1,773	0	0	0	0	69	0	82	3,670					
	APPROACH %	0%	93%	7%	8%	92%	0%	0%	0%	0%	46%	0%	54%						
	PEAK HR FACTOR		0.906			0.970			0.000			0.740		0.959					
	APP/DEPART	1,599	/	1,594	1,920	/	1,842	0	/	234	151	/	0	0					

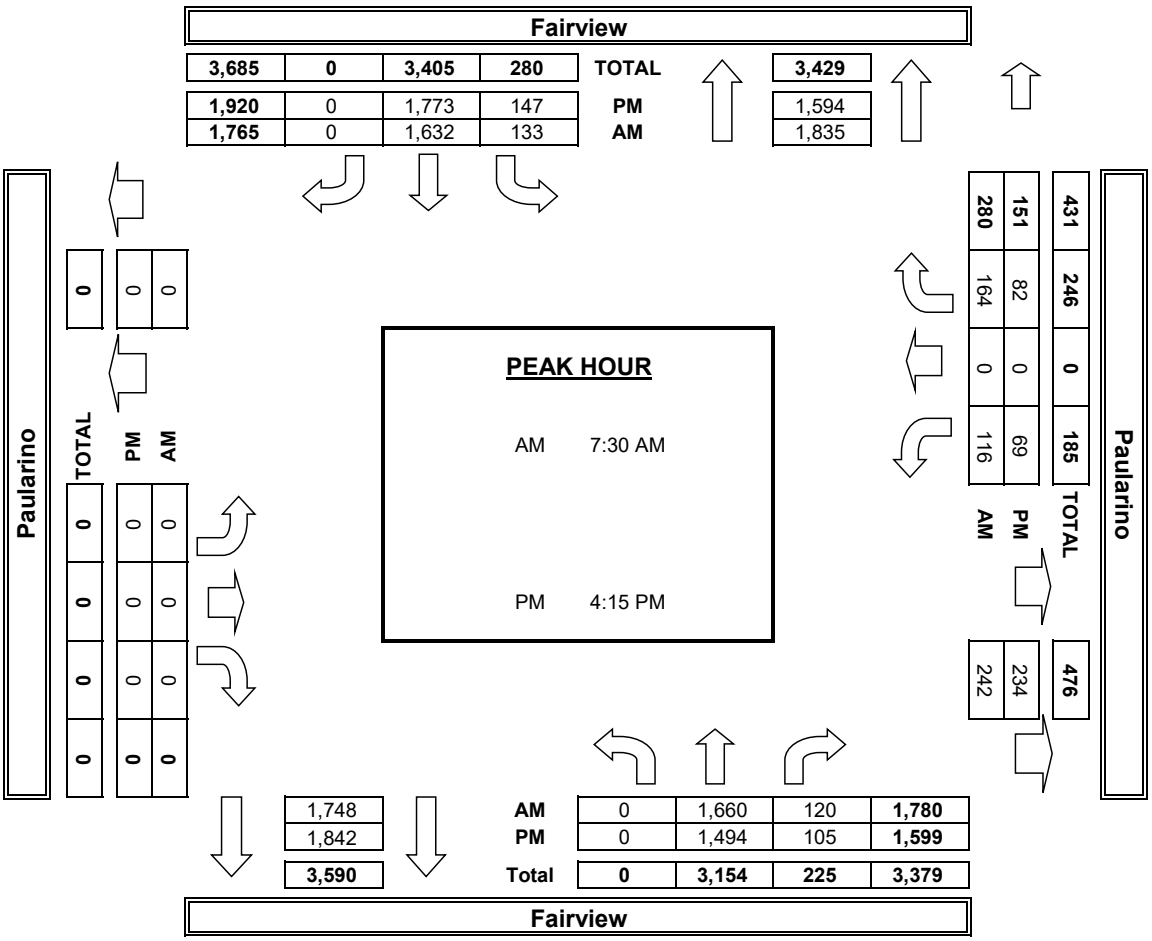


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:15 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Costa Mesa	PROJECT #:	SC
Tue, May 22, 18	NORTH & SOUTH:	Fairview	LOCATION #:	18
	EAST & WEST:	Baker	CONTROL:	SIGNAL

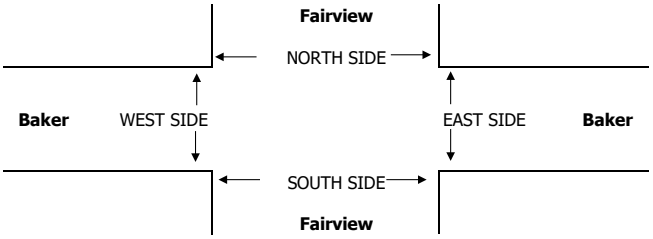
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

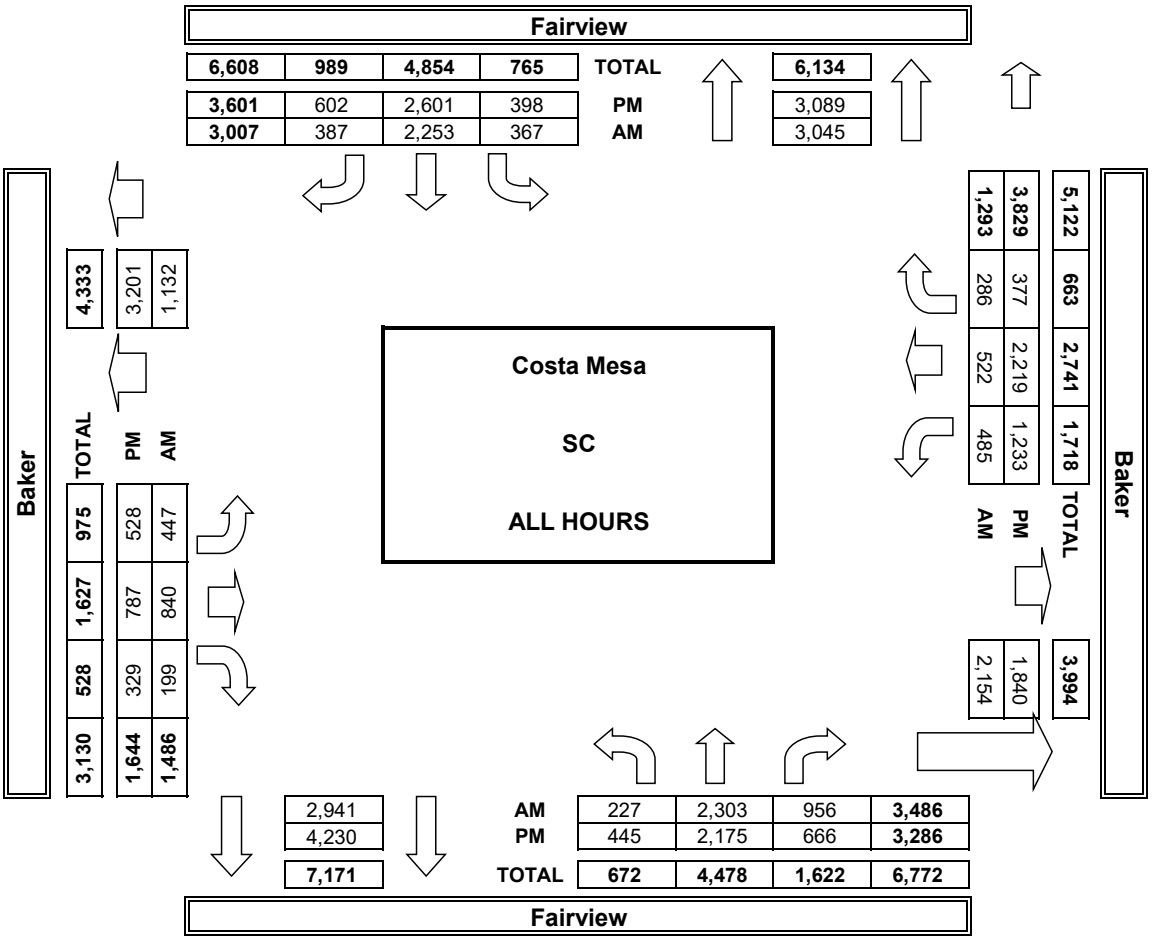
		NORTHBOUND Fairview			SOUTHBOUND Fairview			EASTBOUND Baker			WESTBOUND Baker				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 2	ST 4	SR 1	EL 2	ET 2	ER 1	WL 2	WT 3	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	10	193	78	53	160	32	41	77	7	34	39	31	755	0	2	0	0	2
	7:15 AM	12	262	112	54	238	41	43	86	19	45	43	28	983	0	0	0	0	0
	7:30 AM	34	345	138	55	321	41	69	128	44	81	52	52	1,360	0	0	0	0	0
	7:45 AM	49	376	151	35	377	41	62	118	47	95	101	49	1,501	2	0	0	0	2
	8:00 AM	30	306	122	49	338	66	72	104	28	67	79	40	1,301	0	2	0	0	2
	8:15 AM	42	292	115	43	252	55	58	124	20	62	76	38	1,177	0	2	0	0	2
	8:30 AM	21	286	112	31	259	47	56	103	15	50	65	30	1,075	0	3	0	0	3
	8:45 AM	29	243	128	47	308	64	46	100	19	51	67	18	1,120	2	0	0	0	2
	VOLUMES	227	2,303	956	367	2,253	387	447	840	199	485	522	286	9,272	4	9	0	0	13
	APPROACH %	7%	66%	27%	12%	75%	13%	30%	57%	13%	38%	40%	22%						
	APP/DEPART	3,486	/	3,045	3,007	/	2,941	1,486	/	2,154	1,293	/	1,132	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	155	1,319	526	182	1,288	203	261	474	139	305	308	179	5,339					
	APPROACH %	8%	66%	26%	11%	77%	12%	30%	54%	16%	39%	39%	23%						
	PEAK HR FACTOR		0.868			0.923			0.907			0.808		0.889					
	APP/DEPART	2,000	/	1,763	1,673	/	1,734	874	/	1,178	792	/	664	0					
PM	4:00 PM	43	273	89	40	296	88	76	100	37	140	237	60	1,479	3	1	0	0	4
	4:15 PM	56	284	81	48	331	76	62	83	40	160	267	36	1,524	14	0	0	0	14
	4:30 PM	42	268	78	60	284	71	75	102	46	154	270	54	1,504	5	2	1	0	8
	4:45 PM	58	282	71	51	372	75	56	102	53	163	277	43	1,603	9	3	0	0	12
	5:00 PM	58	294	88	40	290	58	83	100	45	161	282	54	1,553	8	2	0	0	10
	5:15 PM	62	261	89	62	334	83	70	101	39	155	321	32	1,609	9	1	0	0	10
	5:30 PM	66	259	83	45	352	68	63	95	36	151	299	41	1,558	12	0	2	0	14
	5:45 PM	60	254	87	52	342	83	43	104	33	149	266	57	1,530	8	3	0	1	12
	VOLUMES	445	2,175	666	398	2,601	602	528	787	329	1,233	2,219	377	12,360	68	12	3	1	84
	APPROACH %	14%	66%	20%	11%	72%	17%	32%	48%	20%	32%	58%	10%						
	APP/DEPART	3,286	/	3,089	3,601	/	4,230	1,644	/	1,840	3,829	/	3,201	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	244	1,096	331	198	1,348	284	272	398	173	630	1,179	170	6,323					
	APPROACH %	15%	66%	20%	11%	74%	16%	32%	47%	21%	32%	60%	9%						
	PEAK HR FACTOR		0.949			0.919			0.924			0.974		0.982					
	APP/DEPART	1,671	/	1,542	1,830	/	2,189	843	/	921	1,979	/	1,671	0					

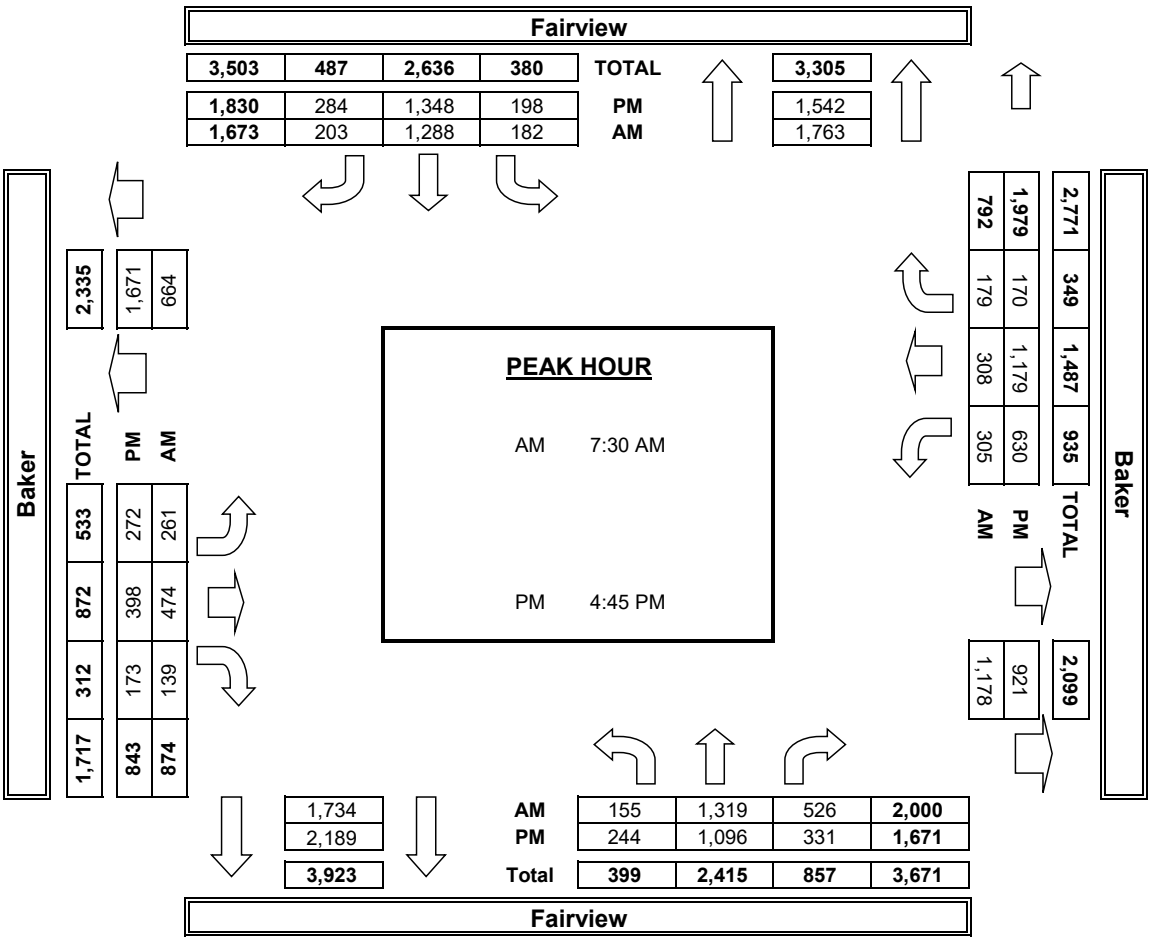


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:30 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:45 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





APPENDIX C

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX C-I

EXISTING TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.748

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	125	880	90	309	1784	123	123	1118	337	130	434	129
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	880	90	309	1784	123	123	1118	337	130	434	129
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	227	23	80	460	32	32	288	87	34	112	33
Total Analysis Volume [veh/h]	129	908	93	319	1841	127	127	1154	348	134	448	133
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.19	0.06	0.10	0.38	0.08	0.08	0.24	0.22	0.08	0.09	0.08
Intersection LOS	C											
Intersection V/C	0.748											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.561

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	62	1112	90	67	2148	74	5	31	27	17	30	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1112	90	67	2148	74	5	31	27	17	30	32
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	287	23	17	554	19	1	8	7	4	8	8
Total Analysis Volume [veh/h]	64	1148	93	69	2217	76	5	32	28	18	31	33
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.26	0.26	0.04	0.48	0.48	0.00	0.02	0.02	0.01	0.04	0.04
Intersection LOS	A											
Intersection V/C	0.561											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.601

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	192	1261	230	143	1909	47	16	102	50	129	140	82
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	1261	230	143	1909	47	16	102	50	129	140	82
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	328	60	37	496	12	4	27	13	34	36	21
Total Analysis Volume [veh/h]	200	1311	239	149	1984	49	17	106	52	134	146	85
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

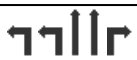
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.27	0.15	0.05	0.41	0.03	0.01	0.05	0.05	0.04	0.08	0.08
Intersection LOS	B											
Intersection V/C	0.601											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	304	1720	222	72	1950	44	7	46	248	88	186	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	1720	222	72	1950	44	7	46	248	88	186	40
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	452	58	19	513	12	2	12	65	23	49	11
Total Analysis Volume [veh/h]	320	1809	233	76	2050	46	7	48	261	93	196	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.28	0.12	0.02	0.32	0.03	0.00	0.10	0.10	0.03	0.06	0.03
Intersection LOS	A											
Intersection V/C	0.546											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	295	55	0	0	91	248
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	295	55	0	0	91	248
Peak Hour Factor	0.8920	0.8920	1.0000	1.0000	0.8920	0.8920
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	83	0	0	0	26	0
Total Analysis Volume [veh/h]	331	0	0	0	102	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.00	0.00	0.06	0.00
Intersection LOS	A					
Intersection V/C	0.271					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1387	0	0	1283	995	0	0	0	439	0	867
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1387	0	0	1283	995	0	0	0	439	0	867
Peak Hour Factor	1.0000	0.9600	1.0000	1.0000	0.9600	0.9600	1.0000	1.0000	1.0000	0.9600	1.0000	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	361	0	0	334	0	0	0	0	114	0	226
Total Analysis Volume [veh/h]	0	1445	0	0	1336	0	0	0	0	457	0	903
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.23	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.14	0.00	0.28
Intersection LOS	A											
Intersection V/C	0.509											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1083	1713	0	1643	0	390	0	436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1083	1713	0	1643	0	390	0	436	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	281	0	0	427	0	101	0	113	0	0	0
Total Analysis Volume [veh/h]	0	1126	0	0	1708	0	405	0	453	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

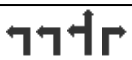
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.23	0.00	0.00	0.27	0.00	0.13	0.00	0.18	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.446											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	116	2015	16	52	1807	184	648	36	133	15	42	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	2015	16	52	1807	184	648	36	133	15	42	128
Peak Hour Factor	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	512	4	13	460	47	165	9	34	4	11	33
Total Analysis Volume [veh/h]	118	2050	16	53	1838	187	659	37	135	15	43	130
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

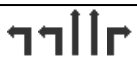
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.26	0.26	0.03	0.32	0.32	0.14	0.15	0.08	0.01	0.03	0.08
Intersection LOS	B											
Intersection V/C	0.616											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.516

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	60	1754	241	204	1398	184	232	235	57	222	215	119
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	1754	241	204	1398	184	232	235	57	222	215	119
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	454	62	53	362	48	60	61	15	57	56	31
Total Analysis Volume [veh/h]	62	1816	249	211	1447	190	240	243	59	230	223	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.28	0.08	0.07	0.23	0.04	0.08	0.09	0.09	0.07	0.07	0.08
Intersection LOS	A											
Intersection V/C	0.516											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	93	302	45	68	124	36	71	293	44	46	294	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	93	302	45	68	124	36	71	293	44	46	294	94
Peak Hour Factor	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	93	14	21	38	11	22	90	13	14	90	29
Total Analysis Volume [veh/h]	114	371	55	83	152	44	87	360	54	56	361	115
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.23	0.03	0.05	0.12	0.12	0.05	0.11	0.03	0.04	0.15	0.15
Intersection LOS	A											
Intersection V/C	0.487											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.321

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	161	461	63	95	4	83	78	241	0	5	94	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	161	461	63	95	4	83	78	241	0	5	94	48
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	137	19	28	1	25	23	72	0	1	28	14
Total Analysis Volume [veh/h]	191	548	75	113	5	99	93	286	0	6	112	57
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.19	0.19	0.04	0.03	0.03	0.03	0.09	0.00	0.00	0.04	0.00
Intersection LOS	A											
Intersection V/C	0.321											

AM Existing Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.673
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	219	755	87	294	1521	165	115	967	148	215	476	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	219	755	87	294	1521	165	115	967	148	215	476	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	219	755	87	294	1521	165	115	967	148	215	476	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	219	755	87	294	1521	165	115	967	148	215	476	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	219	755	87	294	1521	165	115	967	148	215	476	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	219	755	87	294	1521	165	115	967	148	215	476	134
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.69	0.31	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4504	496	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.18	0.09	0.30	0.10	0.04	0.19	0.09	0.07	0.09	0.08
Crit Moves:	****				****			****		****		

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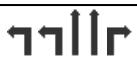
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.661

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	204	877	154	212	1599	139	39	248	62	263	300	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	877	154	212	1599	139	39	248	62	263	300	96
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	239	42	58	436	38	11	68	17	72	82	26
Total Analysis Volume [veh/h]	223	957	168	231	1746	152	43	271	68	287	328	105
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

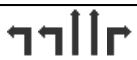
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.20	0.11	0.07	0.40	0.40	0.01	0.11	0.11	0.09	0.10	0.07
Intersection LOS	B											
Intersection V/C	0.661											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	238	1183	182	23	1858	45	6	92	154	295	110	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	238	1183	182	23	1858	45	6	92	154	295	110	51
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	325	50	6	510	12	2	25	42	81	30	14
Total Analysis Volume [veh/h]	261	1299	200	25	2040	49	7	101	169	324	121	56
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.27	0.13	0.01	0.44	0.44	0.00	0.06	0.05	0.10	0.04	0.04
Intersection LOS	B											
Intersection V/C	0.681											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	255	770	0	0	1983	289	0	0	0	649	0	824
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	255	770	0	0	1983	289	0	0	0	649	0	824
Peak Hour Factor	0.9330	0.9330	1.0000	1.0000	0.9330	0.9330	1.0000	1.0000	1.0000	0.9330	1.0000	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	206	0	0	531	77	0	0	0	174	0	221
Total Analysis Volume [veh/h]	273	825	0	0	2125	310	0	0	0	696	0	883
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.17	0.00	0.00	0.22	0.19	0.00	0.00	0.00	0.22	0.00	0.28
Intersection LOS	B											
Intersection V/C	0.668											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.614

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	882	1040	1178	1451	0	149	0	321	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	882	1040	1178	1451	0	149	0	321	0	0	0
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	0.9200	1.0000	0.9200	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	240	283	320	394	0	40	0	87	0	0	0
Total Analysis Volume [veh/h]	0	959	1130	1280	1577	0	162	0	349	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.26	0.26	0.27	0.33	0.00	0.05	0.00	0.11	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.614											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1660	120	133	1632	116	164
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1660	120	133	1632	116	164
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	462	33	37	454	32	46
Total Analysis Volume [veh/h]	1849	134	148	1817	129	183
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.41	0.41	0.09	0.38	0.08	0.11
Intersection LOS	B					
Intersection V/C	0.620					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.647

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	155	1319	526	182	1288	203	261	474	139	305	308	179
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	155	1319	526	182	1288	203	261	474	139	305	308	179
Peak Hour Factor	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	371	148	51	362	57	73	133	39	86	87	50
Total Analysis Volume [veh/h]	174	1484	592	205	1449	228	294	533	156	343	346	201
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.31	0.26	0.06	0.23	0.14	0.09	0.17	0.10	0.11	0.07	0.13
Intersection LOS	B											
Intersection V/C	0.647											

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.814

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	576	1489	86	208	1051	172	137	479	177	85	1438	270
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	576	1489	86	208	1051	172	137	479	177	85	1438	270
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	386	22	54	273	45	36	124	46	22	373	70
Total Analysis Volume [veh/h]	598	1545	89	216	1090	178	142	497	184	88	1492	280
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.32	0.06	0.07	0.23	0.11	0.09	0.10	0.12	0.06	0.31	0.18
Intersection LOS	D											
Intersection V/C	0.814											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.707

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	38	1951	37	21	1267	7	40	51	86	82	227	129
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	1951	37	21	1267	7	40	51	86	82	227	129
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	511	10	6	332	2	10	13	23	21	59	34
Total Analysis Volume [veh/h]	40	2045	39	22	1328	7	42	53	90	86	238	135
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.43	0.43	0.01	0.28	0.28	0.03	0.03	0.06	0.05	0.23	0.23
Intersection LOS	C											
Intersection V/C	0.707											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	158	1781	236	92	1357	53	64	147	199	234	655	187
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	158	1781	236	92	1357	53	64	147	199	234	655	187
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	461	61	24	351	14	17	38	52	61	170	48
Total Analysis Volume [veh/h]	164	1844	244	95	1405	55	66	152	206	242	678	194
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

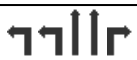
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.38	0.15	0.03	0.29	0.03	0.04	0.11	0.11	0.15	0.27	0.27
Intersection LOS	C											
Intersection V/C	0.798											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	393	1975	178	70	1652	86	19	49	393	292	842	254
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	393	1975	178	70	1652	86	19	49	393	292	842	254
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	103	520	47	18	435	23	5	13	103	77	222	67
Total Analysis Volume [veh/h]	414	2079	187	74	1739	91	20	52	414	307	886	267
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.32	0.02	0.02	0.27	0.06	0.01	0.15	0.15	0.10	0.28	0.17
Intersection LOS	B											
Intersection V/C	0.690											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.558

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	353	414	0	0	468	856
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	353	414	0	0	468	856
Peak Hour Factor	0.9190	0.9190	1.0000	1.0000	0.9190	0.9190
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	96	0	0	0	127	0
Total Analysis Volume [veh/h]	384	0	0	0	509	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.00	0.00	0.00	0.32	0.00
Intersection LOS	A					
Intersection V/C	0.558					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.632

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1422	0	0	1291	1110	0	0	0	753	0	1132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1422	0	0	1291	1110	0	0	0	753	0	1132
Peak Hour Factor	1.0000	0.9730	1.0000	1.0000	0.9730	0.9730	1.0000	1.0000	1.0000	0.9730	1.0000	0.9730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	365	0	0	332	0	0	0	0	193	0	291
Total Analysis Volume [veh/h]	0	1461	0	0	1327	0	0	0	0	774	0	1163
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.23	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.24	0.00	0.40
Intersection LOS	B											
Intersection V/C	0.632											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1229	1237	0	2040	0	198	0	741	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1229	1237	0	2040	0	198	0	741	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	323	0	0	537	0	52	0	195	0	0	0
Total Analysis Volume [veh/h]	0	1294	0	0	2147	0	208	0	780	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

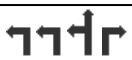
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.00	0.00	0.34	0.00	0.07	0.00	0.21	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.579											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.773

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	146	1853	21	128	2237	393	387	37	103	49	64	222
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	146	1853	21	128	2237	393	387	37	103	49	64	222
Peak Hour Factor	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	491	6	34	592	104	102	10	27	13	17	59
Total Analysis Volume [veh/h]	155	1963	22	136	2370	416	410	39	109	52	68	235
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

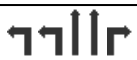
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.25	0.25	0.09	0.44	0.44	0.09	0.09	0.07	0.03	0.04	0.15
Intersection LOS	C											
Intersection V/C	0.773											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.601

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	128	1449	204	188	1832	269	219	229	59	435	640	282
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	128	1449	204	188	1832	269	219	229	59	435	640	282
Peak Hour Factor	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	366	52	48	463	68	55	58	15	110	162	71
Total Analysis Volume [veh/h]	129	1465	206	190	1852	272	221	232	60	440	647	285
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.23	0.00	0.06	0.29	0.10	0.07	0.09	0.09	0.14	0.20	0.18
Intersection LOS	B											
Intersection V/C	0.601											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.776

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	326	620	104	71	146	66	91	385	30	28	615	183
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	326	620	104	71	146	66	91	385	30	28	615	183
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	86	163	27	19	38	17	24	101	8	7	162	48
Total Analysis Volume [veh/h]	342	651	109	75	153	69	96	404	32	29	646	192
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.41	0.07	0.05	0.14	0.14	0.06	0.13	0.02	0.02	0.26	0.26
Intersection LOS	C											
Intersection V/C	0.776											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	637	674	88	184	12	132	64	182	7	37	560	179
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	637	674	88	184	12	132	64	182	7	37	560	179
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	167	176	23	48	3	35	17	48	2	10	146	47
Total Analysis Volume [veh/h]	666	705	92	192	13	138	67	190	7	39	586	187
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.25	0.25	0.06	0.05	0.05	0.02	0.06	0.06	0.01	0.18	0.06
Intersection LOS	A											
Intersection V/C	0.513											

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	D

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	227	1664	99	165	911	94	273	724	232	173	1390	248
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	227	1664	99	165	911	94	273	724	232	173	1390	248
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	1664	99	165	911	94	273	724	232	173	1390	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	227	1664	99	165	911	94	273	724	232	173	1390	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	1664	99	165	911	94	273	724	232	173	1390	248
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	227	1664	99	165	911	94	273	724	232	173	1390	248
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.04	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.83	0.17	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4730	270	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.35	0.37	0.05	0.18	0.06	0.09	0.14	0.15	0.05	0.27	0.16
Crit Moves:			****	****			****				****	

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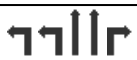
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	154	1780	310	102	1194	73	169	396	84	220	605	152
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	154	1780	310	102	1194	73	169	396	84	220	605	152
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	468	81	27	314	19	44	104	22	58	159	40
Total Analysis Volume [veh/h]	162	1872	326	107	1256	77	178	416	88	231	636	160
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

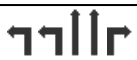
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.39	0.20	0.03	0.28	0.28	0.06	0.16	0.16	0.07	0.20	0.10
Intersection LOS	B											
Intersection V/C	0.678											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.704

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	142	1844	318	67	1429	46	83	145	487	370	435	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	142	1844	318	67	1429	46	83	145	487	370	435	305
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	482	83	18	374	12	22	38	127	97	114	80
Total Analysis Volume [veh/h]	149	1929	333	70	1495	48	87	152	509	387	455	319
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.40	0.21	0.02	0.32	0.32	0.05	0.10	0.16	0.12	0.14	0.20
Intersection LOS	C											
Intersection V/C	0.704											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	189	1258	0	0	1989	300	0	0	0	770	0	1070
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	1258	0	0	1989	300	0	0	0	770	0	1070
Peak Hour Factor	0.9560	0.9560	1.0000	1.0000	0.9560	0.9560	1.0000	1.0000	1.0000	0.9560	1.0000	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	329	0	0	520	78	0	0	0	201	0	280
Total Analysis Volume [veh/h]	198	1316	0	0	2081	314	0	0	0	805	0	1119
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.27	0.00	0.00	0.22	0.20	0.00	0.00	0.00	0.25	0.00	0.35
Intersection LOS	B											
Intersection V/C	0.690											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.587

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1093	530	1095	1657	0	356	0	429	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1093	530	1095	1657	0	356	0	429	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	284	138	285	431	0	93	0	111	0	0	0
Total Analysis Volume [veh/h]	0	1136	551	1138	1722	0	370	0	446	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.21	0.21	0.24	0.36	0.00	0.12	0.00	0.14	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.587											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.497

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1494	105	147	1773	69	82
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1494	105	147	1773	69	82
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	389	27	38	462	18	21
Total Analysis Volume [veh/h]	1558	109	153	1849	72	86
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.35	0.35	0.10	0.39	0.05	0.05
Intersection LOS	A					
Intersection V/C	0.497					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.632

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	244	1096	331	198	1348	284	272	398	173	630	1179	170
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	244	1096	331	198	1348	284	272	398	173	630	1179	170
Peak Hour Factor	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	279	84	50	343	72	69	101	44	160	300	43
Total Analysis Volume [veh/h]	248	1116	337	202	1373	289	277	405	176	642	1201	173
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.23	0.01	0.06	0.21	0.18	0.09	0.13	0.11	0.20	0.25	0.11
Intersection LOS	B											
Intersection V/C	0.632											

APPENDIX C-II

EXISTING TRAFFIC CONDITIONS (CITY OF SANTA ANA GUIDELINES)

AM Existing Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	125	880	90	309	1784	123	123	1118	337	130	434	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	880	90	309	1784	123	123	1118	337	130	434	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	125	880	90	309	1784	123	123	1118	337	130	434	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	880	90	309	1784	123	123	1118	337	130	434	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	880	90	309	1784	123	123	1118	337	130	434	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	880	90	309	1784	123	123	1118	337	130	434	129
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.06	0.10	0.35	0.08	0.08	0.22	0.21	0.08	0.09	0.08
Crit Moves:	****				****			****		****		

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AM Existing Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	192	1261	230	143	1909	47	16	102	50	129	140	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	192	1261	230	143	1909	47	16	102	50	129	140	82
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	1261	230	143	1909	47	16	102	50	129	140	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	192	1261	230	143	1909	47	16	102	50	129	140	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	192	1261	230	143	1909	47	16	102	50	129	140	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	192	1261	230	143	1909	47	16	102	50	129	140	82
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.34	0.66	1.10	1.20	0.70
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	2247	1053	1764	1915	1121
Capacity Analysis Module:												
Vol/Sat:	0.06	0.25	0.14	0.04	0.37	0.03	0.01	0.05	0.05	0.07	0.07	0.07
Crit Moves:	****				****				****		****	

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AM Existing Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	204	877	154	212	1599	139	39	248	62	263	300	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	204	877	154	212	1599	139	39	248	62	263	300	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	877	154	212	1599	139	39	248	62	263	300	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	877	154	212	1599	139	39	248	62	263	300	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	877	154	212	1599	139	39	248	62	263	300	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	204	877	154	212	1599	139	39	248	62	263	300	96
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.76	0.24	2.00	1.60	0.40	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4616	384	3200	2660	640	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.10	0.07	0.35	0.36	0.01	0.09	0.10	0.08	0.09	0.06
Crit Moves:	****					****			****	****		

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PM Existing Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	576	1489	86	208	1051	172	137	479	177	85	1438	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	576	1489	86	208	1051	172	137	479	177	85	1438	270
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	576	1489	86	208	1051	172	137	479	177	85	1438	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	576	1489	86	208	1051	172	137	479	177	85	1438	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	576	1489	86	208	1051	172	137	479	177	85	1438	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	576	1489	86	208	1051	172	137	479	177	85	1438	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.29	0.05	0.07	0.21	0.11	0.09	0.09	0.11	0.05	0.28	0.17
Crit Moves:	****				****		****				****	

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PM Existing Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.819
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	D

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	158	1781	236	92	1357	53	64	147	199	234	655	187
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	1781	236	92	1357	53	64	147	199	234	655	187
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	158	1781	236	92	1357	53	64	147	199	234	655	187
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	158	1781	236	92	1357	53	64	147	199	234	655	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	1781	236	92	1357	53	64	147	199	234	655	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	1781	236	92	1357	53	64	147	199	234	655	187
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.04	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.00	1.48	0.52
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	1700	1600	1600	2458	837
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.15	0.03	0.27	0.03	0.04	0.09	0.12	0.15	0.27	0.22
Crit Moves:		****		****					****		****	

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PM Existing Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	154	1780	310	102	1194	73	169	396	84	220	605	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	1780	310	102	1194	73	169	396	84	220	605	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	1780	310	102	1194	73	169	396	84	220	605	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	154	1780	310	102	1194	73	169	396	84	220	605	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	1780	310	102	1194	73	169	396	84	220	605	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	154	1780	310	102	1194	73	169	396	84	220	605	152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.83	0.17	2.00	1.65	0.35	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4723	277	3200	2740	560	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.19	0.03	0.25	0.26	0.05	0.14	0.15	0.07	0.18	0.10
Crit Moves:		****		****			****				****	

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APPENDIX C-III

EXISTING PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.764

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	130	903	90	309	1849	123	123	1118	343	130	434	129
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	130	903	90	309	1849	123	123	1118	343	130	434	129
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	233	23	80	477	32	32	288	88	34	112	33
Total Analysis Volume [veh/h]	134	932	93	319	1908	127	127	1154	354	134	448	133
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.19	0.06	0.10	0.40	0.08	0.08	0.24	0.22	0.08	0.09	0.08
Intersection LOS	C											
Intersection V/C	0.764											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	62	1139	90	67	2218	74	5	31	27	17	30	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1139	90	67	2218	74	5	31	27	17	30	32
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	294	23	17	572	19	1	8	7	4	8	8
Total Analysis Volume [veh/h]	64	1175	93	69	2289	76	5	32	28	18	31	33
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.26	0.26	0.04	0.49	0.49	0.00	0.02	0.02	0.01	0.04	0.04
Intersection LOS	A											
Intersection V/C	0.576											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.621

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	199	1287	230	166	1957	47	16	107	67	129	141	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	199	1287	230	166	1957	47	16	107	67	129	141	83
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	334	60	43	509	12	4	28	17	34	37	22
Total Analysis Volume [veh/h]	207	1338	239	173	2034	49	17	111	70	134	147	86
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.28	0.15	0.05	0.42	0.03	0.01	0.06	0.06	0.04	0.08	0.08
Intersection LOS	B											
Intersection V/C	0.621											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.573

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	304	1812	392	111	1952	52	7	46	248	168	206	74
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	1812	392	111	1952	52	7	46	248	168	206	74
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	476	103	29	513	14	2	12	65	44	54	19
Total Analysis Volume [veh/h]	320	1905	412	117	2053	55	7	48	261	177	217	78
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.30	0.20	0.04	0.32	0.03	0.00	0.10	0.10	0.06	0.07	0.05
Intersection LOS	A											
Intersection V/C	0.573											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.291

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	295	55	0	0	120	248
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	295	55	0	0	120	248
Peak Hour Factor	0.8920	0.8920	1.0000	1.0000	0.8920	0.8920
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	83	0	0	0	34	0
Total Analysis Volume [veh/h]	331	0	0	0	135	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.00	0.00	0.08	0.00
Intersection LOS	A					
Intersection V/C	0.291					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1598	0	0	1329	1034	0	0	0	439	0	917
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1598	0	0	1329	1034	0	0	0	439	0	917
Peak Hour Factor	1.0000	0.9600	1.0000	1.0000	0.9600	0.9600	1.0000	1.0000	1.0000	0.9600	1.0000	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	416	0	0	346	0	0	0	0	114	0	239
Total Analysis Volume [veh/h]	0	1665	0	0	1384	0	0	0	0	457	0	955
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.26	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.14	0.00	0.29
Intersection LOS	A											
Intersection V/C	0.559											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.474

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1198	1713	0	1689	0	487	0	436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1198	1713	0	1689	0	487	0	436	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	311	0	0	439	0	127	0	113	0	0	0
Total Analysis Volume [veh/h]	0	1245	0	0	1756	0	506	0	453	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

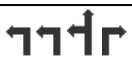
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.26	0.00	0.00	0.27	0.00	0.16	0.00	0.20	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.474											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	116	2130	16	52	1853	184	648	36	133	15	42	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	2130	16	52	1853	184	648	36	133	15	42	128
Peak Hour Factor	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	542	4	13	471	47	165	9	34	4	11	33
Total Analysis Volume [veh/h]	118	2167	16	53	1885	187	659	37	135	15	43	130
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

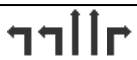
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.27	0.27	0.03	0.32	0.32	0.14	0.15	0.08	0.01	0.03	0.08
Intersection LOS	B											
Intersection V/C	0.624											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.534

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	60	1865	241	204	1441	187	236	235	57	222	215	119
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	1865	241	204	1441	187	236	235	57	222	215	119
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	483	62	53	373	48	61	61	15	57	56	31
Total Analysis Volume [veh/h]	62	1931	249	211	1492	194	244	243	59	230	223	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.30	0.08	0.07	0.23	0.05	0.08	0.09	0.09	0.07	0.07	0.08
Intersection LOS	A											
Intersection V/C	0.534											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	93	313	45	68	138	59	75	306	46	46	371	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	93	313	45	68	138	59	75	306	46	46	371	94
Peak Hour Factor	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	96	14	21	42	18	23	94	14	14	114	29
Total Analysis Volume [veh/h]	114	384	55	83	169	72	92	375	56	56	455	115
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.24	0.03	0.05	0.15	0.15	0.06	0.12	0.04	0.04	0.18	0.18
Intersection LOS	A											
Intersection V/C	0.528											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.340

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	239	457	63	97	3	98	92	292	1	5	201	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	239	457	63	97	3	98	92	292	1	5	201	48
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	136	19	29	1	29	27	87	0	1	60	14
Total Analysis Volume [veh/h]	284	543	75	115	4	116	109	347	1	6	239	57
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.19	0.19	0.04	0.04	0.04	0.03	0.11	0.11	0.00	0.07	0.00
Intersection LOS	A											
Intersection V/C	0.340											

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.683
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	219	774	87	294	1571	165	115	967	148	215	476	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	219	774	87	294	1571	165	115	967	148	215	476	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	219	774	87	294	1571	165	115	967	148	215	476	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	219	774	87	294	1571	165	115	967	148	215	476	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	219	774	87	294	1571	165	115	967	148	215	476	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	219	774	87	294	1571	165	115	967	148	215	476	134
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.70	0.30	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4515	485	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.18	0.09	0.31	0.10	0.04	0.19	0.09	0.07	0.09	0.08
Crit Moves:	****				****			****		****		

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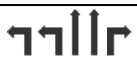
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	204	891	170	212	1617	171	44	255	62	283	345	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	204	891	170	212	1617	171	44	255	62	283	345	96
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	243	46	58	441	47	12	70	17	77	94	26
Total Analysis Volume [veh/h]	223	973	186	231	1765	187	48	278	68	309	377	105
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

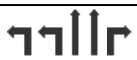
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.20	0.12	0.07	0.41	0.41	0.02	0.11	0.11	0.10	0.12	0.07
Intersection LOS	B											
Intersection V/C	0.681											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.710

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	279	1183	182	23	1858	82	35	101	169	295	139	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	279	1183	182	23	1858	82	35	101	169	295	139	51
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	325	50	6	510	23	10	28	46	81	38	14
Total Analysis Volume [veh/h]	306	1299	200	25	2040	90	38	111	186	324	153	56
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.27	0.13	0.01	0.44	0.44	0.02	0.07	0.06	0.10	0.05	0.04
Intersection LOS	C											
Intersection V/C	0.710											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.670

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	255	811	0	0	1998	289	0	0	0	649	0	824
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	255	811	0	0	1998	289	0	0	0	649	0	824
Peak Hour Factor	0.9330	0.9330	1.0000	1.0000	0.9330	0.9330	1.0000	1.0000	1.0000	0.9330	1.0000	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	217	0	0	535	77	0	0	0	174	0	221
Total Analysis Volume [veh/h]	273	869	0	0	2141	310	0	0	0	696	0	883
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.18	0.00	0.00	0.22	0.19	0.00	0.00	0.00	0.22	0.00	0.28
Intersection LOS	B											
Intersection V/C	0.670											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.729

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	923	1040	1178	1466	0	149	0	321	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	923	1040	1178	1466	0	149	0	321	0	0	0
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	0.9200	1.0000	0.9200	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	251	283	320	398	0	40	0	87	0	0	0
Total Analysis Volume [veh/h]	0	1003	1130	1280	1593	0	162	0	349	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.27	0.27	0.33	0.00	0.05	0.00	0.11	0.00	0.00	0.00
Intersection LOS	C											
Intersection V/C	0.729											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1701	120	133	1647	116	164
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1701	120	133	1647	116	164
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	474	33	37	459	32	46
Total Analysis Volume [veh/h]	1894	134	148	1834	129	183
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.42	0.42	0.09	0.38	0.08	0.11
Intersection LOS	B					
Intersection V/C	0.629					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	155	1356	526	185	1300	203	261	474	139	305	308	183
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	155	1356	526	185	1300	203	261	474	139	305	308	183
Peak Hour Factor	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	381	148	52	366	57	73	133	39	86	87	51
Total Analysis Volume [veh/h]	174	1525	592	208	1462	228	294	533	156	343	346	206
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.32	0.26	0.07	0.23	0.14	0.09	0.17	0.10	0.11	0.07	0.13
Intersection LOS	B											
Intersection V/C	0.656											

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.823

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	581	1549	86	208	1086	172	137	479	185	85	1438	270
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	581	1549	86	208	1086	172	137	479	185	85	1438	270
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	151	402	22	54	282	45	36	124	48	22	373	70
Total Analysis Volume [veh/h]	603	1607	89	216	1127	178	142	497	192	88	1492	280
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.33	0.06	0.07	0.23	0.11	0.09	0.10	0.12	0.06	0.31	0.18
Intersection LOS	D											
Intersection V/C	0.823											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.721

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	38	2016	37	21	1310	7	40	51	86	82	227	129
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	2016	37	21	1310	7	40	51	86	82	227	129
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	528	10	6	343	2	10	13	23	21	59	34
Total Analysis Volume [veh/h]	40	2113	39	22	1373	7	42	53	90	86	238	135
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.45	0.45	0.01	0.29	0.29	0.03	0.03	0.06	0.05	0.23	0.23
Intersection LOS	C											
Intersection V/C	0.721											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.820

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	173	1837	236	96	1396	53	64	148	212	234	659	196
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	173	1837	236	96	1396	53	64	148	212	234	659	196
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	475	61	25	361	14	17	38	55	61	171	51
Total Analysis Volume [veh/h]	179	1902	244	99	1445	55	66	153	219	242	682	203
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

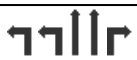
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.40	0.15	0.03	0.30	0.03	0.04	0.12	0.12	0.15	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.820											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.711

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	393	1979	296	126	1690	134	19	49	393	473	884	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	393	1979	296	126	1690	134	19	49	393	473	884	305
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	103	521	78	33	445	35	5	13	103	124	233	80
Total Analysis Volume [veh/h]	414	2083	312	133	1779	141	20	52	414	498	931	321
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.33	0.04	0.04	0.28	0.09	0.01	0.15	0.15	0.16	0.29	0.20
Intersection LOS	C											
Intersection V/C	0.711											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.619

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	353	414	0	0	558	856
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	353	414	0	0	558	856
Peak Hour Factor	0.9190	0.9190	1.0000	1.0000	0.9190	0.9190
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	96	0	0	0	152	0
Total Analysis Volume [veh/h]	384	0	0	0	607	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.00	0.00	0.00	0.38	0.00
Intersection LOS	B					
Intersection V/C	0.619					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.652

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1536	0	0	1396	1226	0	0	0	753	0	1141
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1536	0	0	1396	1226	0	0	0	753	0	1141
Peak Hour Factor	1.0000	0.9730	1.0000	1.0000	0.9730	0.9730	1.0000	1.0000	1.0000	0.9730	1.0000	0.9730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	395	0	0	359	0	0	0	0	193	0	293
Total Analysis Volume [veh/h]	0	1579	0	0	1435	0	0	0	0	774	0	1173
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.25	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.24	0.00	0.41
Intersection LOS	B											
Intersection V/C	0.652											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1301	1237	0	2145	0	239	0	741	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1301	1237	0	2145	0	239	0	741	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	342	0	0	564	0	63	0	195	0	0	0
Total Analysis Volume [veh/h]	0	1369	0	0	2258	0	252	0	780	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

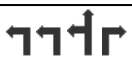
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.00	0.00	0.35	0.00	0.08	0.00	0.22	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.597											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.790

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	146	1925	21	128	2342	393	387	37	103	49	64	222
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	146	1925	21	128	2342	393	387	37	103	49	64	222
Peak Hour Factor	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	510	6	34	620	104	102	10	27	13	17	59
Total Analysis Volume [veh/h]	155	2039	22	136	2481	416	410	39	109	52	68	235
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

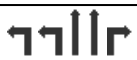
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.26	0.26	0.09	0.45	0.45	0.09	0.09	0.07	0.03	0.04	0.15
Intersection LOS	C											
Intersection V/C	0.790											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.619

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	128	1516	204	188	1934	272	224	229	59	435	640	282
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	128	1516	204	188	1934	272	224	229	59	435	640	282
Peak Hour Factor	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	383	52	48	489	69	57	58	15	110	162	71
Total Analysis Volume [veh/h]	129	1533	206	190	1956	275	226	232	60	440	647	285
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.24	0.00	0.06	0.31	0.10	0.07	0.09	0.09	0.14	0.20	0.18
Intersection LOS	B											
Intersection V/C	0.619											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	326	631	104	71	165	70	113	459	43	28	629	183
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	326	631	104	71	165	70	113	459	43	28	629	183
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	86	166	27	19	43	18	30	121	11	7	165	48
Total Analysis Volume [veh/h]	342	663	109	75	173	74	119	482	45	29	661	192
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.41	0.07	0.05	0.15	0.15	0.07	0.15	0.03	0.02	0.27	0.27
Intersection LOS	D											
Intersection V/C	0.802											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	693	666	88	197	10	153	81	263	9	37	647	179
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	693	666	88	197	10	153	81	263	9	37	647	179
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	181	174	23	52	3	40	21	69	2	10	169	47
Total Analysis Volume [veh/h]	725	697	92	206	10	160	85	275	9	39	677	187
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.25	0.25	0.06	0.05	0.05	0.03	0.09	0.09	0.01	0.21	0.05
Intersection LOS	A											
Intersection V/C	0.549											

PM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	D

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1 0		2 0 3	0 1		2 0 3	0 1		2 0 3	0 1	
Volume Module:												
Base Vol:	227	1709	99	165	941	94	273	724	232	173	1390	248
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	227	1709	99	165	941	94	273	724	232	173	1390	248
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	1709	99	165	941	94	273	724	232	173	1390	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	227	1709	99	165	941	94	273	724	232	173	1390	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	1709	99	165	941	94	273	724	232	173	1390	248
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	227	1709	99	165	941	94	273	724	232	173	1390	248
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.04	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.84	0.16	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4737	263	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.36	0.38	0.05	0.18	0.06	0.09	0.14	0.15	0.05	0.27	0.16
Crit Moves:			****	****			****				****	

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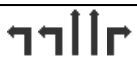
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	154	1794	326	102	1218	79	200	440	84	247	613	152
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	154	1794	326	102	1218	79	200	440	84	247	613	152
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	472	86	27	320	21	53	116	22	65	161	40
Total Analysis Volume [veh/h]	162	1886	343	107	1281	83	210	463	88	260	645	160
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

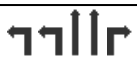
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.39	0.21	0.03	0.28	0.28	0.07	0.17	0.17	0.08	0.20	0.10
Intersection LOS	B											
Intersection V/C	0.694											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.716

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	166	1844	318	67	1429	97	113	172	524	370	447	305
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	1844	318	67	1429	97	113	172	524	370	447	305
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	482	83	18	374	25	30	45	137	97	117	80
Total Analysis Volume [veh/h]	174	1929	333	70	1495	101	118	180	548	387	468	319
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.40	0.21	0.02	0.33	0.33	0.07	0.11	0.17	0.12	0.15	0.20
Intersection LOS	C											
Intersection V/C	0.716											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	189	1282	0	0	2026	300	0	0	0	770	0	1070
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	1282	0	0	2026	300	0	0	0	770	0	1070
Peak Hour Factor	0.9560	0.9560	1.0000	1.0000	0.9560	0.9560	1.0000	1.0000	1.0000	0.9560	1.0000	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	335	0	0	530	78	0	0	0	201	0	280
Total Analysis Volume [veh/h]	198	1341	0	0	2119	314	0	0	0	805	0	1119
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.28	0.00	0.00	0.22	0.20	0.00	0.00	0.00	0.25	0.00	0.35
Intersection LOS	B											
Intersection V/C	0.694											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1117	530	1095	1694	0	356	0	429	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1117	530	1095	1694	0	356	0	429	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	290	138	285	440	0	93	0	111	0	0	0
Total Analysis Volume [veh/h]	0	1161	551	1138	1761	0	370	0	446	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.21	0.21	0.24	0.37	0.00	0.12	0.00	0.14	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.590											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.502

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1518	105	147	1810	69	82
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1518	105	147	1810	69	82
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	396	27	38	472	18	21
Total Analysis Volume [veh/h]	1583	109	153	1887	72	86
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.35	0.35	0.10	0.39	0.05	0.05
Intersection LOS	A					
Intersection V/C	0.502					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.637

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	244	1114	331	201	1382	284	272	398	173	630	1179	175
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	244	1114	331	201	1382	284	272	398	173	630	1179	175
Peak Hour Factor	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	284	84	51	352	72	69	101	44	160	300	45
Total Analysis Volume [veh/h]	248	1134	337	205	1407	289	277	405	176	642	1201	178
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.24	0.01	0.06	0.22	0.18	0.09	0.13	0.11	0.20	0.25	0.11
Intersection LOS	B											
Intersection V/C	0.637											

APPENDIX C-IV

EXISTING PLUS PROJECT TRAFFIC CONDITIONS (CITY OF SANTA ANA GUIDELINES)

AM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	130	903	90	309	1849	123	123	1118	343	130	434	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	903	90	309	1849	123	123	1118	343	130	434	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	903	90	309	1849	123	123	1118	343	130	434	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	903	90	309	1849	123	123	1118	343	130	434	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	903	90	309	1849	123	123	1118	343	130	434	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	903	90	309	1849	123	123	1118	343	130	434	129
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.06	0.10	0.36	0.08	0.08	0.22	0.21	0.08	0.09	0.08
Crit Moves:	****				****			****		****		

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AM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	199	1287	230	166	1957	47	16	107	67	129	141	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	199	1287	230	166	1957	47	16	107	67	129	141	83
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	199	1287	230	166	1957	47	16	107	67	129	141	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	199	1287	230	166	1957	47	16	107	67	129	141	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	1287	230	166	1957	47	16	107	67	129	141	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	199	1287	230	166	1957	47	16	107	67	129	141	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.23	0.77	1.10	1.20	0.70
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	2068	1232	1758	1918	1123
Capacity Analysis Module:												
Vol/Sat:	0.06	0.25	0.14	0.05	0.38	0.03	0.01	0.05	0.05	0.07	0.07	0.07
Crit Moves:	****				****				****			****

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AM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.670
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	204	891	170	212	1617	171	44	255	62	283	345	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	204	891	170	212	1617	171	44	255	62	283	345	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	891	170	212	1617	171	44	255	62	283	345	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	891	170	212	1617	171	44	255	62	283	345	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	891	170	212	1617	171	44	255	62	283	345	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	204	891	170	212	1617	171	44	255	62	283	345	96
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.71	0.29	2.00	1.61	0.39	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4541	459	3200	2674	626	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.11	0.07	0.36	0.37	0.01	0.10	0.10	0.09	0.10	0.06
Crit Moves:	****					****		****		****		

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PM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	581	1549	86	208	1086	172	137	479	185	85	1438	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	581	1549	86	208	1086	172	137	479	185	85	1438	270
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	581	1549	86	208	1086	172	137	479	185	85	1438	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	581	1549	86	208	1086	172	137	479	185	85	1438	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	581	1549	86	208	1086	172	137	479	185	85	1438	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	581	1549	86	208	1086	172	137	479	185	85	1438	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.30	0.05	0.07	0.21	0.11	0.09	0.09	0.12	0.05	0.28	0.17
Crit Moves:	****				****		****				****	

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PM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	173	1837	236	96	1396	53	64	148	212	234	659	196
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	173	1837	236	96	1396	53	64	148	212	234	659	196
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	1837	236	96	1396	53	64	148	212	234	659	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	173	1837	236	96	1396	53	64	148	212	234	659	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	1837	236	96	1396	53	64	148	212	234	659	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	173	1837	236	96	1396	53	64	148	212	234	659	196
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.04	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.00	1.46	0.54
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	1700	1600	1600	2425	869
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.15	0.03	0.27	0.03	0.04	0.09	0.13	0.15	0.27	0.23
Crit Moves:		****		****					****		****	

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PM Existing Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	154	1794	326	102	1218	79	200	440	84	247	613	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	1794	326	102	1218	79	200	440	84	247	613	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	1794	326	102	1218	79	200	440	84	247	613	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	154	1794	326	102	1218	79	200	440	84	247	613	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	1794	326	102	1218	79	200	440	84	247	613	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	154	1794	326	102	1218	79	200	440	84	247	613	152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	2.00	1.68	0.32	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4708	292	3200	2787	513	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.20	0.03	0.26	0.27	0.06	0.16	0.16	0.08	0.18	0.10
Crit Moves:		****		****				****		****		

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APPENDIX C-V

YEAR 2021 CUMULATIVE TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.796

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	144	921	99	321	1843	139	129	1236	350	136	500	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	144	921	99	321	1843	139	129	1236	350	136	500	136
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	238	26	83	475	36	33	319	90	35	129	35
Total Analysis Volume [veh/h]	149	950	102	331	1902	143	133	1276	361	140	516	140
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.20	0.06	0.10	0.40	0.09	0.08	0.27	0.23	0.09	0.11	0.09
Intersection LOS	C											
Intersection V/C	0.796											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	64	1180	93	69	2221	76	5	32	28	18	31	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	1180	93	69	2221	76	5	32	28	18	31	33
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	304	24	18	573	20	1	8	7	5	8	9
Total Analysis Volume [veh/h]	66	1218	96	71	2292	78	5	33	29	19	32	34
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.27	0.27	0.04	0.49	0.49	0.00	0.02	0.02	0.01	0.04	0.04
Intersection LOS	A											
Intersection V/C	0.579											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	198	1334	237	147	1975	48	16	115	52	133	163	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	198	1334	237	147	1975	48	16	115	52	133	163	84
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	347	62	38	513	12	4	30	14	35	42	22
Total Analysis Volume [veh/h]	206	1387	246	153	2053	50	17	120	54	138	169	87
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

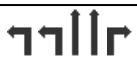
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.29	0.15	0.05	0.43	0.03	0.01	0.05	0.05	0.04	0.08	0.08
Intersection LOS	B											
Intersection V/C	0.629											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.564

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	313	1807	229	74	2018	45	7	49	255	91	194	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	313	1807	229	74	2018	45	7	49	255	91	194	41
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	475	60	19	530	12	2	13	67	24	51	11
Total Analysis Volume [veh/h]	329	1900	241	78	2122	47	7	52	268	96	204	43
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.30	0.12	0.02	0.33	0.03	0.00	0.10	0.10	0.03	0.06	0.03
Intersection LOS	A											
Intersection V/C	0.564											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.279

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	94	255
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	94	255
Peak Hour Factor	0.8920	0.8920	1.0000	1.0000	0.8920	0.8920
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	85	0	0	0	26	0
Total Analysis Volume [veh/h]	341	0	0	0	105	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.00	0.00	0.07	0.00
Intersection LOS	A					
Intersection V/C	0.279					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.531

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1464	0	0	1330	1025	0	0	0	457	0	893
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1464	0	0	1330	1025	0	0	0	457	0	893
Peak Hour Factor	1.0000	0.9600	1.0000	1.0000	0.9600	0.9600	1.0000	1.0000	1.0000	0.9600	1.0000	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	381	0	0	346	0	0	0	0	119	0	233
Total Analysis Volume [veh/h]	0	1525	0	0	1385	0	0	0	0	476	0	930
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.24	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.15	0.00	0.29
Intersection LOS	A											
Intersection V/C	0.531											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.462

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1150	1799	0	1706	0	402	0	454	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1150	1799	0	1706	0	402	0	454	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	299	0	0	443	0	104	0	118	0	0	0
Total Analysis Volume [veh/h]	0	1195	0	0	1773	0	418	0	472	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

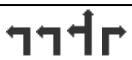
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.25	0.00	0.00	0.28	0.00	0.13	0.00	0.19	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.462											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	119	2145	16	54	1880	190	667	37	137	15	43	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	2145	16	54	1880	190	667	37	137	15	43	132
Peak Hour Factor	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	546	4	14	478	48	170	9	35	4	11	34
Total Analysis Volume [veh/h]	121	2182	16	55	1913	193	679	38	139	15	44	134
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

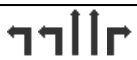
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.27	0.27	0.03	0.33	0.33	0.14	0.15	0.09	0.01	0.03	0.08
Intersection LOS	B											
Intersection V/C	0.638											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	62	1888	249	210	1462	190	239	242	59	231	221	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1888	249	210	1462	190	239	242	59	231	221	123
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	489	64	54	378	49	62	63	15	60	57	32
Total Analysis Volume [veh/h]	64	1954	258	217	1513	197	247	251	61	239	229	127
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.31	0.09	0.07	0.24	0.05	0.08	0.10	0.10	0.07	0.07	0.08
Intersection LOS	A											
Intersection V/C	0.545											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	96	311	46	70	128	37	73	312	45	47	322	97
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	311	46	70	128	37	73	312	45	47	322	97
Peak Hour Factor	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	95	14	21	39	11	22	96	14	14	99	30
Total Analysis Volume [veh/h]	118	382	56	86	157	45	90	383	55	58	395	119
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.24	0.04	0.05	0.13	0.13	0.06	0.12	0.03	0.04	0.16	0.16
Intersection LOS	A											
Intersection V/C	0.509											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.331

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	166	475	65	98	4	85	80	250	0	5	99	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	475	65	98	4	85	80	250	0	5	99	49
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	141	19	29	1	25	24	74	0	1	29	15
Total Analysis Volume [veh/h]	197	564	77	116	5	101	95	297	0	6	118	58
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.20	0.20	0.04	0.03	0.03	0.03	0.09	0.00	0.00	0.04	0.00
Intersection LOS	A											
Intersection V/C	0.331											

AM Year 2021 Cumulative Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	228	786	94	307	1575	171	119	1088	154	224	547	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	228	786	94	307	1575	171	119	1088	154	224	547	142
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	228	786	94	307	1575	171	119	1088	154	224	547	142
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	228	786	94	307	1575	171	119	1088	154	224	547	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	786	94	307	1575	171	119	1088	154	224	547	142
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	228	786	94	307	1575	171	119	1088	154	224	547	142
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.68	0.32	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4487	513	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.10	0.31	0.11	0.04	0.21	0.10	0.07	0.11	0.09
Crit Moves:	****				****			****		****		

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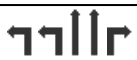
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.687

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	217	909	159	230	1658	143	44	261	64	271	329	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	909	159	230	1658	143	44	261	64	271	329	99
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	248	43	63	453	39	12	71	17	74	90	27
Total Analysis Volume [veh/h]	237	992	174	251	1810	156	48	285	70	296	359	108
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

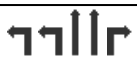
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.21	0.11	0.08	0.41	0.41	0.02	0.11	0.11	0.09	0.11	0.07
Intersection LOS	B											
Intersection V/C	0.687											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.704

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	245	1226	187	26	1920	48	8	95	159	304	113	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	245	1226	187	26	1920	48	8	95	159	304	113	55
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	336	51	7	527	13	2	26	44	83	31	15
Total Analysis Volume [veh/h]	269	1346	205	29	2108	53	9	104	175	334	124	60
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.28	0.13	0.01	0.45	0.45	0.01	0.07	0.05	0.10	0.04	0.04
Intersection LOS	C											
Intersection V/C	0.704											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.689

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	263	801	0	0	2047	299	0	0	0	668	0	849
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	801	0	0	2047	299	0	0	0	668	0	849
Peak Hour Factor	0.9330	0.9330	1.0000	1.0000	0.9330	0.9330	1.0000	1.0000	1.0000	0.9330	1.0000	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	215	0	0	548	80	0	0	0	179	0	227
Total Analysis Volume [veh/h]	282	859	0	0	2194	320	0	0	0	716	0	910
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.18	0.18	0.00	0.00	0.23	0.20	0.00	0.00	0.00	0.22	0.00	0.28
Intersection LOS	B											
Intersection V/C	0.689											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.633

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	915	1071	1213	1500	0	155	0	331	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	915	1071	1213	1500	0	155	0	331	0	0	0
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	0.9200	1.0000	0.9200	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	249	291	330	408	0	42	0	90	0	0	0
Total Analysis Volume [veh/h]	0	995	1164	1318	1630	0	168	0	360	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.27	0.27	0.34	0.00	0.05	0.00	0.11	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.633											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1717	124	137	1686	119	169
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1717	124	137	1686	119	169
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	478	35	38	469	33	47
Total Analysis Volume [veh/h]	1912	138	153	1878	133	188
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.43	0.43	0.10	0.39	0.08	0.12
Intersection LOS	B					
Intersection V/C	0.640					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	160	1364	543	188	1331	209	269	489	143	316	319	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	1364	543	188	1331	209	269	489	143	316	319	186
Peak Hour Factor	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	384	153	53	374	59	76	138	40	89	90	52
Total Analysis Volume [veh/h]	180	1534	611	211	1497	235	303	550	161	355	359	209
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.32	0.27	0.07	0.23	0.15	0.09	0.17	0.10	0.11	0.07	0.13
Intersection LOS	B											
Intersection V/C	0.668											

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.870

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	597	1543	92	218	1099	179	152	556	196	95	1576	281
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	597	1543	92	218	1099	179	152	556	196	95	1576	281
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	155	400	24	57	285	46	39	144	51	25	409	73
Total Analysis Volume [veh/h]	619	1601	95	226	1140	186	158	577	203	99	1635	291
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.33	0.06	0.07	0.24	0.12	0.10	0.12	0.13	0.06	0.34	0.18
Intersection LOS	D											
Intersection V/C	0.870											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	39	2026	38	22	1342	7	41	53	89	84	234	133
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	2026	38	22	1342	7	41	53	89	84	234	133
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	531	10	6	352	2	11	14	23	22	61	35
Total Analysis Volume [veh/h]	41	2124	40	23	1407	7	43	56	93	88	245	139
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.45	0.45	0.01	0.29	0.29	0.03	0.04	0.06	0.06	0.24	0.24
Intersection LOS	C											
Intersection V/C	0.732											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.845

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	163	1850	243	95	1435	55	66	183	205	241	702	193
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	1850	243	95	1435	55	66	183	205	241	702	193
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	479	63	25	371	14	17	47	53	62	182	50
Total Analysis Volume [veh/h]	169	1915	252	98	1486	57	68	189	212	249	727	200
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

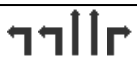
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.40	0.16	0.03	0.31	0.04	0.04	0.13	0.13	0.16	0.29	0.29
Intersection LOS	D											
Intersection V/C	0.845											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.719

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	405	2050	183	72	1739	89	20	53	405	301	870	262
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	2050	183	72	1739	89	20	53	405	301	870	262
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	539	48	19	458	23	5	14	107	79	229	69
Total Analysis Volume [veh/h]	426	2158	193	76	1831	94	21	56	426	317	916	276
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.34	0.02	0.02	0.29	0.06	0.01	0.15	0.15	0.10	0.29	0.17
Intersection LOS	C											
Intersection V/C	0.719											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.575

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	426	0	0	482	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	426	0	0	482	882
Peak Hour Factor	0.9190	0.9190	1.0000	1.0000	0.9190	0.9190
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	99	0	0	0	131	0
Total Analysis Volume [veh/h]	396	0	0	0	524	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.00	0.00	0.00	0.33	0.00
Intersection LOS	A					
Intersection V/C	0.575					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.657

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1481	0	0	1367	1143	0	0	0	794	0	1166
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1481	0	0	1367	1143	0	0	0	794	0	1166
Peak Hour Factor	1.0000	0.9730	1.0000	1.0000	0.9730	0.9730	1.0000	1.0000	1.0000	0.9730	1.0000	0.9730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	381	0	0	351	0	0	0	0	204	0	300
Total Analysis Volume [veh/h]	0	1522	0	0	1405	0	0	0	0	816	0	1198
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.24	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.26	0.00	0.42
Intersection LOS	B											
Intersection V/C	0.657											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1282	1294	0	2155	0	204	0	781	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1282	1294	0	2155	0	204	0	781	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	337	0	0	567	0	54	0	206	0	0	0
Total Analysis Volume [veh/h]	0	1349	0	0	2268	0	215	0	822	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

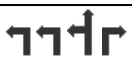
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.28	0.00	0.00	0.35	0.00	0.07	0.00	0.22	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.611											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.808

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	150	1945	22	132	2376	405	399	38	106	50	66	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	1945	22	132	2376	405	399	38	106	50	66	229
Peak Hour Factor	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	515	6	35	629	107	106	10	28	13	17	61
Total Analysis Volume [veh/h]	159	2060	23	140	2517	429	423	40	112	53	70	243
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

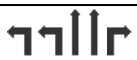
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.26	0.26	0.09	0.46	0.46	0.09	0.10	0.07	0.03	0.04	0.15
Intersection LOS	D											
Intersection V/C	0.808											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.633

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	132	1534	212	194	1971	277	226	236	61	449	659	290
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	1534	212	194	1971	277	226	236	61	449	659	290
Peak Hour Factor	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	388	54	49	498	70	57	60	15	113	167	73
Total Analysis Volume [veh/h]	133	1551	214	196	1993	280	229	239	62	454	666	293
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.24	0.00	0.06	0.31	0.10	0.07	0.09	0.09	0.14	0.21	0.18
Intersection LOS	B											
Intersection V/C	0.633											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.808

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	336	639	107	73	150	68	94	429	31	29	660	188
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	336	639	107	73	150	68	94	429	31	29	660	188
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	168	28	19	39	18	25	113	8	8	173	49
Total Analysis Volume [veh/h]	353	671	112	77	158	71	99	451	33	30	693	197
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.42	0.07	0.05	0.14	0.14	0.06	0.14	0.02	0.02	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.808											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.530

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	656	694	91	190	12	136	66	190	7	38	580	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	656	694	91	190	12	136	66	190	7	38	580	184
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	172	181	24	50	3	36	17	50	2	10	152	48
Total Analysis Volume [veh/h]	686	726	95	199	13	142	69	199	7	40	607	192
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.26	0.26	0.06	0.05	0.05	0.02	0.06	0.06	0.01	0.19	0.06
Intersection LOS	A											
Intersection V/C	0.530											

PM Year 2021 Cumulative Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	237	1724	106	175	949	99	282	815	242	182	1534	258
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	237	1724	106	175	949	99	282	815	242	182	1534	258
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	1724	106	175	949	99	282	815	242	182	1534	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	237	1724	106	175	949	99	282	815	242	182	1534	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	1724	106	175	949	99	282	815	242	182	1534	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	237	1724	106	175	949	99	282	815	242	182	1534	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.04	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.83	0.17	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4722	278	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.38	0.05	0.19	0.06	0.09	0.16	0.15	0.06	0.30	0.16
Crit Moves:			****	****			****				****	

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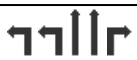
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	169	1838	319	122	1245	75	179	435	87	227	650	157
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	169	1838	319	122	1245	75	179	435	87	227	650	157
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	483	84	32	327	20	47	114	23	60	171	41
Total Analysis Volume [veh/h]	178	1933	335	128	1309	79	188	457	91	239	683	165
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

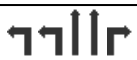
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.40	0.21	0.04	0.29	0.29	0.06	0.17	0.17	0.07	0.21	0.10
Intersection LOS	C											
Intersection V/C	0.715											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	146	1907	328	72	1481	50	88	149	502	381	448	317
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	146	1907	328	72	1481	50	88	149	502	381	448	317
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	499	86	19	387	13	23	39	131	100	117	83
Total Analysis Volume [veh/h]	153	1995	343	75	1549	52	92	156	525	399	469	332
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.42	0.21	0.02	0.33	0.33	0.06	0.10	0.16	0.12	0.15	0.21
Intersection LOS	C											
Intersection V/C	0.728											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.712

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	195	1304	0	0	2056	311	0	0	0	793	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	195	1304	0	0	2056	311	0	0	0	793	0	1102
Peak Hour Factor	0.9560	0.9560	1.0000	1.0000	0.9560	0.9560	1.0000	1.0000	1.0000	0.9560	1.0000	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	341	0	0	538	81	0	0	0	207	0	288
Total Analysis Volume [veh/h]	204	1364	0	0	2151	325	0	0	0	829	0	1153
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.28	0.00	0.00	0.22	0.20	0.00	0.00	0.00	0.26	0.00	0.36
Intersection LOS	C											
Intersection V/C	0.712											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.606

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1132	546	1128	1714	0	369	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1132	546	1128	1714	0	369	0	442	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	294	142	293	445	0	96	0	115	0	0	0
Total Analysis Volume [veh/h]	0	1177	568	1173	1782	0	384	0	459	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.22	0.22	0.24	0.37	0.00	0.12	0.00	0.14	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.606											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.512

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1545	108	151	1833	71	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1545	108	151	1833	71	84
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	403	28	39	478	19	22
Total Analysis Volume [veh/h]	1611	113	157	1911	74	88
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.36	0.36	0.10	0.40	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.512					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.653

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	251	1134	343	206	1393	293	280	412	178	650	1215	176
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	1134	343	206	1393	293	280	412	178	650	1215	176
Peak Hour Factor	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	64	289	87	52	355	75	71	105	45	165	309	45
Total Analysis Volume [veh/h]	256	1155	349	210	1419	298	285	420	181	662	1237	179
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.24	0.01	0.07	0.22	0.19	0.09	0.13	0.11	0.21	0.26	0.11
Intersection LOS	B											
Intersection V/C	0.653											

APPENDIX C-VI

YEAR 2021 CUMULATIVE TRAFFIC CONDITIONS (CITY OF SANTA ANA GUIDELINES)

AM Year 2021 Cumulative Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	144	929	99	321	1895	139	129	1236	350	136	500	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	929	99	321	1895	139	129	1236	350	136	500	136
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	929	99	321	1895	139	129	1236	350	136	500	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	929	99	321	1895	139	129	1236	350	136	500	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	929	99	321	1895	139	129	1236	350	136	500	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	929	99	321	1895	139	129	1236	350	136	500	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.06	0.10	0.37	0.09	0.08	0.24	0.22	0.09	0.10	0.09
Crit Moves:	****				****			****		****		

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AM Year 2021 Cumulative Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	199	1341	237	164	2010	48	16	118	59	133	164	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	199	1341	237	164	2010	48	16	118	59	133	164	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	199	1341	237	164	2010	48	16	118	59	133	164	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	199	1341	237	164	2010	48	16	118	59	133	164	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	1341	237	164	2010	48	16	118	59	133	164	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	199	1341	237	164	2010	48	16	118	59	133	164	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.33	0.67	1.04	1.29	0.67
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	2233	1067	1673	2061	1065
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.15	0.05	0.39	0.03	0.01	0.05	0.06	0.08	0.08	0.08
Crit Moves:	****				****				****			****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	217	909	159	230	1658	164	47	267	64	271	364	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	909	159	230	1658	164	47	267	64	271	364	99
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	909	159	230	1658	164	47	267	64	271	364	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	909	159	230	1658	164	47	267	64	271	364	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	909	159	230	1658	164	47	267	64	271	364	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	909	159	230	1658	164	47	267	64	271	364	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.73	0.27	2.00	1.61	0.39	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4568	432	3200	2681	619	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.10	0.07	0.36	0.38	0.01	0.10	0.10	0.08	0.11	0.06
Crit Moves:	****					****		****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.858
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	597	1593	92	218	1109	179	152	556	196	95	1576	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	597	1593	92	218	1109	179	152	556	196	95	1576	281
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	597	1593	92	218	1109	179	152	556	196	95	1576	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	597	1593	92	218	1109	179	152	556	196	95	1576	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	597	1593	92	218	1109	179	152	556	196	95	1576	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	597	1593	92	218	1109	179	152	556	196	95	1576	281
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.19	0.31	0.06	0.07	0.22	0.11	0.10	0.11	0.12	0.06	0.31	0.18
Crit Moves:	****				****		****				****	

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PM Year 2021 Cumulative Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	170	1893	243	98	1441	55	66	184	206	241	705	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1893	243	98	1441	55	66	184	206	241	705	200
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	1893	243	98	1441	55	66	184	206	241	705	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1893	243	98	1441	55	66	184	206	241	705	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1893	243	98	1441	55	66	184	206	241	705	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1893	243	98	1441	55	66	184	206	241	705	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.04	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.00	1.48	0.52
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	1700	1600	1600	2460	835
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.15	0.03	0.28	0.03	0.04	0.11	0.13	0.15	0.29	0.24
Crit Moves:		****		****					****		****	

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PM Year 2021 Cumulative Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	169	1838	319	122	1245	79	199	468	87	227	656	157
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1838	319	122	1245	79	199	468	87	227	656	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1838	319	122	1245	79	199	468	87	227	656	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	1838	319	122	1245	79	199	468	87	227	656	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	1838	319	122	1245	79	199	468	87	227	656	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	1838	319	122	1245	79	199	468	87	227	656	157
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	2.00	1.69	0.31	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4714	286	3200	2798	502	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.20	0.04	0.26	0.28	0.06	0.17	0.17	0.07	0.19	0.10
Crit Moves:		****		****			****				****	

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APPENDIX C-VII

YEAR 2021 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.810

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	149	943	99	321	1898	139	129	1236	356	136	500	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	943	99	321	1898	139	129	1236	356	136	500	136
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	243	26	83	490	36	33	319	92	35	129	35
Total Analysis Volume [veh/h]	154	973	102	331	1959	143	133	1276	367	140	516	140
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.20	0.06	0.10	0.41	0.09	0.08	0.27	0.23	0.09	0.11	0.09
Intersection LOS	D											
Intersection V/C	0.810											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.592

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	64	1206	93	69	2281	76	5	32	28	18	31	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	1206	93	69	2281	76	5	32	28	18	31	33
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	311	24	18	588	20	1	8	7	5	8	9
Total Analysis Volume [veh/h]	66	1245	96	71	2354	78	5	33	29	19	32	34
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.28	0.28	0.04	0.51	0.51	0.00	0.02	0.02	0.01	0.04	0.04
Intersection LOS	A											
Intersection V/C	0.592											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.646

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	205	1358	237	164	2017	48	16	118	67	133	164	85
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	205	1358	237	164	2017	48	16	118	67	133	164	85
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	53	353	62	43	524	12	4	31	17	35	43	22
Total Analysis Volume [veh/h]	213	1412	246	170	2097	50	17	123	70	138	170	88
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

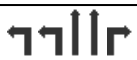
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.29	0.15	0.05	0.44	0.03	0.01	0.06	0.06	0.04	0.08	0.08
Intersection LOS	B											
Intersection V/C	0.646											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.589

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	313	1875	375	113	2018	51	7	49	255	167	213	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	313	1875	375	113	2018	51	7	49	255	167	213	75
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	493	99	30	530	13	2	13	67	44	56	20
Total Analysis Volume [veh/h]	329	1972	394	119	2122	54	7	52	268	176	224	79
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.31	0.19	0.04	0.33	0.03	0.00	0.10	0.10	0.06	0.07	0.05
Intersection LOS	A											
Intersection V/C	0.589											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.298

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	120	255
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	120	255
Peak Hour Factor	0.8920	0.8920	1.0000	1.0000	0.8920	0.8920
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	85	0	0	0	34	0
Total Analysis Volume [veh/h]	341	0	0	0	135	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.00	0.00	0.08	0.00
Intersection LOS	A					
Intersection V/C	0.298					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.570

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1640	0	0	1373	1060	0	0	0	457	0	931
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1640	0	0	1373	1060	0	0	0	457	0	931
Peak Hour Factor	1.0000	0.9600	1.0000	1.0000	0.9600	0.9600	1.0000	1.0000	1.0000	0.9600	1.0000	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	427	0	0	358	0	0	0	0	119	0	242
Total Analysis Volume [veh/h]	0	1708	0	0	1430	0	0	0	0	476	0	970
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.15	0.00	0.30
Intersection LOS	A											
Intersection V/C	0.570											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1248	1799	0	1749	0	481	0	454	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1248	1799	0	1749	0	481	0	454	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	324	0	0	455	0	125	0	118	0	0	0
Total Analysis Volume [veh/h]	0	1297	0	0	1818	0	500	0	472	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

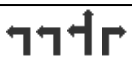
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.00	0.00	0.28	0.00	0.16	0.00	0.20	0.00	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.487											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.645

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	119	2243	16	54	1923	190	667	37	137	15	43	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	2243	16	54	1923	190	667	37	137	15	43	132
Peak Hour Factor	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	570	4	14	489	48	170	9	35	4	11	34
Total Analysis Volume [veh/h]	121	2282	16	55	1956	193	679	38	139	15	44	134
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

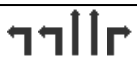
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.29	0.29	0.03	0.34	0.34	0.14	0.15	0.09	0.01	0.03	0.08
Intersection LOS	B											
Intersection V/C	0.645											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.561

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	62	1982	249	210	1502	193	243	242	59	231	221	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1982	249	210	1502	193	243	242	59	231	221	123
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	513	64	54	389	50	63	63	15	60	57	32
Total Analysis Volume [veh/h]	64	2052	258	217	1555	200	252	251	61	239	229	127
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.32	0.09	0.07	0.24	0.05	0.08	0.10	0.10	0.07	0.07	0.08
Intersection LOS	A											
Intersection V/C	0.561											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	96	322	46	70	142	54	76	322	47	47	381	97
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	322	46	70	142	54	76	322	47	47	381	97
Peak Hour Factor	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150	0.8150
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	99	14	21	44	17	23	99	14	14	117	30
Total Analysis Volume [veh/h]	118	395	56	86	174	66	93	395	58	58	467	119
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.25	0.04	0.05	0.15	0.15	0.06	0.12	0.04	0.04	0.18	0.18
Intersection LOS	A											
Intersection V/C	0.542											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.349

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	234	471	65	100	3	100	94	299	1	5	194	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	234	471	65	100	3	100	94	299	1	5	194	49
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	140	19	30	1	30	28	89	0	1	58	15
Total Analysis Volume [veh/h]	278	559	77	119	4	119	112	355	1	6	230	58
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.20	0.20	0.04	0.04	0.04	0.04	0.11	0.11	0.00	0.07	0.00
Intersection LOS	A											
Intersection V/C	0.349											

AM Year 2021 Cumulative Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	228	804	94	307	1617	171	119	1088	154	224	547	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	228	804	94	307	1617	171	119	1088	154	224	547	142
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	228	804	94	307	1617	171	119	1088	154	224	547	142
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	228	804	94	307	1617	171	119	1088	154	224	547	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	804	94	307	1617	171	119	1088	154	224	547	142
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	228	804	94	307	1617	171	119	1088	154	224	547	142
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.69	0.31	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4498	502	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.19	0.10	0.32	0.11	0.04	0.21	0.10	0.07	0.11	0.09
Crit Moves:	****				****			****		****		

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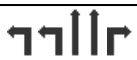
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.705

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	217	923	175	230	1676	167	48	267	64	291	364	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	923	175	230	1676	167	48	267	64	291	364	99
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	252	48	63	457	46	13	73	17	79	99	27
Total Analysis Volume [veh/h]	237	1008	191	251	1830	182	52	291	70	318	397	108
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.21	0.12	0.08	0.42	0.42	0.02	0.11	0.11	0.10	0.12	0.07
Intersection LOS	C											
Intersection V/C	0.705											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.729

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	280	1226	187	26	1920	85	37	103	173	304	136	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	280	1226	187	26	1920	85	37	103	173	304	136	55
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	336	51	7	527	23	10	28	47	83	37	15
Total Analysis Volume [veh/h]	307	1346	205	29	2108	93	41	113	190	334	149	60
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.28	0.13	0.01	0.46	0.46	0.03	0.07	0.06	0.10	0.05	0.04
Intersection LOS	C											
Intersection V/C	0.729											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.691

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	263	836	0	0	2061	299	0	0	0	668	0	849
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	836	0	0	2061	299	0	0	0	668	0	849
Peak Hour Factor	0.9330	0.9330	1.0000	1.0000	0.9330	0.9330	1.0000	1.0000	1.0000	0.9330	1.0000	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	224	0	0	552	80	0	0	0	179	0	227
Total Analysis Volume [veh/h]	282	896	0	0	2209	320	0	0	0	716	0	910
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.18	0.19	0.00	0.00	0.23	0.20	0.00	0.00	0.00	0.22	0.00	0.28
Intersection LOS	B											
Intersection V/C	0.691											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	950	1071	1213	1514	0	155	0	331	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	950	1071	1213	1514	0	155	0	331	0	0	0
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	0.9200	1.0000	0.9200	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	258	291	330	411	0	42	0	90	0	0	0
Total Analysis Volume [veh/h]	0	1033	1164	1318	1646	0	168	0	360	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.27	0.27	0.34	0.00	0.05	0.00	0.11	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.639											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.648

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1752	124	137	1700	119	169
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1752	124	137	1700	119	169
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	488	35	38	473	33	47
Total Analysis Volume [veh/h]	1951	138	153	1893	133	188
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.44	0.44	0.10	0.39	0.08	0.12
Intersection LOS	B					
Intersection V/C	0.648					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	160	1395	543	191	1342	209	269	489	143	316	319	190
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	1395	543	191	1342	209	269	489	143	316	319	190
Peak Hour Factor	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	392	153	54	377	59	76	138	40	89	90	53
Total Analysis Volume [veh/h]	180	1569	611	215	1510	235	303	550	161	355	359	214
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.33	0.27	0.07	0.24	0.15	0.09	0.17	0.10	0.11	0.07	0.13
Intersection LOS	B											
Intersection V/C	0.677											

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.879

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	602	1593	92	218	1132	179	152	556	204	95	1576	281
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	602	1593	92	218	1132	179	152	556	204	95	1576	281
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	156	413	24	57	294	46	39	144	53	25	409	73
Total Analysis Volume [veh/h]	624	1652	95	226	1174	186	158	577	212	99	1635	291
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.34	0.06	0.07	0.24	0.12	0.10	0.12	0.13	0.06	0.34	0.18
Intersection LOS	D											
Intersection V/C	0.879											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.744

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	39	2081	38	22	1383	7	41	53	89	84	234	133
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	2081	38	22	1383	7	41	53	89	84	234	133
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	545	10	6	362	2	11	14	23	22	61	35
Total Analysis Volume [veh/h]	41	2181	40	23	1450	7	43	56	93	88	245	139
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.46	0.46	0.01	0.30	0.30	0.03	0.04	0.06	0.06	0.24	0.24
Intersection LOS	C											
Intersection V/C	0.744											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.863

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	176	1898	243	98	1473	55	66	184	217	241	705	200
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	176	1898	243	98	1473	55	66	184	217	241	705	200
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	491	63	25	381	14	17	48	56	62	182	52
Total Analysis Volume [veh/h]	182	1965	252	101	1525	57	68	190	225	249	730	207
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

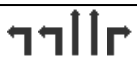
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.41	0.16	0.03	0.32	0.04	0.04	0.13	0.13	0.16	0.29	0.29
Intersection LOS	D											
Intersection V/C	0.863											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.735

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	405	2050	297	128	1766	126	20	53	405	455	906	310
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	2050	297	128	1766	126	20	53	405	455	906	310
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	539	78	34	465	33	5	14	107	120	238	82
Total Analysis Volume [veh/h]	426	2158	313	135	1859	133	21	56	426	479	954	326
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.34	0.05	0.04	0.29	0.08	0.01	0.15	0.15	0.15	0.30	0.20
Intersection LOS	C											
Intersection V/C	0.735											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	426	0	0	555	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	426	0	0	555	882
Peak Hour Factor	0.9190	0.9190	1.0000	1.0000	0.9190	0.9190
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	99	0	0	0	151	0
Total Analysis Volume [veh/h]	396	0	0	0	604	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.00	0.00	0.00	0.38	0.00
Intersection LOS	B					
Intersection V/C	0.625					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.676

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1588	0	0	1456	1237	0	0	0	794	0	1173
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1588	0	0	1456	1237	0	0	0	794	0	1173
Peak Hour Factor	1.0000	0.9730	1.0000	1.0000	0.9730	0.9730	1.0000	1.0000	1.0000	0.9730	1.0000	0.9730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	408	0	0	374	0	0	0	0	204	0	301
Total Analysis Volume [veh/h]	0	1632	0	0	1496	0	0	0	0	816	0	1206
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.26	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.26	0.00	0.42
Intersection LOS	B											
Intersection V/C	0.676											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.626

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1351	1294	0	2244	0	242	0	781	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1351	1294	0	2244	0	242	0	781	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	356	0	0	591	0	64	0	206	0	0	0
Total Analysis Volume [veh/h]	0	1422	0	0	2362	0	255	0	822	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

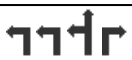
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.30	0.00	0.00	0.37	0.00	0.08	0.00	0.22	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.626											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.823

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	150	2014	22	132	2465	405	399	38	106	50	66	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	2014	22	132	2465	405	399	38	106	50	66	229
Peak Hour Factor	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440	0.9440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	533	6	35	653	107	106	10	28	13	17	61
Total Analysis Volume [veh/h]	159	2133	23	140	2611	429	423	40	112	53	70	243
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

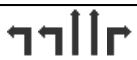
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.27	0.27	0.09	0.48	0.48	0.09	0.10	0.07	0.03	0.04	0.15
Intersection LOS	D											
Intersection V/C	0.823											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.648

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	132	1598	212	194	2057	280	231	236	61	449	659	290
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	1598	212	194	2057	280	231	236	61	449	659	290
Peak Hour Factor	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	404	54	49	520	71	58	60	15	113	167	73
Total Analysis Volume [veh/h]	133	1616	214	196	2080	283	234	239	62	454	666	293
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.25	0.00	0.06	0.33	0.10	0.07	0.09	0.09	0.14	0.21	0.18
Intersection LOS	B											
Intersection V/C	0.648											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.830

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	336	650	107	73	169	71	111	486	41	29	671	188
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	336	650	107	73	169	71	111	486	41	29	671	188
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	171	28	19	44	19	29	128	11	8	176	49
Total Analysis Volume [veh/h]	353	683	112	77	178	75	117	511	43	30	705	197
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.43	0.07	0.05	0.16	0.16	0.07	0.16	0.03	0.02	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.830											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.564

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	710	686	91	200	10	157	83	263	9	38	665	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	710	686	91	200	10	157	83	263	9	38	665	184
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	186	179	24	52	3	41	22	69	2	10	174	48
Total Analysis Volume [veh/h]	743	718	95	209	10	164	87	275	9	40	696	192
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.25	0.25	0.07	0.05	0.05	0.03	0.09	0.09	0.01	0.22	0.05
Intersection LOS	A											
Intersection V/C	0.564											

PM Year 2021 Cumulative Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.883
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	237	1761	106	175	977	99	282	815	242	182	1534	258
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	237	1761	106	175	977	99	282	815	242	182	1534	258
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	1761	106	175	977	99	282	815	242	182	1534	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	237	1761	106	175	977	99	282	815	242	182	1534	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	1761	106	175	977	99	282	815	242	182	1534	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	237	1761	106	175	977	99	282	815	242	182	1534	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.04	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.83	0.17	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4727	273	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.39	0.05	0.19	0.06	0.09	0.16	0.15	0.06	0.30	0.16
Crit Moves:			****	****			****				****	

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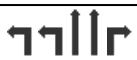
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	169	1852	335	122	1269	79	202	469	87	254	656	157
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	169	1852	335	122	1269	79	202	469	87	254	656	157
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	487	88	32	334	21	53	123	23	67	172	41
Total Analysis Volume [veh/h]	178	1947	352	128	1334	83	212	493	91	267	690	165
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.41	0.22	0.04	0.30	0.30	0.07	0.18	0.18	0.08	0.22	0.10
Intersection LOS	C											
Intersection V/C	0.728											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	169	1907	328	72	1481	101	118	171	533	381	459	317
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	169	1907	328	72	1481	101	118	171	533	381	459	317
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	499	86	19	387	26	31	45	139	100	120	83
Total Analysis Volume [veh/h]	177	1995	343	75	1549	106	123	179	558	399	480	332
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.42	0.21	0.02	0.34	0.34	0.08	0.11	0.17	0.12	0.15	0.21
Intersection LOS	C											
Intersection V/C	0.738											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	195	1327	0	0	2087	311	0	0	0	793	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	195	1327	0	0	2087	311	0	0	0	793	0	1102
Peak Hour Factor	0.9560	0.9560	1.0000	1.0000	0.9560	0.9560	1.0000	1.0000	1.0000	0.9560	1.0000	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	347	0	0	546	81	0	0	0	207	0	288
Total Analysis Volume [veh/h]	204	1388	0	0	2183	325	0	0	0	829	0	1153
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.29	0.00	0.00	0.23	0.20	0.00	0.00	0.00	0.26	0.00	0.36
Intersection LOS	C											
Intersection V/C	0.715											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1155	546	1128	1745	0	369	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1155	546	1128	1745	0	369	0	442	0	0	0
Peak Hour Factor	1.0000	0.9620	0.9620	0.9620	0.9620	1.0000	0.9620	1.0000	0.9620	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	300	142	293	453	0	96	0	115	0	0	0
Total Analysis Volume [veh/h]	0	1201	568	1173	1814	0	384	0	459	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.22	0.22	0.24	0.38	0.00	0.12	0.00	0.14	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.609											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1568	108	151	1864	71	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1568	108	151	1864	71	84
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	409	28	39	486	19	22
Total Analysis Volume [veh/h]	1635	113	157	1944	74	88
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.36	0.36	0.10	0.41	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.517					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.658

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	251	1151	343	209	1421	293	280	412	178	650	1215	181
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	1151	343	209	1421	293	280	412	178	650	1215	181
Peak Hour Factor	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820	0.9820
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	64	293	87	53	362	75	71	105	45	165	309	46
Total Analysis Volume [veh/h]	256	1172	349	213	1447	298	285	420	181	662	1237	184
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.24	0.01	0.07	0.23	0.19	0.09	0.13	0.11	0.21	0.26	0.12
Intersection LOS	B											
Intersection V/C	0.658											

APPENDIX C-VIII

YEAR 2021 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS (CITY OF SANTA ANA GUIDELINES)

AM Year 2021 Cumulative Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	149	943	99	321	1898	139	129	1236	356	136	500	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	943	99	321	1898	139	129	1236	356	136	500	136
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	149	943	99	321	1898	139	129	1236	356	136	500	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	943	99	321	1898	139	129	1236	356	136	500	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	943	99	321	1898	139	129	1236	356	136	500	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	943	99	321	1898	139	129	1236	356	136	500	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.06	0.10	0.37	0.09	0.08	0.24	0.22	0.09	0.10	0.09
Crit Moves:	****				****			****		****		

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AM Year 2021 Cumulative Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	205	1358	237	164	2017	48	16	118	67	133	164	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	1358	237	164	2017	48	16	118	67	133	164	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	1358	237	164	2017	48	16	118	67	133	164	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	1358	237	164	2017	48	16	118	67	133	164	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	1358	237	164	2017	48	16	118	67	133	164	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	205	1358	237	164	2017	48	16	118	67	133	164	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.28	0.72	1.04	1.29	0.67
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	2141	1159	1673	2061	1065
Capacity Analysis Module:												
Vol/Sat:	0.06	0.27	0.15	0.05	0.40	0.03	0.01	0.06	0.06	0.08	0.08	0.08
Crit Moves:	****			****					****			****

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AM Year 2021 Cumulative Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	217	923	175	230	1676	167	48	267	64	291	364	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	923	175	230	1676	167	48	267	64	291	364	99
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	923	175	230	1676	167	48	267	64	291	364	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	923	175	230	1676	167	48	267	64	291	364	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	923	175	230	1676	167	48	267	64	291	364	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	923	175	230	1676	167	48	267	64	291	364	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.73	0.27	2.00	1.61	0.39	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4565	435	3200	2681	619	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.11	0.07	0.37	0.38	0.02	0.10	0.10	0.09	0.11	0.06
Crit Moves:	****					****		****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	602	1593	92	218	1132	179	152	556	204	95	1576	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	602	1593	92	218	1132	179	152	556	204	95	1576	281
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	602	1593	92	218	1132	179	152	556	204	95	1576	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	602	1593	92	218	1132	179	152	556	204	95	1576	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	602	1593	92	218	1132	179	152	556	204	95	1576	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	602	1593	92	218	1132	179	152	556	204	95	1576	281
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.19	0.31	0.06	0.07	0.22	0.11	0.10	0.11	0.13	0.06	0.31	0.18
Crit Moves:	****				****		****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	1 1	0	1 1	0 1	0
Volume Module:												
Base Vol:	176	1898	243	98	1473	55	66	184	217	241	705	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	1898	243	98	1473	55	66	184	217	241	705	200
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	1898	243	98	1473	55	66	184	217	241	705	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	1898	243	98	1473	55	66	184	217	241	705	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1898	243	98	1473	55	66	184	217	241	705	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	1898	243	98	1473	55	66	184	217	241	705	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.04	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.00	1.48	0.52
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	1700	1600	1600	2460	835
Capacity Analysis Module:												
Vol/Sat:	0.06	0.37	0.15	0.03	0.29	0.03	0.04	0.11	0.14	0.15	0.29	0.24
Crit Moves:		****		****					****		****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	169	1852	335	122	1269	79	202	469	87	254	656	157
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1852	335	122	1269	79	202	469	87	254	656	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1852	335	122	1269	79	202	469	87	254	656	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	1852	335	122	1269	79	202	469	87	254	656	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	1852	335	122	1269	79	202	469	87	254	656	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	1852	335	122	1269	79	202	469	87	254	656	157
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	2.00	1.69	0.31	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4719	281	3200	2799	501	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.21	0.04	0.27	0.28	0.06	0.17	0.17	0.08	0.19	0.10
Crit Moves:		****		****				****		****		

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APPENDIX C-IX

YEAR 2035 BUILDOUT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.865

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	144	921	99	390	2170	139	129	1360	350	136	500	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	144	921	99	390	2170	139	129	1360	350	136	500	136
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	230	25	98	543	35	32	340	88	34	125	34
Total Analysis Volume [veh/h]	144	921	99	390	2170	139	129	1360	350	136	500	136
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.19	0.06	0.12	0.45	0.09	0.08	0.28	0.22	0.09	0.10	0.09
Intersection LOS	D											
Intersection V/C	0.865											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	64	1180	93	90	2399	110	10	32	28	20	31	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	1180	93	90	2399	110	10	32	28	20	31	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	295	23	23	600	28	3	8	7	5	8	8
Total Analysis Volume [veh/h]	64	1180	93	90	2399	110	10	32	28	20	31	33
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.27	0.27	0.06	0.52	0.52	0.01	0.02	0.02	0.01	0.04	0.04
Intersection LOS	B											
Intersection V/C	0.609											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.648

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	370	1334	237	147	1975	90	16	191	52	133	163	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	370	1334	237	147	1975	90	16	191	52	133	163	84
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	93	334	59	37	494	23	4	48	13	33	41	21
Total Analysis Volume [veh/h]	370	1334	237	147	1975	90	16	191	52	133	163	84
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

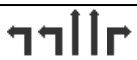
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.28	0.15	0.05	0.41	0.06	0.01	0.06	0.03	0.04	0.06	0.05
Intersection LOS	B											
Intersection V/C	0.648											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	350	2155	483	150	2023	106	10	150	255	91	194	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	350	2155	483	150	2023	106	10	150	255	91	194	41
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	539	121	38	506	27	3	38	64	23	49	10
Total Analysis Volume [veh/h]	350	2155	483	150	2023	106	10	150	255	91	194	41
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.34	0.27	0.05	0.32	0.07	0.01	0.13	0.13	0.03	0.06	0.03
Intersection LOS	A											
Intersection V/C	0.580											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.314

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	199	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	199	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	76	0	0	0	50	0
Total Analysis Volume [veh/h]	304	0	0	0	199	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.00	0.00	0.00	0.12	0.00
Intersection LOS	A					
Intersection V/C	0.314					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	2142	0	0	1330	1224	0	0	0	457	0	893
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2142	0	0	1330	1224	0	0	0	457	0	893
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	536	0	0	333	0	0	0	0	114	0	223
Total Analysis Volume [veh/h]	0	2142	0	0	1330	0	0	0	0	457	0	893
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.33	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.14	0.00	0.28
Intersection LOS	B											
Intersection V/C	0.616											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.613

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1430	1799	0	1706	0	712	0	798	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1430	1799	0	1706	0	712	0	798	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	358	0	0	427	0	178	0	200	0	0	0
Total Analysis Volume [veh/h]	0	1430	0	0	1706	0	712	0	798	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

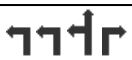
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.30	0.00	0.00	0.27	0.00	0.22	0.00	0.31	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.613											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	119	2212	16	100	2305	190	667	60	137	30	43	160
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	2212	16	100	2305	190	667	60	137	30	43	160
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	553	4	25	576	48	167	15	34	8	11	40
Total Analysis Volume [veh/h]	119	2212	16	100	2305	190	667	60	137	30	43	160
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

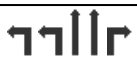
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.28	0.28	0.06	0.36	0.12	0.14	0.15	0.09	0.02	0.03	0.10
Intersection LOS	B											
Intersection V/C	0.686											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	62	1980	270	210	1868	190	261	242	60	231	221	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	1980	270	210	1868	190	261	242	60	231	221	123
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	495	68	53	467	48	65	61	15	58	55	31
Total Analysis Volume [veh/h]	62	1980	270	210	1868	190	261	242	60	231	221	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.31	0.10	0.07	0.29	0.04	0.08	0.09	0.09	0.07	0.07	0.08
Intersection LOS	A											
Intersection V/C	0.542											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.479

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	96	311	46	170	128	37	76	312	120	47	322	97
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	311	46	170	128	37	76	312	120	47	322	97
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	78	12	43	32	9	19	78	30	12	81	24
Total Analysis Volume [veh/h]	96	311	46	170	128	37	76	312	120	47	322	97
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.19	0.03	0.11	0.10	0.10	0.05	0.10	0.08	0.03	0.13	0.13
Intersection LOS	A											
Intersection V/C	0.479											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.477

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	166	475	70	100	10	85	130	250	620	10	99	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	166	475	70	100	10	85	130	250	620	10	99	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	119	18	25	3	21	33	63	155	3	25	12
Total Analysis Volume [veh/h]	166	475	70	100	10	85	130	250	620	10	99	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.17	0.17	0.03	0.03	0.03	0.04	0.27	0.27	0.00	0.03	0.00
Intersection LOS	A											
Intersection V/C	0.477											

AM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1 0		2 0 3	0 1		2 0 3	0 1		2 0 3	0 1	
Volume Module:												
Base Vol:	370	1543	180	307	1575	171	190	1088	154	224	1180	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	1543	180	307	1575	171	190	1088	154	224	1180	190
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	370	1543	180	307	1575	171	190	1088	154	224	1180	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	370	1543	180	307	1575	171	190	1088	154	224	1180	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	370	1543	180	307	1575	171	190	1088	154	224	1180	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	370	1543	180	307	1575	171	190	1088	154	224	1180	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.69	0.31	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4499	501	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.34	0.36	0.10	0.31	0.11	0.06	0.21	0.10	0.07	0.23	0.12
Crit Moves:			****	****			****				****	

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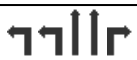
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.725

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	217	1160	159	230	1790	143	63	314	130	370	393	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	1160	159	230	1790	143	63	314	130	370	393	140
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	290	40	58	448	36	16	79	33	93	98	35
Total Analysis Volume [veh/h]	217	1160	159	230	1790	143	63	314	130	370	393	140
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

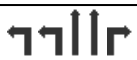
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.24	0.10	0.07	0.40	0.40	0.02	0.14	0.14	0.12	0.12	0.09
Intersection LOS	C											
Intersection V/C	0.725											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.762

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	544	1480	290	30	1920	180	30	95	159	304	193	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	544	1480	290	30	1920	180	30	95	159	304	193	55
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	136	370	73	8	480	45	8	24	40	76	48	14
Total Analysis Volume [veh/h]	544	1480	290	30	1920	180	30	95	159	304	193	55
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.31	0.18	0.01	0.44	0.44	0.02	0.06	0.05	0.10	0.06	0.03
Intersection LOS	C											
Intersection V/C	0.762											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.767

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	270	1142	0	0	2047	300	0	0	0	668	0	1232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	1142	0	0	2047	300	0	0	0	668	0	1232
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	286	0	0	512	75	0	0	0	167	0	308
Total Analysis Volume [veh/h]	270	1142	0	0	2047	300	0	0	0	668	0	1232
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.24	0.00	0.00	0.21	0.19	0.00	0.00	0.00	0.21	0.00	0.39
Intersection LOS	C											
Intersection V/C	0.767											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.637

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1132	1180	1213	1500	0	310	0	370	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1132	1180	1213	1500	0	310	0	370	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	283	295	303	375	0	78	0	93	0	0	0
Total Analysis Volume [veh/h]	0	1132	1180	1213	1500	0	310	0	370	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.29	0.25	0.31	0.00	0.10	0.00	0.12	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.637											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1971	124	137	1686	119	190
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1971	124	137	1686	119	190
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	493	31	34	422	30	48
Total Analysis Volume [veh/h]	1971	124	137	1686	119	190
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.44	0.44	0.09	0.35	0.07	0.12
Intersection LOS	B					
Intersection V/C	0.641					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.744

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	160	1641	790	280	1331	209	330	520	143	390	320	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	1641	790	280	1331	209	330	520	143	390	320	186
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	410	198	70	333	52	83	130	36	98	80	47
Total Analysis Volume [veh/h]	160	1641	790	280	1331	209	330	520	143	390	320	186
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.34	0.37	0.09	0.21	0.13	0.10	0.16	0.09	0.12	0.07	0.12
Intersection LOS	C											
Intersection V/C	0.744											

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.949

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	597	1659	92	218	1112	179	210	556	196	105	1920	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	597	1659	92	218	1112	179	210	556	196	105	1920	350
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	415	23	55	278	45	53	139	49	26	480	88
Total Analysis Volume [veh/h]	597	1659	92	218	1112	179	210	556	196	105	1920	350
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.35	0.06	0.07	0.23	0.11	0.13	0.12	0.12	0.07	0.40	0.22
Intersection LOS	E											
Intersection V/C	0.949											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.777

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	39	2224	70	22	1610	20	90	53	130	84	234	133
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	2224	70	22	1610	20	90	53	130	84	234	133
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	556	18	6	403	5	23	13	33	21	59	33
Total Analysis Volume [veh/h]	39	2224	70	22	1610	20	90	53	130	84	234	133
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.48	0.48	0.01	0.34	0.34	0.06	0.03	0.08	0.05	0.23	0.23
Intersection LOS	C											
Intersection V/C	0.777											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.842

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	163	2072	243	135	1703	55	66	183	238	241	702	193
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	2072	243	135	1703	55	66	183	238	241	702	193
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	518	61	34	426	14	17	46	60	60	176	48
Total Analysis Volume [veh/h]	163	2072	243	135	1703	55	66	183	238	241	702	193
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

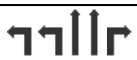
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.43	0.15	0.04	0.35	0.03	0.04	0.06	0.15	0.15	0.22	0.12
Intersection LOS	D											
Intersection V/C	0.842											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.850

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	405	2285	194	130	2076	89	20	53	405	392	1236	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	2285	194	130	2076	89	20	53	405	392	1236	350
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	101	571	49	33	519	22	5	13	101	98	309	88
Total Analysis Volume [veh/h]	405	2285	194	130	2076	89	20	53	405	392	1236	350
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.36	0.00	0.04	0.32	0.06	0.01	0.14	0.14	0.12	0.39	0.22
Intersection LOS	D											
Intersection V/C	0.850											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	730	0	0	912	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	730	0	0	912	882
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	91	0	0	0	228	0
Total Analysis Volume [veh/h]	364	0	0	0	912	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.00	0.00	0.00	0.57	0.00
Intersection LOS	C					
Intersection V/C	0.798					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.733

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1703	0	0	1819	1143	0	0	0	987	0	1166
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1703	0	0	1819	1143	0	0	0	987	0	1166
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	426	0	0	455	0	0	0	0	247	0	292
Total Analysis Volume [veh/h]	0	1703	0	0	1819	0	0	0	0	987	0	1166
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.31	0.00	0.45
Intersection LOS	C											
Intersection V/C	0.733											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.742

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1499	1849	0	2796	0	204	0	977	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1499	1849	0	2796	0	204	0	977	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	375	0	0	699	0	51	0	244	0	0	0
Total Analysis Volume [veh/h]	0	1499	0	0	2796	0	204	0	977	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

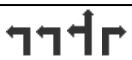
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.31	0.00	0.00	0.44	0.00	0.06	0.00	0.25	0.00	0.00	0.00
Intersection LOS	C											
Intersection V/C	0.742											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.876

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	150	2450	30	200	3373	460	500	38	110	60	66	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	2450	30	200	3373	460	500	38	110	60	66	229
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	613	8	50	843	115	125	10	28	15	17	57
Total Analysis Volume [veh/h]	150	2450	30	200	3373	460	500	38	110	60	66	229
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

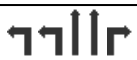
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.31	0.31	0.13	0.53	0.29	0.10	0.11	0.07	0.04	0.04	0.14
Intersection LOS	D											
Intersection V/C	0.876											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.775

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	132	2104	212	292	2719	412	278	236	70	590	710	290
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	2104	212	292	2719	412	278	236	70	590	710	290
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	526	53	73	680	103	70	59	18	148	178	73
Total Analysis Volume [veh/h]	132	2104	212	292	2719	412	278	236	70	590	710	290
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.33	0.00	0.09	0.42	0.17	0.09	0.10	0.10	0.18	0.22	0.18
Intersection LOS	C											
Intersection V/C	0.775											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.775

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	336	639	140	73	180	85	94	429	50	40	667	200
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	336	639	140	73	180	85	94	429	50	40	667	200
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	160	35	18	45	21	24	107	13	10	167	50
Total Analysis Volume [veh/h]	336	639	140	73	180	85	94	429	50	40	667	200
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.40	0.09	0.05	0.17	0.17	0.06	0.13	0.03	0.03	0.27	0.27
Intersection LOS	C											
Intersection V/C	0.775											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.628

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	656	694	91	190	12	330	66	190	130	38	947	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	656	694	91	190	12	330	66	190	130	38	947	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	164	174	23	48	3	83	17	48	33	10	237	46
Total Analysis Volume [veh/h]	656	694	91	190	12	330	66	190	130	38	947	184
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.25	0.25	0.06	0.11	0.11	0.02	0.10	0.10	0.01	0.30	0.06
Intersection LOS	B											
Intersection V/C	0.628											

PM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.915
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	96	Level Of Service:	E

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	250	1724	140	260	1620	100	282	1570	242	280	1534	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	1724	140	260	1620	100	282	1570	242	280	1534	300
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	250	1724	140	260	1620	100	282	1570	242	280	1534	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	1724	140	260	1620	100	282	1570	242	280	1534	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	1724	140	260	1620	100	282	1570	242	280	1534	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	1724	140	260	1620	100	282	1570	242	280	1534	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.77	0.23	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4639	361	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.37	0.39	0.08	0.32	0.06	0.09	0.31	0.15	0.09	0.30	0.19
Crit Moves:			****	****				****		****		

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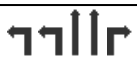
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.761

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	190	1838	319	150	1300	90	411	454	140	227	650	157
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	190	1838	319	150	1300	90	411	454	140	227	650	157
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	460	80	38	325	23	103	114	35	57	163	39
Total Analysis Volume [veh/h]	190	1838	319	150	1300	90	411	454	140	227	650	157
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

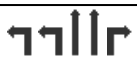
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.38	0.20	0.05	0.29	0.29	0.13	0.19	0.19	0.07	0.20	0.10
Intersection LOS	C											
Intersection V/C	0.761											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	283	1907	470	72	1620	50	240	356	758	381	448	317
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	283	1907	470	72	1620	50	240	356	758	381	448	317
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	477	118	18	405	13	60	89	190	95	112	79
Total Analysis Volume [veh/h]	283	1907	470	72	1620	50	240	356	758	381	448	317
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.40	0.29	0.02	0.35	0.35	0.15	0.22	0.24	0.12	0.14	0.20
Intersection LOS	C											
Intersection V/C	0.792											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.801

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	320	1577	0	0	2468	311	0	0	0	900	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	320	1577	0	0	2468	311	0	0	0	900	0	1102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	394	0	0	617	78	0	0	0	225	0	276
Total Analysis Volume [veh/h]	320	1577	0	0	2468	311	0	0	0	900	0	1102
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.33	0.00	0.00	0.26	0.19	0.00	0.00	0.00	0.28	0.00	0.34
Intersection LOS	D											
Intersection V/C	0.801											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1397	546	1474	1884	0	510	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1397	546	1474	1884	0	510	0	442	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	349	137	369	471	0	128	0	111	0	0	0
Total Analysis Volume [veh/h]	0	1397	546	1474	1884	0	510	0	442	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.24	0.24	0.31	0.39	0.00	0.16	0.00	0.14	0.00	0.00	0.00
Intersection LOS	C											
Intersection V/C	0.709											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.605

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1738	150	151	2422	71	160
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1738	150	151	2422	71	160
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	435	38	38	606	18	40
Total Analysis Volume [veh/h]	1738	150	151	2422	71	160
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.39	0.39	0.09	0.50	0.04	0.10
Intersection LOS	B					
Intersection V/C	0.605					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.816

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	251	1448	520	300	1722	430	280	620	178	650	1600	176
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	1448	520	300	1722	430	280	620	178	650	1600	176
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	362	130	75	431	108	70	155	45	163	400	44
Total Analysis Volume [veh/h]	251	1448	520	300	1722	430	280	620	178	650	1600	176
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.30	0.12	0.09	0.27	0.27	0.09	0.19	0.11	0.20	0.33	0.11
Intersection LOS	D											
Intersection V/C	0.816											

APPENDIX C-X

YEAR 2035 BUILDOUT TRAFFIC CONDITIONS (CITY OF SANTA ANA GUIDELINES)

AM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	144	921	99	390	2170	139	129	1360	350	136	500	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	921	99	390	2170	139	129	1360	350	136	500	136
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	921	99	390	2170	139	129	1360	350	136	500	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	921	99	390	2170	139	129	1360	350	136	500	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	921	99	390	2170	139	129	1360	350	136	500	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	921	99	390	2170	139	129	1360	350	136	500	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.06	0.12	0.43	0.09	0.08	0.27	0.22	0.09	0.10	0.09
Crit Moves:	****				****			****		****		

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AM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	370	1334	237	147	1975	90	16	191	52	133	163	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	1334	237	147	1975	90	16	191	52	133	163	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	370	1334	237	147	1975	90	16	191	52	133	163	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	370	1334	237	147	1975	90	16	191	52	133	163	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	370	1334	237	147	1975	90	16	191	52	133	163	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	370	1334	237	147	1975	90	16	191	52	133	163	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.04	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.35	1.65	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	3400	1600	2157	2743	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.26	0.15	0.05	0.39	0.06	0.01	0.06	0.03	0.06	0.06	0.05
Crit Moves:	****				****			****		****		

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AM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	217	1160	159	230	1790	143	63	314	130	370	393	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1160	159	230	1790	143	63	314	130	370	393	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	1160	159	230	1790	143	63	314	130	370	393	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1160	159	230	1790	143	63	314	130	370	393	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1160	159	230	1790	143	63	314	130	370	393	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1160	159	230	1790	143	63	314	130	370	393	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.78	0.22	2.00	1.41	0.59	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4645	355	3200	2363	937	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.10	0.07	0.39	0.40	0.02	0.13	0.14	0.12	0.12	0.09
Crit Moves:	****					****			****	****		

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PM Year 2035 Buildout Traffic Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.962
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	148	Level Of Service:	E

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	597	1659	92	218	1112	179	210	556	196	105	1920	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	597	1659	92	218	1112	179	210	556	196	105	1920	350
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	597	1659	92	218	1112	179	210	556	196	105	1920	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	597	1659	92	218	1112	179	210	556	196	105	1920	350
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	597	1659	92	218	1112	179	210	556	196	105	1920	350
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	597	1659	92	218	1112	179	210	556	196	105	1920	350
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.19	0.33	0.06	0.07	0.22	0.11	0.13	0.11	0.12	0.07	0.38	0.22
Crit Moves:	****				****		****				****	

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PM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	D

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	163	2072	243	135	1703	55	66	183	238	241	702	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	2072	243	135	1703	55	66	183	238	241	702	193
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	2072	243	135	1703	55	66	183	238	241	702	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	163	2072	243	135	1703	55	66	183	238	241	702	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	2072	243	135	1703	55	66	183	238	241	702	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	163	2072	243	135	1703	55	66	183	238	241	702	193
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	3400	1600	1600	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.41	0.15	0.04	0.33	0.03	0.04	0.05	0.15	0.15	0.21	0.12
Crit Moves:		****		****					****		****	

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PM Year 2035 Buildout Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	190	1838	319	150	1300	90	411	454	140	227	650	157
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1838	319	150	1300	90	411	454	140	227	650	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	190	1838	319	150	1300	90	411	454	140	227	650	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1838	319	150	1300	90	411	454	140	227	650	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1838	319	150	1300	90	411	454	140	227	650	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	1838	319	150	1300	90	411	454	140	227	650	157
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.81	0.19	2.00	1.53	0.47	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4689	311	3200	2546	754	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.36	0.20	0.05	0.28	0.29	0.13	0.18	0.19	0.07	0.19	0.10
Crit Moves:		****		****			****				****	

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APPENDIX C-XI

YEAR 2035 BUILDOUT PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.881

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	149	944	99	390	2235	139	129	1360	356	136	500	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	944	99	390	2235	139	129	1360	356	136	500	136
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	236	25	98	559	35	32	340	89	34	125	34
Total Analysis Volume [veh/h]	149	944	99	390	2235	139	129	1360	356	136	500	136
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.20	0.06	0.12	0.47	0.09	0.08	0.28	0.22	0.09	0.10	0.09
Intersection LOS	D											
Intersection V/C	0.881											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	64	1207	93	90	2469	110	10	32	28	20	31	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	1207	93	90	2469	110	10	32	28	20	31	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	302	23	23	617	28	3	8	7	5	8	8
Total Analysis Volume [veh/h]	64	1207	93	90	2469	110	10	32	28	20	31	33
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.27	0.27	0.06	0.54	0.54	0.01	0.02	0.02	0.01	0.04	0.04
Intersection LOS	B											
Intersection V/C	0.624											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.662

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	377	1360	237	170	2023	90	16	196	69	133	164	85
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	377	1360	237	170	2023	90	16	196	69	133	164	85
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	94	340	59	43	506	23	4	49	17	33	41	21
Total Analysis Volume [veh/h]	377	1360	237	170	2023	90	16	196	69	133	164	85
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

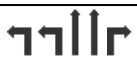
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.28	0.15	0.05	0.42	0.06	0.01	0.06	0.04	0.04	0.06	0.05
Intersection LOS	B											
Intersection V/C	0.662											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.606

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	350	2247	653	189	2025	114	10	150	255	171	214	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	350	2247	653	189	2025	114	10	150	255	171	214	75
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	562	163	47	506	29	3	38	64	43	54	19
Total Analysis Volume [veh/h]	350	2247	653	189	2025	114	10	150	255	171	214	75
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.35	0.35	0.06	0.32	0.07	0.01	0.13	0.13	0.05	0.07	0.05
Intersection LOS	B											
Intersection V/C	0.606											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.333

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	228	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	228	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	76	0	0	0	57	0
Total Analysis Volume [veh/h]	304	0	0	0	228	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.00	0.00	0.00	0.14	0.00
Intersection LOS	A					
Intersection V/C	0.333					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.662

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	2353	0	0	1376	1263	0	0	0	457	0	943
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2353	0	0	1376	1263	0	0	0	457	0	943
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	588	0	0	344	0	0	0	0	114	0	236
Total Analysis Volume [veh/h]	0	2353	0	0	1376	0	0	0	0	457	0	943
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.37	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.14	0.00	0.29
Intersection LOS	B											
Intersection V/C	0.662											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.657

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1545	1799	0	1752	0	809	0	798	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1545	1799	0	1752	0	809	0	798	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	386	0	0	438	0	202	0	200	0	0	0
Total Analysis Volume [veh/h]	0	1545	0	0	1752	0	809	0	798	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

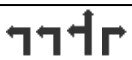
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.32	0.00	0.00	0.27	0.00	0.25	0.00	0.33	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.657											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.693

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	119	2327	16	100	2351	190	667	60	137	30	43	160
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	2327	16	100	2351	190	667	60	137	30	43	160
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	582	4	25	588	48	167	15	34	8	11	40
Total Analysis Volume [veh/h]	119	2327	16	100	2351	190	667	60	137	30	43	160
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

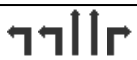
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.29	0.29	0.06	0.37	0.12	0.14	0.15	0.09	0.02	0.03	0.10
Intersection LOS	B											
Intersection V/C	0.693											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	62	2091	270	210	1911	193	265	242	60	231	221	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	2091	270	210	1911	193	265	242	60	231	221	123
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	523	68	53	478	48	66	61	15	58	55	31
Total Analysis Volume [veh/h]	62	2091	270	210	1911	193	265	242	60	231	221	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.33	0.10	0.07	0.30	0.04	0.08	0.09	0.09	0.07	0.07	0.08
Intersection LOS	A											
Intersection V/C	0.559											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	96	322	46	170	142	60	80	325	122	47	399	97
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	322	46	170	142	60	80	325	122	47	399	97
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	81	12	43	36	15	20	81	31	12	100	24
Total Analysis Volume [veh/h]	96	322	46	170	142	60	80	325	122	47	399	97
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.20	0.03	0.11	0.13	0.13	0.05	0.10	0.08	0.03	0.16	0.16
Intersection LOS	A											
Intersection V/C	0.513											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.492

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	244	471	70	102	9	100	144	301	621	10	206	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	244	471	70	102	9	100	144	301	621	10	206	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	118	18	26	2	25	36	75	155	3	52	12
Total Analysis Volume [veh/h]	244	471	70	102	9	100	144	301	621	10	206	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.17	0.17	0.03	0.03	0.03	0.05	0.29	0.29	0.00	0.06	0.00
Intersection LOS	A											
Intersection V/C	0.492											

AM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1 0		2 0 3	0 1		2 0 3	0 1		2 0 3	0 1	
Volume Module:												
Base Vol:	370	1562	180	307	1625	171	190	1088	154	224	1180	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	1562	180	307	1625	171	190	1088	154	224	1180	190
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	370	1562	180	307	1625	171	190	1088	154	224	1180	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	370	1562	180	307	1625	171	190	1088	154	224	1180	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	370	1562	180	307	1625	171	190	1088	154	224	1180	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	370	1562	180	307	1625	171	190	1088	154	224	1180	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.69	0.31	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4504	496	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.36	0.10	0.32	0.11	0.06	0.21	0.10	0.07	0.23	0.12
Crit Moves:			****	****			****				****	

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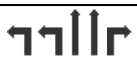
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.744

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	217	1174	175	230	1808	175	68	321	130	390	438	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	1174	175	230	1808	175	68	321	130	390	438	140
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	294	44	58	452	44	17	80	33	98	110	35
Total Analysis Volume [veh/h]	217	1174	175	230	1808	175	68	321	130	390	438	140
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

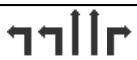
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.24	0.11	0.07	0.41	0.41	0.02	0.14	0.14	0.12	0.14	0.09
Intersection LOS	C											
Intersection V/C	0.744											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	585	1480	290	30	1920	217	59	104	174	304	222	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	585	1480	290	30	1920	217	59	104	174	304	222	55
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	370	73	8	480	54	15	26	44	76	56	14
Total Analysis Volume [veh/h]	585	1480	290	30	1920	217	59	104	174	304	222	55
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.18	0.31	0.18	0.01	0.45	0.45	0.04	0.07	0.05	0.10	0.07	0.03
Intersection LOS	C											
Intersection V/C	0.788											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.769

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	270	1183	0	0	2062	300	0	0	0	668	0	1232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	1183	0	0	2062	300	0	0	0	668	0	1232
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	296	0	0	516	75	0	0	0	167	0	308
Total Analysis Volume [veh/h]	270	1183	0	0	2062	300	0	0	0	668	0	1232
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.25	0.00	0.00	0.21	0.19	0.00	0.00	0.00	0.21	0.00	0.39
Intersection LOS	C											
Intersection V/C	0.769											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.644

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1173	1180	1213	1515	0	310	0	370	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1173	1180	1213	1515	0	310	0	370	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	293	295	303	379	0	78	0	93	0	0	0
Total Analysis Volume [veh/h]	0	1173	1180	1213	1515	0	310	0	370	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.29	0.29	0.25	0.32	0.00	0.10	0.00	0.12	0.00	0.00	0.00
Intersection LOS	B											
Intersection V/C	0.644											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	2012	124	137	1701	119	190
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2012	124	137	1701	119	190
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	503	31	34	425	30	48
Total Analysis Volume [veh/h]	2012	124	137	1701	119	190
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.45	0.45	0.09	0.35	0.07	0.12
Intersection LOS	B					
Intersection V/C	0.649					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.745

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	160	1678	790	283	1343	209	330	520	143	390	320	190
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	1678	790	283	1343	209	330	520	143	390	320	190
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	420	198	71	336	52	83	130	36	98	80	48
Total Analysis Volume [veh/h]	160	1678	790	283	1343	209	330	520	143	390	320	190
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.35	0.37	0.09	0.21	0.13	0.10	0.16	0.09	0.12	0.07	0.12
Intersection LOS	C											
Intersection V/C	0.745											

Intersection Level Of Service Report
Intersection 1: Harbor Boulevard at MacArthur Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.958

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			MacArthur Blvd			MacArthur Blvd		
Base Volume Input [veh/h]	602	1719	92	218	1147	179	210	556	204	105	1920	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	602	1719	92	218	1147	179	210	556	204	105	1920	350
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	151	430	23	55	287	45	53	139	51	26	480	88
Total Analysis Volume [veh/h]	602	1719	92	218	1147	179	210	556	204	105	1920	350
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.36	0.06	0.07	0.24	0.11	0.13	0.12	0.13	0.07	0.40	0.22
Intersection LOS	E											
Intersection V/C	0.958											

Intersection Level Of Service Report
Intersection 2: Harbor Boulevard at Scenic Avenue/Lake Center Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.791

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Scenic Ave			Lake Center Dr		
Base Volume Input [veh/h]	39	2289	70	22	1653	20	90	53	130	84	234	133
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	2289	70	22	1653	20	90	53	130	84	234	133
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	572	18	6	413	5	23	13	33	21	59	33
Total Analysis Volume [veh/h]	39	2289	70	22	1653	20	90	53	130	84	234	133
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.49	0.49	0.01	0.35	0.35	0.06	0.03	0.08	0.05	0.23	0.23
Intersection LOS	C											
Intersection V/C	0.791											

Intersection Level Of Service Report
Intersection 3: Harbor Boulevard at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.864

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	178	2128	243	139	1742	55	66	184	251	241	706	202
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	178	2128	243	139	1742	55	66	184	251	241	706	202
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	532	61	35	436	14	17	46	63	60	177	51
Total Analysis Volume [veh/h]	178	2128	243	139	1742	55	66	184	251	241	706	202
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.44	0.15	0.04	0.36	0.03	0.04	0.06	0.16	0.15	0.22	0.13
Intersection LOS	D											
Intersection V/C	0.864											

Intersection Level Of Service Report
Intersection 4: Harbor Boulevard at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.869

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	405	2289	312	186	2114	137	20	53	405	573	1278	401
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	2289	312	186	2114	137	20	53	405	573	1278	401
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	101	572	78	47	529	34	5	13	101	143	320	100
Total Analysis Volume [veh/h]	405	2289	312	186	2114	137	20	53	405	573	1278	401
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	0	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.36	0.02	0.06	0.33	0.09	0.01	0.14	0.14	0.18	0.40	0.25
Intersection LOS	D											
Intersection V/C	0.869											

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.854

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	730	0	0	1002	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	730	0	0	1002	882
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	91	0	0	0	251	0
Total Analysis Volume [veh/h]	364	0	0	0	1002	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.00	0.00	0.00	0.63	0.00
Intersection LOS	D					
Intersection V/C	0.854					

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.751

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1817	0	0	1924	1259	0	0	0	987	0	1175
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1817	0	0	1924	1259	0	0	0	987	0	1175
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	454	0	0	481	0	0	0	0	247	0	294
Total Analysis Volume [veh/h]	0	1817	0	0	1924	0	0	0	0	987	0	1175
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.28	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.31	0.00	0.45
Intersection LOS	C											
Intersection V/C	0.751											

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.759

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1571	1849	0	2901	0	245	0	977	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1571	1849	0	2901	0	245	0	977	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	393	0	0	725	0	61	0	244	0	0	0
Total Analysis Volume [veh/h]	0	1571	0	0	2901	0	245	0	977	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-

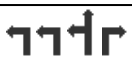
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.33	0.00	0.00	0.45	0.00	0.08	0.00	0.25	0.00	0.00	0.00
Intersection LOS	C											
Intersection V/C	0.759											

Intersection Level Of Service Report
Intersection 8: Harbor Boulevard at Gisler Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.892

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Gisler Ave			Gisler Ave		
Base Volume Input [veh/h]	150	2522	30	200	3478	460	500	38	110	60	66	229
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	2522	30	200	3478	460	500	38	110	60	66	229
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	631	8	50	870	115	125	10	28	15	17	57
Total Analysis Volume [veh/h]	150	2522	30	200	3478	460	500	38	110	60	66	229
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

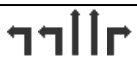
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.32	0.32	0.13	0.54	0.29	0.10	0.11	0.07	0.04	0.04	0.14
Intersection LOS	D											
Intersection V/C	0.892											

Intersection Level Of Service Report
Intersection 9: Harbor Boulevard at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Baker St			Baker St		
Base Volume Input [veh/h]	132	2171	212	292	2821	415	283	236	70	590	710	290
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	2171	212	292	2821	415	283	236	70	590	710	290
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	543	53	73	705	104	71	59	18	148	178	73
Total Analysis Volume [veh/h]	132	2171	212	292	2821	415	283	236	70	590	710	290
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.34	0.00	0.09	0.44	0.17	0.09	0.10	0.10	0.18	0.22	0.18
Intersection LOS	C											
Intersection V/C	0.792											

Intersection Level Of Service Report
Intersection 10: Susan Street at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Susan St			Susan St			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	336	650	140	73	199	89	116	503	63	40	681	200
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	336	650	140	73	199	89	116	503	63	40	681	200
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	163	35	18	50	22	29	126	16	10	170	50
Total Analysis Volume [veh/h]	336	650	140	73	199	89	116	503	63	40	681	200
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.41	0.09	0.05	0.18	0.18	0.07	0.16	0.04	0.03	0.28	0.28
Intersection LOS	C											
Intersection V/C	0.800											

Intersection Level Of Service Report
Intersection 11: Susan Street at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

Intersection Setup

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Susan St			Susan St			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	712	686	91	203	10	351	83	271	132	38	1034	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	712	686	91	203	10	351	83	271	132	38	1034	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	178	172	23	51	3	88	21	68	33	10	259	46
Total Analysis Volume [veh/h]	712	686	91	203	10	351	83	271	132	38	1034	184
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal Group	1	6	0	5	2	0	3	8	0	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.24	0.24	0.06	0.11	0.11	0.03	0.13	0.13	0.01	0.32	0.05
Intersection LOS	B											
Intersection V/C	0.684											

PM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fairview Road at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	E

Street Name:	Fairview Rd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1 0		2 0 3	0 1		2 0 3	0 1		2 0 3	0 1	
Volume Module:												
Base Vol:	250	1769	140	260	1650	100	282	1570	242	280	1534	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	1769	140	260	1650	100	282	1570	242	280	1534	300
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	250	1769	140	260	1650	100	282	1570	242	280	1534	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	1769	140	260	1650	100	282	1570	242	280	1534	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	1769	140	260	1650	100	282	1570	242	280	1534	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	1769	140	260	1650	100	282	1570	242	280	1534	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.04	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	2.78	0.22	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4648	352	3200	5100	1600	3200	5100	1600	3200	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.38	0.40	0.08	0.32	0.06	0.09	0.31	0.15	0.09	0.30	0.19
Crit Moves:			****	****				****		****		

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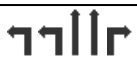
Intersection Level Of Service Report
Intersection 13: Fairview Road at Sunflower Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.776

Intersection Setup

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Sunflower Ave			Sunflower Ave		
Base Volume Input [veh/h]	190	1852	335	150	1324	96	442	498	140	254	658	157
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	190	1852	335	150	1324	96	442	498	140	254	658	157
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	463	84	38	331	24	111	125	35	64	165	39
Total Analysis Volume [veh/h]	190	1852	335	150	1324	96	442	498	140	254	658	157
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.39	0.21	0.05	0.30	0.30	0.14	0.20	0.20	0.08	0.21	0.10
Intersection LOS	C											
Intersection V/C	0.776											

Intersection Level Of Service Report
Intersection 14: Fairview Road at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.822

Intersection Setup

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			South Coast Dr			South Coast Dr		
Base Volume Input [veh/h]	307	1907	470	72	1620	101	270	383	795	381	460	317
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	307	1907	470	72	1620	101	270	383	795	381	460	317
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	477	118	18	405	25	68	96	199	95	115	79
Total Analysis Volume [veh/h]	307	1907	470	72	1620	101	270	383	795	381	460	317
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.40	0.29	0.02	0.36	0.36	0.17	0.24	0.25	0.12	0.14	0.20
Intersection LOS	D											
Intersection V/C	0.822											

Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	320	1601	0	0	2505	311	0	0	0	900	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	320	1601	0	0	2505	311	0	0	0	900	0	1102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	400	0	0	626	78	0	0	0	225	0	276
Total Analysis Volume [veh/h]	320	1601	0	0	2505	311	0	0	0	900	0	1102
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.33	0.00	0.00	0.26	0.19	0.00	0.00	0.00	0.28	0.00	0.34
Intersection LOS	D											
Intersection V/C	0.805											

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.712

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1421	546	1474	1921	0	510	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1421	546	1474	1921	0	510	0	442	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	355	137	369	480	0	128	0	111	0	0	0
Total Analysis Volume [veh/h]	0	1421	546	1474	1921	0	510	0	442	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.25	0.25	0.31	0.40	0.00	0.16	0.00	0.14	0.00	0.00	0.00
Intersection LOS	C											
Intersection V/C	0.712											

Intersection Level Of Service Report
Intersection 17: Fairview Road at Paularino Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.612

Intersection Setup

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name	Fairview Rd		Fairview Rd		Paularino Ave	
Base Volume Input [veh/h]	1762	150	151	2459	71	160
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1762	150	151	2459	71	160
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	441	38	38	615	18	40
Total Analysis Volume [veh/h]	1762	150	151	2459	71	160
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	6	0	5	2	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.40	0.40	0.09	0.51	0.04	0.10
Intersection LOS	B					
Intersection V/C	0.612					

Intersection Level Of Service Report
Intersection 18: Fairview Road at Baker Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.821

Intersection Setup

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			Baker St			Baker St		
Base Volume Input [veh/h]	251	1466	520	303	1756	430	280	620	178	650	1600	181
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	1466	520	303	1756	430	280	620	178	650	1600	181
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	367	130	76	439	108	70	155	45	163	400	45
Total Analysis Volume [veh/h]	251	1466	520	303	1756	430	280	620	178	650	1600	181
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.31	0.12	0.09	0.27	0.27	0.09	0.19	0.11	0.20	0.33	0.11
Intersection LOS	D											
Intersection V/C	0.821											

APPENDIX C-XII

YEAR 2035 BUILDOUT PLUS PROJECT TRAFFIC CONDITIONS (CITY OF SANTA ANA GUIDELINES)

AM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.886
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	149	944	99	390	2235	139	129	1360	356	136	500	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	944	99	390	2235	139	129	1360	356	136	500	136
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	149	944	99	390	2235	139	129	1360	356	136	500	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	944	99	390	2235	139	129	1360	356	136	500	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	944	99	390	2235	139	129	1360	356	136	500	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	944	99	390	2235	139	129	1360	356	136	500	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.06	0.12	0.44	0.09	0.08	0.27	0.22	0.09	0.10	0.09
Crit Moves:	****				****			****		****		

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AM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	377	1360	237	170	2023	90	16	196	69	133	164	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	377	1360	237	170	2023	90	16	196	69	133	164	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	377	1360	237	170	2023	90	16	196	69	133	164	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	377	1360	237	170	2023	90	16	196	69	133	164	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	377	1360	237	170	2023	90	16	196	69	133	164	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	377	1360	237	170	2023	90	16	196	69	133	164	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.04	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.34	1.66	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	3400	1600	2149	2751	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.15	0.05	0.40	0.06	0.01	0.06	0.04	0.06	0.06	0.05
Crit Moves:	****				****			****		****		

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AM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	217	1174	175	230	1808	175	68	321	130	390	438	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1174	175	230	1808	175	68	321	130	390	438	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	1174	175	230	1808	175	68	321	130	390	438	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1174	175	230	1808	175	68	321	130	390	438	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1174	175	230	1808	175	68	321	130	390	438	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1174	175	230	1808	175	68	321	130	390	438	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.05	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.74	0.26	2.00	1.42	0.58	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4576	424	3200	2378	922	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.11	0.07	0.40	0.41	0.02	0.14	0.14	0.12	0.13	0.09
Crit Moves:	****					****		****		****		

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PM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Harbor Boulevard at MacArthur Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	164	Level Of Service:	E

Street Name:	Harbor Blvd						MacArthur Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	602	1719	92	218	1147	179	210	556	204	105	1920	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	602	1719	92	218	1147	179	210	556	204	105	1920	350
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	602	1719	92	218	1147	179	210	556	204	105	1920	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	602	1719	92	218	1147	179	210	556	204	105	1920	350
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	602	1719	92	218	1147	179	210	556	204	105	1920	350
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	602	1719	92	218	1147	179	210	556	204	105	1920	350
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	5100	1600	1600	5100	1600
Capacity Analysis Module:												
Vol/Sat:	0.19	0.34	0.06	0.07	0.22	0.11	0.13	0.11	0.13	0.07	0.38	0.22
Crit Moves:	****			****			****				****	

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PM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Harbor Avenue at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Street Name:	Harbor Ave						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	178	2128	243	139	1742	55	66	184	251	241	706	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	178	2128	243	139	1742	55	66	184	251	241	706	202
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	2128	243	139	1742	55	66	184	251	241	706	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	2128	243	139	1742	55	66	184	251	241	706	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	2128	243	139	1742	55	66	184	251	241	706	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	178	2128	243	139	1742	55	66	184	251	241	706	202
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	5100	1600	1600	3400	1600	1600	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.42	0.15	0.04	0.34	0.03	0.04	0.05	0.16	0.15	0.21	0.13
Crit Moves:		****		****					****		****	

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PM Year 2035 Buildout Plus Project Traffic Conditions
2-18-3968 The Press Site, Costa Mesa

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Fairview Road at Sunflower Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Fairview Rd						Sunflower Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	190	1852	335	150	1324	96	442	498	140	254	658	157
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1852	335	150	1324	96	442	498	140	254	658	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	190	1852	335	150	1324	96	442	498	140	254	658	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1852	335	150	1324	96	442	498	140	254	658	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1852	335	150	1324	96	442	498	140	254	658	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	1852	335	150	1324	96	442	498	140	254	658	157
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.00	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.00
Lanes:	2.00	3.00	1.00	2.00	2.80	0.20	2.00	1.56	0.44	2.00	2.00	1.00
Final Sat.:	3200	5100	1600	3200	4675	325	3200	2598	702	3200	3400	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.36	0.21	0.05	0.28	0.30	0.14	0.19	0.20	0.08	0.19	0.10
Crit Moves:		****		****			****				****	

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APPENDIX D

CALTRANS INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX D-I

EXISTING TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	33.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	295	55	0	0	91	248
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	295	55	0	0	91	248
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	78	0	0	0	24	0
Total Analysis Volume [veh/h]	311	0	0	0	96	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	65	0	0	0	25	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	18	18		64	64
g / C, Green / Cycle	0.20	0.20		0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.17	0.00		0.05	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	354	316		1332	1132
d1, Uniform Delay [s]	34.93	0.00		3.92	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.04	0.00		0.10	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.00		0.07	0.00
d, Delay for Lane Group [s/veh]	41.97	0.00		4.03	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	7.14	0.00		0.48	0.00
50th-Percentile Queue Length [ft/ln]	178.53	0.00		11.88	0.00
95th-Percentile Queue Length [veh/ln]	11.52	0.00		0.86	0.00
95th-Percentile Queue Length [ft/ln]	288.10	0.00		21.39	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.97	0.00	0.00	0.00	4.03	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	41.97		0.00		4.03	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	33.02					
Intersection LOS	C					
Intersection V/C	0.248					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.291
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1387	0	0	1283	995	0	0	0	439	0	867
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1387	0	0	1283	995	0	0	0	439	0	867
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	365	0	0	338	0	0	0	0	116	0	228
Total Analysis Volume [veh/h]	0	1460	0	0	1351	0	0	0	0	462	0	913
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	51	51	51		30	30	30
g / C, Green / Cycle	0.57	0.57	0.57		0.34	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.21	0.20	0.00		0.26	0.29	0.29
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1591	1589
c, Capacity [veh/h]	3893	3893	911		602	537	537
d1, Uniform Delay [s]	10.42	10.21	0.00		26.52	27.67	27.68
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	0.25	0.00		2.03	3.96	3.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.35	0.00		0.76	0.85	0.85
d, Delay for Lane Group [s/veh]	10.70	10.46	0.00		28.55	31.63	31.67
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.70	3.35	0.00		8.76	9.37	9.38
50th-Percentile Queue Length [ft/ln]	92.41	83.76	0.00		218.95	234.34	234.49
95th-Percentile Queue Length [veh/ln]	6.65	6.03	0.00		13.61	14.39	14.40
95th-Percentile Queue Length [ft/ln]	166.34	150.77	0.00		340.28	359.87	360.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	10.70	0.00	0.00	10.46	0.00	0.00	0.00	0.00	28.58	0.00	31.65
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	10.70			10.46			0.00			30.62		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	17.16											
Intersection LOS	B											
Intersection V/C	0.552											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.387
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.162	2.117	4.132	6.401
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.475

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1083	1713	0	1643	0	390	0	436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1083	1713	0	1643	0	390	0	436	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	285	0	0	432	0	103	0	115	0	0	0
Total Analysis Volume [veh/h]	0	1140	0	0	1729	0	411	0	459	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	26	0	0	26	0	64	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	62	62	62	20	20	20	
g / C, Green / Cycle	0.69	0.69	0.69	0.22	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.22	0.00	0.25	0.17	0.17	0.18	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1660	1589	
c, Capacity [veh/h]	3532	1102	4709	388	361	346	
d1, Uniform Delay [s]	5.44	0.00	5.67	33.00	33.29	33.47	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.24	0.00	0.22	3.20	4.12	4.85	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.32	0.00	0.37	0.77	0.80	0.82	
d, Delay for Lane Group [s/veh]	5.68	0.00	5.89	36.20	37.41	38.32	
Lane Group LOS	A	A	A	D	D	D	
Critical Lane Group	No	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	2.42	0.00	2.85	6.28	6.24	6.22	
50th-Percentile Queue Length [ft/ln]	60.55	0.00	71.17	157.06	155.92	155.45	
95th-Percentile Queue Length [veh/ln]	4.36	0.00	5.12	10.39	10.33	10.31	
95th-Percentile Queue Length [ft/ln]	108.98	0.00	128.11	259.82	258.32	257.69	

Movement, Approach, & Intersection Results

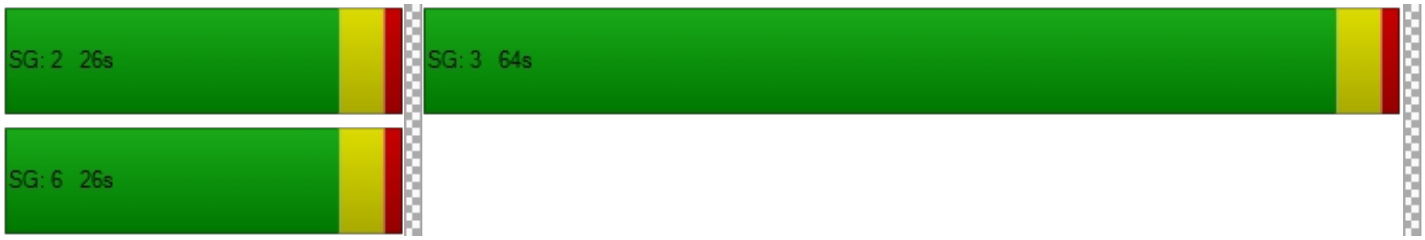
d_M, Delay for Movement [s/veh]	0.00	5.68	0.00	0.00	5.89	0.00	36.55	0.00	37.98	0.00	0.00	0.00
Movement LOS		A	A		A		D		D			
d_A, Approach Delay [s/veh]	5.68			5.89			37.29			0.00		
Approach LOS	A			A			D			A		
d_I, Intersection Delay [s/veh]	13.13											
Intersection LOS	B											
Intersection V/C	0.475											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	0	0
d_b, Bicycle Delay [s]	25.69	25.69	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.187	2.273	5.568	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	24.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.766

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	255	770	0	0	1983	289	0	0	0	649	0	824
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	255	770	0	0	1983	289	0	0	0	649	0	824
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	203	0	0	522	76	0	0	0	171	0	217
Total Analysis Volume [veh/h]	268	811	0	0	2087	304	0	0	0	683	0	867
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	22	50	0	0	28	0	0	0	0	40	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	15	50	31	31		32	32
g / C, Green / Cycle	0.17	0.56	0.34	0.34		0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.15	0.16	0.20	0.19		0.20	0.31
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	305	2849	3500	546		1217	990
d1, Uniform Delay [s]	36.39	10.40	24.40	23.99		23.57	27.34
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.01	0.25	0.76	4.06		0.41	2.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.28	0.60	0.56		0.56	0.88
d, Delay for Lane Group [s/veh]	44.40	10.65	25.16	28.05		23.98	29.99
Lane Group LOS	D	B	C	C		C	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	6.31	2.68	6.04	5.70		5.74	8.72
50th-Percentile Queue Length [ft/ln]	157.70	67.02	150.95	142.46		143.51	217.89
95th-Percentile Queue Length [veh/ln]	10.43	4.83	10.07	9.61		9.67	13.56
95th-Percentile Queue Length [ft/ln]	260.67	120.64	251.70	240.34		241.75	338.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.40	10.65	0.00	0.00	25.16	28.05	0.00	0.00	0.00	23.98	0.00	29.99
Movement LOS	D	B			C	C				C		C
d_A, Approach Delay [s/veh]	19.03			25.52			0.00			27.34		
Approach LOS	B			C			A			C		
d_I, Intersection Delay [s/veh]	24.69											
Intersection LOS	C											
Intersection V/C	0.766											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	34.67	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.981	2.508
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1022	533	0	0
d_b, Bicycle Delay [s]	10.76	24.20	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.153	2.217	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	23.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	882	1040	1178	1451	0	149	0	321	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	882	1040	1178	1451	0	149	0	321	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	232	274	310	382	0	39	0	84	0	0	0
Total Analysis Volume [veh/h]	0	928	1095	1240	1527	0	157	0	338	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	54	76	0	24	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	100	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	45	45	45	29	77	15	15	
g / C, Green / Cycle	0.45	0.45	0.45	0.29	0.77	0.15	0.15	
(v / s)_i Volume / Saturation Flow Rate	0.18	0.34	0.34	0.24	0.30	0.05	0.12	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2273	709	709	1497	3947	502	409	
d1, Uniform Delay [s]	18.75	23.39	23.39	33.26	3.62	38.27	41.52	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.55	7.97	7.97	1.24	0.29	0.35	4.32	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.41	0.77	0.77	0.83	0.39	0.31	0.83	
d, Delay for Lane Group [s/veh]	19.29	31.36	31.36	34.50	3.91	38.62	45.84	
Lane Group LOS	B	C	C	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	4.84	12.00	12.00	9.34	2.55	1.74	4.25	
50th-Percentile Queue Length [ft/ln]	121.01	300.10	300.10	233.50	63.84	43.51	106.31	
95th-Percentile Queue Length [veh/ln]	8.45	17.69	17.69	14.35	4.60	3.13	7.63	
95th-Percentile Queue Length [ft/ln]	211.21	442.16	442.16	358.81	114.92	78.31	190.86	

Movement, Approach, & Intersection Results

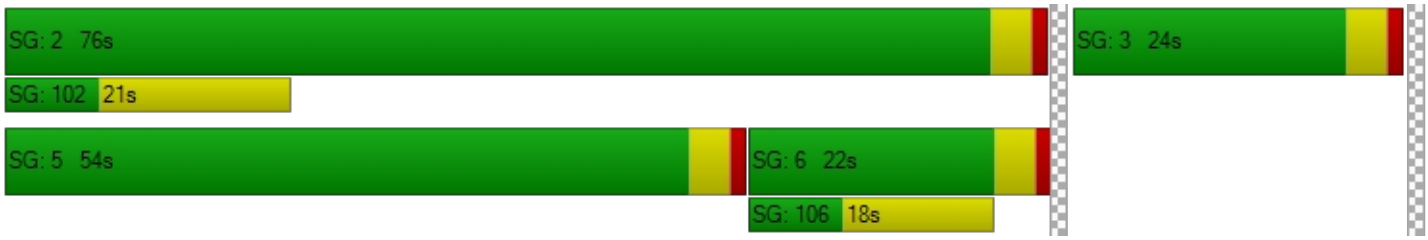
d_M, Delay for Movement [s/veh]	0.00	19.29	31.36	34.50	3.91	0.00	38.62	0.00	45.84	0.00	0.00	0.00
Movement LOS		B	C	C	A		D		D			
d_A, Approach Delay [s/veh]	25.82			17.62			43.55			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	23.19											
Intersection LOS	C											
Intersection V/C	0.800											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.257	2.704
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	360	1440	0	0
d_b, Bicycle Delay [s]	33.62	3.92	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	2.394	3.081	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	21.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.519

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	353	414	0	0	468	856
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	353	414	0	0	468	856
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	93	0	0	0	123	0
Total Analysis Volume [veh/h]	372	0	0	0	493	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	66	0	0	0	24	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	21		61	61
g / C, Green / Cycle	0.23	0.23		0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.21	0.00		0.26	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	416	371		1267	1077
d1, Uniform Delay [s]	33.37	0.00		6.34	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.96	0.00		0.90	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.00		0.39	0.00
d, Delay for Lane Group [s/veh]	40.33	0.00		7.24	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	8.44	0.00		3.79	0.00
50th-Percentile Queue Length [ft/ln]	211.12	0.00		94.64	0.00
95th-Percentile Queue Length [veh/ln]	13.21	0.00		6.81	0.00
95th-Percentile Queue Length [ft/ln]	330.27	0.00		170.34	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.33	0.00	0.00	0.00	7.24	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	40.33		0.00		7.24	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	21.47					
Intersection LOS	C					
Intersection V/C	0.519					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.946
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1422	0	0	1291	1110	0	0	0	753	0	1132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1422	0	0	1291	1110	0	0	0	753	0	1132
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	374	0	0	340	0	0	0	0	198	0	298
Total Analysis Volume [veh/h]	0	1497	0	0	1359	0	0	0	0	793	0	1192
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	39	39	39		43	43	43
g / C, Green / Cycle	0.43	0.43	0.43		0.48	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.22	0.20	0.00		0.37	0.41	0.42
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1624	1589
c, Capacity [veh/h]	2948	2948	690		849	774	758
d1, Uniform Delay [s]	18.45	17.98	0.00		19.56	20.74	21.06
k, delay calibration	0.50	0.50	0.50		0.11	0.15	0.16
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.63	0.52	0.00		1.65	3.88	4.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.46	0.00		0.78	0.85	0.87
d, Delay for Lane Group [s/veh]	19.08	18.50	0.00		21.21	24.62	25.88
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.53	4.89	0.00		11.10	12.19	12.54
50th-Percentile Queue Length [ft/ln]	138.36	122.24	0.00		277.41	304.72	313.56
95th-Percentile Queue Length [veh/ln]	9.39	8.52	0.00		16.56	17.91	18.35
95th-Percentile Queue Length [ft/ln]	234.82	212.90	0.00		413.99	447.86	458.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	19.08	0.00	0.00	18.50	0.00	0.00	0.00	0.00	21.78	0.00	25.32
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	19.08			18.50			0.00			23.90		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	20.90											
Intersection LOS	C											
Intersection V/C	0.699											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.585
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.177	2.120	4.132	7.408
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1229	1237	0	2040	0	198	0	741	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1229	1237	0	2040	0	198	0	741	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	323	0	0	537	0	52	0	195	0	0	0
Total Analysis Volume [veh/h]	0	1294	0	0	2147	0	208	0	780	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	14	0	0	14	0	76	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	56	56	56	26	26	26	
g / C, Green / Cycle	0.62	0.62	0.62	0.29	0.29	0.29	
(v / s)_i Volume / Saturation Flow Rate	0.25	0.00	0.32	0.12	0.25	0.25	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1589	1589	
c, Capacity [veh/h]	3185	994	4247	509	454	454	
d1, Uniform Delay [s]	8.45	0.00	9.22	25.95	30.37	30.37	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.39	0.00	0.43	0.53	4.85	4.85	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.41	0.00	0.51	0.41	0.86	0.86	
d, Delay for Lane Group [s/veh]	8.84	0.00	9.65	26.48	35.23	35.23	
Lane Group LOS	A	A	A	C	D	D	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh/ln]	3.86	0.00	5.22	3.59	8.33	8.33	
50th-Percentile Queue Length [ft/ln]	96.62	0.00	130.47	89.84	208.36	208.36	
95th-Percentile Queue Length [veh/ln]	6.96	0.00	8.97	6.47	13.07	13.07	
95th-Percentile Queue Length [ft/ln]	173.92	0.00	224.14	161.72	326.72	326.72	

Movement, Approach, & Intersection Results

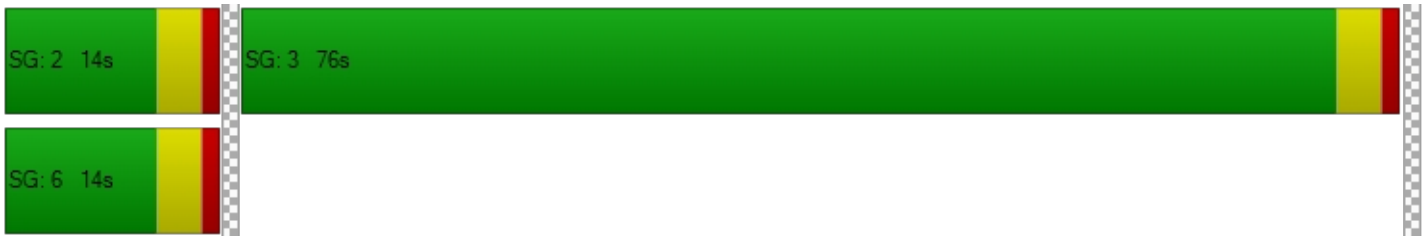
d_M, Delay for Movement [s/veh]	0.00	8.84	0.00	0.00	9.65	0.00	26.48	0.00	35.23	0.00	0.00	0.00
Movement LOS		A	A		A		C		D			
d_A, Approach Delay [s/veh]	8.84			9.65			33.38			0.00		
Approach LOS	A			A			C			A		
d_I, Intersection Delay [s/veh]	14.71											
Intersection LOS	B											
Intersection V/C	0.616											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	222	0	0
d_b, Bicycle Delay [s]	35.56	35.56	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.271	2.445	5.763	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	27.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.821

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	189	1258	0	0	1989	300	0	0	0	770	0	1070
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	1258	0	0	1989	300	0	0	0	770	0	1070
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	331	0	0	523	79	0	0	0	203	0	282
Total Analysis Volume [veh/h]	199	1324	0	0	2094	316	0	0	0	811	0	1126
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	17	35	0	0	18	0	0	0	0	60	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	95	95	95	95		95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	12	43	27	27		44	44
g / C, Green / Cycle	0.13	0.45	0.28	0.28		0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.21	0.20		0.23	0.40
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	232	2299	2839	443		1607	1307
d1, Uniform Delay [s]	40.44	19.33	31.12	30.86		17.79	22.71
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.76	1.06	1.76	9.43		0.25	1.80
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.58	0.74	0.71		0.50	0.86
d, Delay for Lane Group [s/veh]	49.20	20.39	32.88	40.29		18.04	24.51
Lane Group LOS	D	C	C	D		B	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	5.06	7.14	7.32	7.53		6.01	10.89
50th-Percentile Queue Length [ft/ln]	126.55	178.52	183.11	188.23		150.35	272.16
95th-Percentile Queue Length [veh/ln]	8.75	11.52	11.76	12.03		10.04	16.30
95th-Percentile Queue Length [ft/ln]	218.80	288.08	294.07	300.73		250.89	407.44

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.20	20.39	0.00	0.00	32.88	40.29	0.00	0.00	0.00	18.04	0.00	24.51
Movement LOS	D	C			C	D				B		C
d_A, Approach Delay [s/veh]	24.15			33.85			0.00			21.80		
Approach LOS	C			C			A			C		
d_I, Intersection Delay [s/veh]	27.36											
Intersection LOS	C											
Intersection V/C	0.821											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.928	2.605
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	653	295	0	0
d_b, Bicycle Delay [s]	21.56	34.53	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.397	2.222	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	22.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1093	530	1095	1657	0	356	0	429	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1093	530	1095	1657	0	356	0	429	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	288	139	288	436	0	94	0	113	0	0	0
Total Analysis Volume [veh/h]	0	1151	558	1153	1744	0	375	0	452	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	43	65	0	30	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	95	95	95	95	95	95	95	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	39	39	39	26	68	19	19	
g / C, Green / Cycle	0.41	0.41	0.41	0.27	0.72	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.22	0.22	0.22	0.34	0.11	0.16	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2082	650	650	1400	3671	675	549	
d1, Uniform Delay [s]	20.79	21.16	21.16	32.57	5.64	34.52	36.67	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.84	3.03	3.03	1.28	0.44	0.72	3.17	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.49	0.53	0.53	0.82	0.48	0.56	0.82	
d, Delay for Lane Group [s/veh]	21.63	24.19	24.19	33.85	6.08	35.24	39.84	
Lane Group LOS	C	C	C	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.60	6.08	6.08	8.27	4.12	3.93	5.19	
50th-Percentile Queue Length [ft/ln]	140.05	152.08	152.08	206.63	102.88	98.22	129.65	
95th-Percentile Queue Length [veh/ln]	9.48	10.13	10.13	12.98	7.41	7.07	8.92	
95th-Percentile Queue Length [ft/ln]	237.09	253.21	253.21	324.50	185.18	176.80	223.02	

Movement, Approach, & Intersection Results

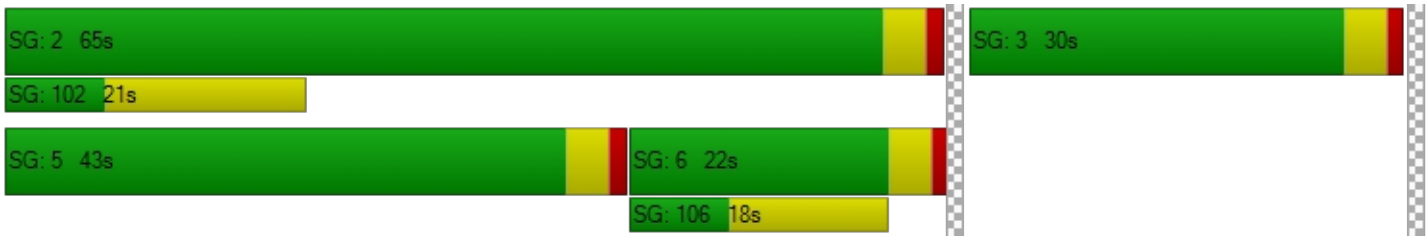
d_M, Delay for Movement [s/veh]	0.00	21.63	24.19	33.85	6.08	0.00	35.24	0.00	39.84	0.00	0.00	0.00
Movement LOS		C	C	C	A		D		D			
d_A, Approach Delay [s/veh]	22.65			17.13			37.76			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	22.01											
Intersection LOS	C											
Intersection V/C	0.684											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.335	2.499
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	379	1284	0	0
d_b, Bicycle Delay [s]	31.21	6.08	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.265	3.153	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX D-II

EXISTING PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	31.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.266

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	295	55	0	0	120	248
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	295	55	0	0	120	248
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	78	0	0	0	32	0
Total Analysis Volume [veh/h]	311	0	0	0	126	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	55	0	0	0	35	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	18	18		64	64
g / C, Green / Cycle	0.20	0.20		0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.17	0.00		0.07	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	353	315		1333	1133
d1, Uniform Delay [s]	34.93	0.00		3.97	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.23	0.00		0.14	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.00		0.09	0.00
d, Delay for Lane Group [s/veh]	42.15	0.00		4.11	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	7.15	0.00		0.63	0.00
50th-Percentile Queue Length [ft/ln]	178.86	0.00		15.82	0.00
95th-Percentile Queue Length [veh/ln]	11.54	0.00		1.14	0.00
95th-Percentile Queue Length [ft/ln]	288.53	0.00		28.48	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.15	0.00	0.00	0.00	4.11	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	42.15		0.00		4.11	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	31.18					
Intersection LOS	C					
Intersection V/C	0.266					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.340
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.605

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1598	0	0	1329	1034	0	0	0	439	0	917
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1598	0	0	1329	1034	0	0	0	439	0	917
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	421	0	0	350	0	0	0	0	116	0	241
Total Analysis Volume [veh/h]	0	1682	0	0	1399	0	0	0	0	462	0	965
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	50	50	50		32	32	32
g / C, Green / Cycle	0.56	0.56	0.56		0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.25	0.21	0.00		0.26	0.30	0.30
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1589	1589
c, Capacity [veh/h]	3784	3784	886		630	562	562
d1, Uniform Delay [s]	11.71	11.09	0.00		25.32	26.93	26.93
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	0.28	0.00		1.67	3.93	3.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.37	0.00		0.73	0.86	0.86
d, Delay for Lane Group [s/veh]	12.09	11.37	0.00		27.00	30.86	30.86
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.68	3.68	0.00		8.55	9.79	9.79
50th-Percentile Queue Length [ft/ln]	116.94	92.02	0.00		213.81	244.69	244.69
95th-Percentile Queue Length [veh/ln]	8.22	6.63	0.00		13.35	14.92	14.92
95th-Percentile Queue Length [ft/ln]	205.61	165.64	0.00		333.71	372.95	372.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	12.09	0.00	0.00	11.37	0.00	0.00	0.00	0.00	27.00	0.00	30.86
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	12.09			11.37			0.00			29.61		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	17.41											
Intersection LOS	B											
Intersection V/C	0.605											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.403
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.253	2.137	4.132	6.487
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.511

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1198	1713	0	1689	0	487	0	436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1198	1713	0	1689	0	487	0	436	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	315	0	0	444	0	128	0	115	0	0	0
Total Analysis Volume [veh/h]	0	1261	0	0	1778	0	513	0	459	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	0	0	22	0	68	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	60	60	60	22	22	22	
g / C, Green / Cycle	0.67	0.67	0.67	0.24	0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.25	0.00	0.26	0.18	0.19	0.20	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1696	1589	
c, Capacity [veh/h]	3396	1060	4528	435	414	388	
d1, Uniform Delay [s]	6.63	0.00	6.76	31.36	31.71	32.22	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.31	0.00	0.26	2.56	3.26	4.74	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.37	0.00	0.39	0.75	0.78	0.83	
d, Delay for Lane Group [s/veh]	6.94	0.00	7.02	33.92	34.98	36.96	
Lane Group LOS	A	A	A	C	C	D	
Critical Lane Group	No	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.14	0.00	3.36	6.64	6.78	7.01	
50th-Percentile Queue Length [ft/ln]	78.60	0.00	84.09	165.97	169.39	175.29	
95th-Percentile Queue Length [veh/ln]	5.66	0.00	6.05	10.86	11.04	11.35	
95th-Percentile Queue Length [ft/ln]	141.48	0.00	151.36	271.61	276.11	283.86	

Movement, Approach, & Intersection Results

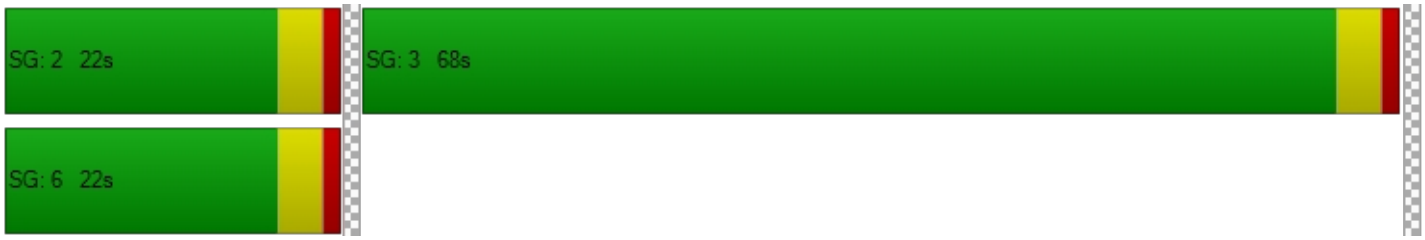
d_M, Delay for Movement [s/veh]	0.00	6.94	0.00	0.00	7.02	0.00	34.31	0.00	36.38	0.00	0.00	0.00
Movement LOS		A	A		A		C		D			
d_A, Approach Delay [s/veh]	6.94			7.02			35.28			0.00		
Approach LOS	A			A			D			A		
d_I, Intersection Delay [s/veh]	13.84											
Intersection LOS	B											
Intersection V/C	0.511											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.253	2.293	5.736	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	24.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.767

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	255	811	0	0	1998	289	0	0	0	649	0	824
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	255	811	0	0	1998	289	0	0	0	649	0	824
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	213	0	0	526	76	0	0	0	171	0	217
Total Analysis Volume [veh/h]	268	854	0	0	2103	304	0	0	0	683	0	867
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	22	50	0	0	28	0	0	0	0	40	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	15	50	31	31		32	32
g / C, Green / Cycle	0.17	0.56	0.34	0.34		0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.15	0.17	0.21	0.19		0.20	0.31
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	305	2849	3500	546		1217	990
d1, Uniform Delay [s]	36.39	10.50	24.45	23.99		23.57	27.34
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.01	0.27	0.77	4.06		0.41	2.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.30	0.60	0.56		0.56	0.88
d, Delay for Lane Group [s/veh]	44.40	10.77	25.22	28.05		23.98	29.99
Lane Group LOS	D	B	C	C		C	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	6.31	2.85	6.10	5.70		5.74	8.72
50th-Percentile Queue Length [ft/ln]	157.70	71.31	152.44	142.46		143.51	217.89
95th-Percentile Queue Length [veh/ln]	10.43	5.13	10.15	9.61		9.67	13.56
95th-Percentile Queue Length [ft/ln]	260.67	128.36	253.68	240.34		241.75	338.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.40	10.77	0.00	0.00	25.22	28.05	0.00	0.00	0.00	23.98	0.00	29.99
Movement LOS	D	B			C	C				C		C
d_A, Approach Delay [s/veh]	18.81			25.58			0.00			27.34		
Approach LOS	B			C			A			C		
d_I, Intersection Delay [s/veh]	24.62											
Intersection LOS	C											
Intersection V/C	0.767											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	34.67	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.981	2.508
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1022	533	0	0
d_b, Bicycle Delay [s]	10.76	24.20	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.177	2.222	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	923	1040	1178	1466	0	149	0	321	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	923	1040	1178	1466	0	149	0	321	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	243	274	310	386	0	39	0	84	0	0	0
Total Analysis Volume [veh/h]	0	972	1095	1240	1543	0	157	0	338	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	54	76	0	24	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	100	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	45	45	45	29	77	15	15	
g / C, Green / Cycle	0.45	0.45	0.45	0.29	0.77	0.15	0.15	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.34	0.34	0.24	0.30	0.05	0.12	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2273	709	709	1497	3947	502	409	
d1, Uniform Delay [s]	18.95	23.39	23.39	33.26	3.64	38.27	41.52	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.59	7.97	7.97	1.24	0.29	0.35	4.32	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.43	0.77	0.77	0.83	0.39	0.31	0.83	
d, Delay for Lane Group [s/veh]	19.54	31.36	31.36	34.50	3.93	38.62	45.84	
Lane Group LOS	B	C	C	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.13	12.00	12.00	9.34	2.59	1.74	4.25	
50th-Percentile Queue Length [ft/ln]	128.17	300.10	300.10	233.50	64.81	43.51	106.31	
95th-Percentile Queue Length [veh/ln]	8.84	17.69	17.69	14.35	4.67	3.13	7.63	
95th-Percentile Queue Length [ft/ln]	221.00	442.16	442.16	358.81	116.66	78.31	190.86	

Movement, Approach, & Intersection Results

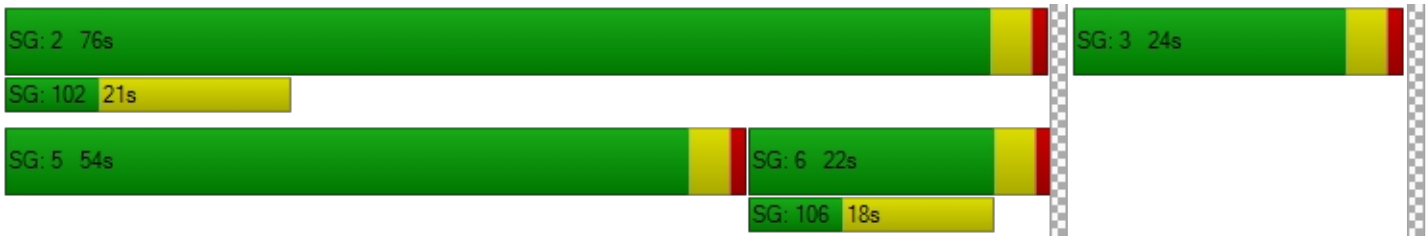
d_M, Delay for Movement [s/veh]	0.00	19.54	31.36	34.50	3.93	0.00	38.62	0.00	45.84	0.00	0.00	0.00
Movement LOS		B	C	C	A		D		D			
d_A, Approach Delay [s/veh]	25.80			17.55			43.55			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	23.15											
Intersection LOS	C											
Intersection V/C	0.800											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.257	2.704
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	360	1440	0	0
d_b, Bicycle Delay [s]	33.62	3.92	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	2.412	3.090	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.574

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	353	414	0	0	558	856
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	353	414	0	0	558	856
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	93	0	0	0	147	0
Total Analysis Volume [veh/h]	372	0	0	0	587	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	66	0	0	0	24	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	21		61	61
g / C, Green / Cycle	0.23	0.23		0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.21	0.00		0.31	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	416	371		1267	1077
d1, Uniform Delay [s]	33.37	0.00		6.80	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.96	0.00		1.22	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.00		0.46	0.00
d, Delay for Lane Group [s/veh]	40.33	0.00		8.02	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	8.44	0.00		4.86	0.00
50th-Percentile Queue Length [ft/ln]	211.12	0.00		121.53	0.00
95th-Percentile Queue Length [veh/ln]	13.21	0.00		8.48	0.00
95th-Percentile Queue Length [ft/ln]	330.27	0.00		211.93	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.33	0.00	0.00	0.00	8.02	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	40.33		0.00		8.02	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	20.56					
Intersection LOS	C					
Intersection V/C	0.574					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	5.101
Bicycle LOS	D	D	F

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	21.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.720

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1536	0	0	1396	1226	0	0	0	753	0	1141
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1536	0	0	1396	1226	0	0	0	753	0	1141
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	404	0	0	367	0	0	0	0	198	0	300
Total Analysis Volume [veh/h]	0	1617	0	0	1469	0	0	0	0	793	0	1201
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	39	39	39		43	43	43
g / C, Green / Cycle	0.43	0.43	0.43		0.48	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.24	0.22	0.00		0.37	0.41	0.42
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1623	1589
c, Capacity [veh/h]	2934	2934	687		853	777	761
d1, Uniform Delay [s]	19.02	18.49	0.00		19.46	20.65	20.96
k, delay calibration	0.50	0.50	0.50		0.11	0.15	0.16
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.75	0.61	0.00		1.67	3.94	4.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.50	0.00		0.78	0.86	0.87
d, Delay for Lane Group [s/veh]	19.77	19.10	0.00		21.13	24.60	25.83
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.15	5.43	0.00		11.13	12.24	12.59
50th-Percentile Queue Length [ft/ln]	153.86	135.64	0.00		278.17	306.00	314.70
95th-Percentile Queue Length [veh/ln]	10.22	9.25	0.00		16.60	17.98	18.41
95th-Percentile Queue Length [ft/ln]	255.58	231.14	0.00		414.93	449.44	460.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	19.77	0.00	0.00	19.10	0.00	0.00	0.00	0.00	21.69	0.00	25.28
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	19.77			19.10			0.00			23.85		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	21.18											
Intersection LOS	C											
Intersection V/C	0.720											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.588
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.227	2.166	4.132	7.423
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.634

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1301	1237	0	2145	0	239	0	741	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1301	1237	0	2145	0	239	0	741	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	342	0	0	564	0	63	0	195	0	0	0
Total Analysis Volume [veh/h]	0	1369	0	0	2258	0	252	0	780	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	14	0	0	14	0	76	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	56	56	56	26	26	26	
g / C, Green / Cycle	0.62	0.62	0.62	0.29	0.29	0.29	
(v / s)_i Volume / Saturation Flow Rate	0.27	0.00	0.33	0.14	0.25	0.25	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1589	1589	
c, Capacity [veh/h]	3180	992	4239	511	456	456	
d1, Uniform Delay [s]	8.67	0.00	9.50	26.62	30.28	30.28	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.43	0.00	0.48	0.74	4.72	4.72	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.43	0.00	0.53	0.49	0.86	0.86	
d, Delay for Lane Group [s/veh]	9.10	0.00	9.98	27.36	35.00	35.00	
Lane Group LOS	A	A	A	C	C	C	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh/ln]	4.19	0.00	5.65	4.48	8.31	8.31	
50th-Percentile Queue Length [ft/ln]	104.79	0.00	141.29	112.07	207.63	207.63	
95th-Percentile Queue Length [veh/ln]	7.54	0.00	9.55	7.96	13.03	13.03	
95th-Percentile Queue Length [ft/ln]	188.62	0.00	238.76	198.88	325.79	325.79	

Movement, Approach, & Intersection Results

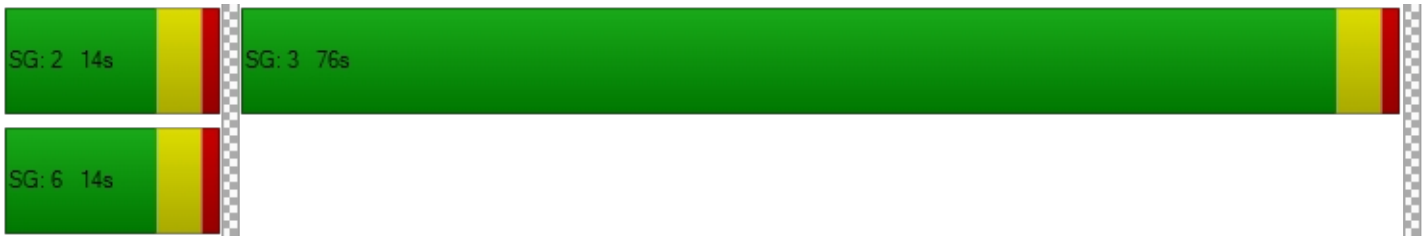
d_M, Delay for Movement [s/veh]	0.00	9.10	0.00	0.00	9.98	0.00	27.36	0.00	35.00	0.00	0.00	0.00
Movement LOS		A	A		A		C		C			
d_A, Approach Delay [s/veh]	9.10			9.98			33.13			0.00		
Approach LOS	A			A			C			A		
d_I, Intersection Delay [s/veh]	14.85											
Intersection LOS	B											
Intersection V/C	0.634											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	222	0	0
d_b, Bicycle Delay [s]	35.56	35.56	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.313	2.491	5.835	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	27.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	189	1282	0	0	2026	300	0	0	0	770	0	1070
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	1282	0	0	2026	300	0	0	0	770	0	1070
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	337	0	0	533	79	0	0	0	203	0	282
Total Analysis Volume [veh/h]	199	1349	0	0	2133	316	0	0	0	811	0	1126
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	17	35	0	0	18	0	0	0	0	60	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	95	95	95	95		95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	12	43	27	27		44	44
g / C, Green / Cycle	0.13	0.45	0.28	0.28		0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.11	0.26	0.21	0.20		0.23	0.40
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	232	2299	2839	443		1607	1307
d1, Uniform Delay [s]	40.44	19.46	31.27	30.86		17.79	22.71
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.76	1.11	1.89	9.43		0.25	1.80
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.59	0.75	0.71		0.50	0.86
d, Delay for Lane Group [s/veh]	49.20	20.57	33.16	40.29		18.04	24.51
Lane Group LOS	D	C	C	D		B	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	5.06	7.33	7.51	7.53		6.01	10.89
50th-Percentile Queue Length [ft/ln]	126.55	183.22	187.71	188.23		150.35	272.16
95th-Percentile Queue Length [veh/ln]	8.75	11.77	12.00	12.03		10.04	16.30
95th-Percentile Queue Length [ft/ln]	218.80	294.21	300.05	300.73		250.89	407.44

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.20	20.57	0.00	0.00	33.16	40.29	0.00	0.00	0.00	18.04	0.00	24.51
Movement LOS	D	C			C	D				B		C
d_A, Approach Delay [s/veh]	24.25			34.08			0.00			21.80		
Approach LOS	C			C			A			C		
d_I, Intersection Delay [s/veh]	27.51											
Intersection LOS	C											
Intersection V/C	0.826											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.928	2.605
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	653	295	0	0
d_b, Bicycle Delay [s]	21.56	34.53	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.411	2.233	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	22.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1117	530	1095	1694	0	356	0	429	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1117	530	1095	1694	0	356	0	429	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	294	139	288	446	0	94	0	113	0	0	0
Total Analysis Volume [veh/h]	0	1176	558	1153	1783	0	375	0	452	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	43	65	0	30	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	95	95	95	95	95	95	95	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	39	39	39	26	68	19	19	
g / C, Green / Cycle	0.41	0.41	0.41	0.27	0.72	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.22	0.22	0.22	0.35	0.11	0.16	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2082	650	650	1400	3671	675	549	
d1, Uniform Delay [s]	20.87	21.24	21.24	32.57	5.70	34.52	36.67	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.86	3.12	3.12	1.28	0.46	0.72	3.17	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.50	0.53	0.53	0.82	0.49	0.56	0.82	
d, Delay for Lane Group [s/veh]	21.73	24.37	24.37	33.85	6.17	35.24	39.84	
Lane Group LOS	C	C	C	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.71	6.20	6.20	8.27	4.26	3.93	5.19	
50th-Percentile Queue Length [ft/ln]	142.67	155.09	155.09	206.63	106.45	98.22	129.65	
95th-Percentile Queue Length [veh/ln]	9.62	10.29	10.29	12.98	7.64	7.07	8.92	
95th-Percentile Queue Length [ft/ln]	240.61	257.21	257.21	324.50	191.05	176.80	223.02	

Movement, Approach, & Intersection Results

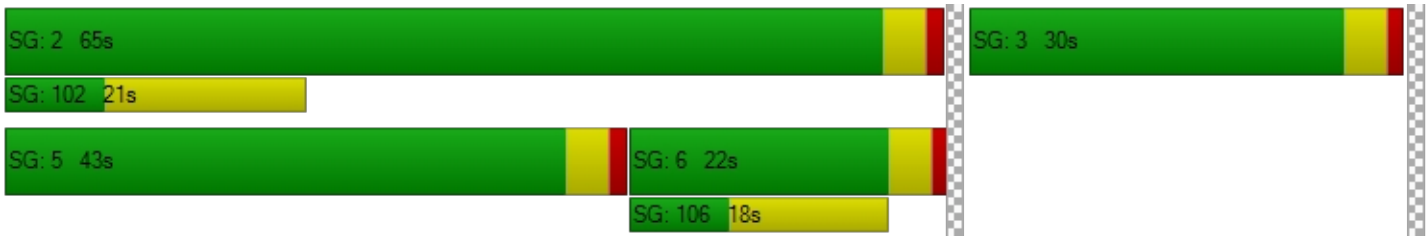
d_M, Delay for Movement [s/veh]	0.00	21.73	24.37	33.85	6.17	0.00	35.24	0.00	39.84	0.00	0.00	0.00
Movement LOS		C	C	C	A		D		D			
d_A, Approach Delay [s/veh]	22.78			17.04			37.76			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	21.97											
Intersection LOS	C											
Intersection V/C	0.688											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.335	2.499
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	379	1284	0	0
d_b, Bicycle Delay [s]	31.21	6.08	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.275	3.174	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX D-III

YEAR 2021 CUMULATIVE TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.261

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	104	255
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	104	255
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	80	0	0	0	27	0
Total Analysis Volume [veh/h]	320	0	0	0	109	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	63	0	0	0	27	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	18	18		64	64
g / C, Green / Cycle	0.20	0.20		0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.18	0.00		0.06	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	363	324		1322	1124
d1, Uniform Delay [s]	34.70	0.00		4.09	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.03	0.00		0.12	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.00		0.08	0.00
d, Delay for Lane Group [s/veh]	41.73	0.00		4.22	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	7.34	0.00		0.56	0.00
50th-Percentile Queue Length [ft/ln]	183.39	0.00		13.98	0.00
95th-Percentile Queue Length [veh/ln]	11.78	0.00		1.01	0.00
95th-Percentile Queue Length [ft/ln]	294.44	0.00		25.16	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.73	0.00	0.00	0.00	4.22	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	41.73		0.00		4.22	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	32.20					
Intersection LOS	C					
Intersection V/C	0.261					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.312
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.607

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1578	0	0	1339	1037	0	0	0	457	0	931
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1578	0	0	1339	1037	0	0	0	457	0	931
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	415	0	0	352	0	0	0	0	120	0	245
Total Analysis Volume [veh/h]	0	1661	0	0	1409	0	0	0	0	481	0	980
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	50	50	50		32	32	32
g / C, Green / Cycle	0.55	0.55	0.55		0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.24	0.21	0.00		0.27	0.31	0.31
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1589	1589
c, Capacity [veh/h]	3746	3746	877		640	571	571
d1, Uniform Delay [s]	11.96	11.40	0.00		25.25	26.65	26.65
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	0.29	0.00		1.81	3.87	3.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.38	0.00		0.75	0.86	0.86
d, Delay for Lane Group [s/veh]	12.34	11.69	0.00		27.06	30.52	30.52
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.68	3.78	0.00		8.95	9.90	9.90
50th-Percentile Queue Length [ft/ln]	116.94	94.43	0.00		223.87	247.38	247.38
95th-Percentile Queue Length [veh/ln]	8.22	6.80	0.00		13.86	15.05	15.05
95th-Percentile Queue Length [ft/ln]	205.62	169.97	0.00		346.56	376.35	376.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	12.34	0.00	0.00	11.69	0.00	0.00	0.00	0.00	27.06	0.00	30.52
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	12.34			11.69			0.00			29.38		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	17.63											
Intersection LOS	B											
Intersection V/C	0.607											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.415
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.245	2.141	4.132	6.543
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1205	1799	0	1715	0	461	0	454	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1205	1799	0	1715	0	461	0	454	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	317	0	0	451	0	121	0	119	0	0	0
Total Analysis Volume [veh/h]	0	1268	0	0	1805	0	485	0	478	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	0	0	22	0	68	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	60	60	60	22	22	22	
g / C, Green / Cycle	0.67	0.67	0.67	0.24	0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.25	0.00	0.27	0.18	0.19	0.20	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1681	1589	
c, Capacity [veh/h]	3408	1063	4544	431	407	384	
d1, Uniform Delay [s]	6.55	0.00	6.70	31.51	31.91	32.33	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.31	0.00	0.26	2.61	3.46	4.74	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.37	0.00	0.40	0.75	0.79	0.83	
d, Delay for Lane Group [s/veh]	6.86	0.00	6.96	34.12	35.37	37.07	
Lane Group LOS	A	A	A	C	D	D	
Critical Lane Group	No	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.13	0.00	3.40	6.61	6.75	6.94	
50th-Percentile Queue Length [ft/ln]	78.33	0.00	84.91	165.29	168.84	173.41	
95th-Percentile Queue Length [veh/ln]	5.64	0.00	6.11	10.83	11.02	11.26	
95th-Percentile Queue Length [ft/ln]	140.99	0.00	152.83	270.71	275.39	281.40	

Movement, Approach, & Intersection Results

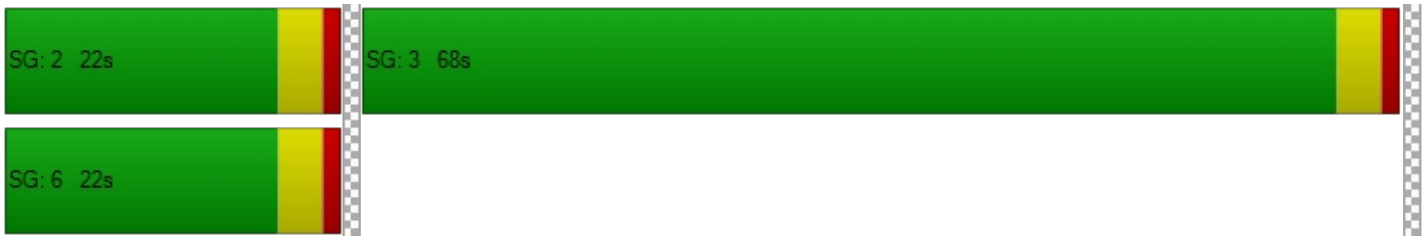
d_M, Delay for Movement [s/veh]	0.00	6.86	0.00	0.00	6.96	0.00	34.54	0.00	36.51	0.00	0.00	0.00
Movement LOS		A	A		A		C		D			
d_A, Approach Delay [s/veh]	6.86			6.96			35.51			0.00		
Approach LOS	A			A			D			A		
d_I, Intersection Delay [s/veh]	13.74											
Intersection LOS	B											
Intersection V/C	0.513											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.257	2.304	5.721	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.784

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	263	822	0	0	2050	299	0	0	0	668	0	849
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	822	0	0	2050	299	0	0	0	668	0	849
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	216	0	0	539	79	0	0	0	176	0	223
Total Analysis Volume [veh/h]	277	865	0	0	2158	315	0	0	0	703	0	894
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	32	50	0	0	18	0	0	0	0	45	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	95	95	95	95		95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	17	52	31	31		35	35
g / C, Green / Cycle	0.18	0.55	0.33	0.33		0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.16	0.17	0.21	0.20		0.20	0.32
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	317	2807	3372	526		1261	1026
d1, Uniform Delay [s]	38.02	11.53	26.98	26.52		24.07	28.11
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.51	0.29	0.94	4.97		0.39	2.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.31	0.64	0.60		0.56	0.87
d, Delay for Lane Group [s/veh]	45.53	11.82	27.92	31.49		24.46	30.57
Lane Group LOS	D	B	C	C		C	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	6.83	3.19	6.89	6.53		6.19	9.45
50th-Percentile Queue Length [ft/ln]	170.82	79.67	172.14	163.17		154.84	236.20
95th-Percentile Queue Length [veh/ln]	11.12	5.74	11.19	10.72		10.27	14.49
95th-Percentile Queue Length [ft/ln]	277.99	143.40	279.73	267.92		256.87	362.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.53	11.82	0.00	0.00	27.92	31.49	0.00	0.00	0.00	24.46	0.00	30.57
Movement LOS	D	B			C	C				C		C
d_A, Approach Delay [s/veh]	19.99			28.37			0.00			27.88		
Approach LOS	B			C			A			C		
d_I, Intersection Delay [s/veh]	26.39											
Intersection LOS	C											
Intersection V/C	0.784											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.003	2.523
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	968	295	0	0
d_b, Bicycle Delay [s]	12.64	34.53	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.188	2.240	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	24.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.823

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	936	1071	1213	1503	0	155	0	331	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	936	1071	1213	1503	0	155	0	331	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	246	282	319	396	0	41	0	87	0	0	0
Total Analysis Volume [veh/h]	0	985	1127	1277	1582	0	163	0	348	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	53	75	0	25	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	100	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	43	43	43	30	77	15	15	
g / C, Green / Cycle	0.43	0.43	0.43	0.30	0.77	0.15	0.15	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.35	0.35	0.25	0.31	0.05	0.12	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2213	691	691	1536	3925	517	420	
d1, Uniform Delay [s]	19.83	24.78	24.78	32.86	3.82	37.97	41.28	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.65	10.29	10.29	1.23	0.31	0.35	4.22	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.45	0.82	0.82	0.83	0.40	0.32	0.83	
d, Delay for Lane Group [s/veh]	20.48	35.06	35.06	34.09	4.13	38.31	45.50	
Lane Group LOS	C	D	D	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.35	13.17	13.17	9.59	2.78	1.80	4.37	
50th-Percentile Queue Length [ft/ln]	133.82	329.17	329.17	239.66	69.46	44.99	109.15	
95th-Percentile Queue Length [veh/ln]	9.15	19.12	19.12	14.66	5.00	3.24	7.79	
95th-Percentile Queue Length [ft/ln]	228.67	477.94	477.94	366.61	125.02	80.97	194.81	

Movement, Approach, & Intersection Results

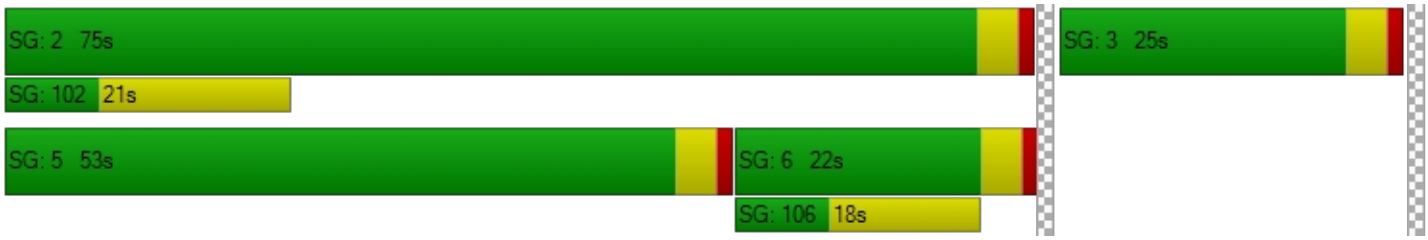
d_M, Delay for Movement [s/veh]	0.00	20.48	35.06	34.09	4.13	0.00	38.31	0.00	45.50	0.00	0.00	0.00
Movement LOS		C	D	C	A		D		D			
d_A, Approach Delay [s/veh]	28.26			17.51			43.21			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	24.05											
Intersection LOS	C											
Intersection V/C	0.823											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.260	2.726
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	360	1420	0	0
d_b, Bicycle Delay [s]	33.62	4.21	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	2.431	3.132	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	21.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	426	0	0	539	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	426	0	0	539	882
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	96	0	0	0	142	0
Total Analysis Volume [veh/h]	383	0	0	0	567	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	67	0	0	0	23	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	22	22		60	60
g / C, Green / Cycle	0.24	0.24		0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.22	0.00		0.30	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	427	381		1255	1067
d1, Uniform Delay [s]	33.09	0.00		6.96	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.95	0.00		1.18	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.00		0.45	0.00
d, Delay for Lane Group [s/veh]	40.03	0.00		8.14	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	8.68	0.00		4.75	0.00
50th-Percentile Queue Length [ft/ln]	216.90	0.00		118.80	0.00
95th-Percentile Queue Length [veh/ln]	13.51	0.00		8.33	0.00
95th-Percentile Queue Length [ft/ln]	337.67	0.00		208.17	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.03	0.00	0.00	0.00	8.14	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	40.03		0.00		8.14	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	21.00					
Intersection LOS	C					
Intersection V/C	0.569					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	5.068
Bicycle LOS	D	D	F

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1502	0	0	1420	1213	0	0	0	794	0	1173
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1502	0	0	1420	1213	0	0	0	794	0	1173
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	395	0	0	374	0	0	0	0	209	0	309
Total Analysis Volume [veh/h]	0	1581	0	0	1495	0	0	0	0	836	0	1235
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	37	37	37		45	45	45
g / C, Green / Cycle	0.41	0.41	0.41		0.50	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.23	0.22	0.00		0.39	0.42	0.43
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1626	1589
c, Capacity [veh/h]	2818	2818	660		883	807	788
d1, Uniform Delay [s]	20.04	19.71	0.00		18.63	19.82	20.17
k, delay calibration	0.50	0.50	0.50		0.13	0.17	0.18
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.81	0.72	0.00		1.85	4.20	5.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.53	0.00		0.78	0.86	0.88
d, Delay for Lane Group [s/veh]	20.85	20.43	0.00		20.48	24.02	25.44
Lane Group LOS	C	C	A		C	C	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.21	5.77	0.00		11.38	12.57	12.98
50th-Percentile Queue Length [ft/ln]	155.16	144.16	0.00		284.50	314.14	324.53
95th-Percentile Queue Length [veh/ln]	10.29	9.70	0.00		16.91	18.38	18.89
95th-Percentile Queue Length [ft/ln]	257.31	242.62	0.00		422.81	459.47	472.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	20.85	0.00	0.00	20.43	0.00	0.00	0.00	0.00	21.10	0.00	24.81
Movement LOS		C			C	A				C		C
d_A, Approach Delay [s/veh]	20.85			20.43			0.00			23.31		
Approach LOS	C			C			A			C		
d_I, Intersection Delay [s/veh]	21.72											
Intersection LOS	C											
Intersection V/C	0.732											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.613
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.212	2.176	4.132	7.550
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.659

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1292	1294	0	2208	0	215	0	781	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1292	1294	0	2208	0	215	0	781	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	340	0	0	581	0	57	0	206	0	0	0
Total Analysis Volume [veh/h]	0	1360	0	0	2324	0	226	0	822	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	13	0	0	13	0	77	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	55	55	55	27	27	27	
g / C, Green / Cycle	0.61	0.61	0.61	0.30	0.30	0.30	
(v / s)_i Volume / Saturation Flow Rate	0.27	0.00	0.34	0.13	0.26	0.26	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1589	1589	
c, Capacity [veh/h]	3112	971	4150	534	477	477	
d1, Uniform Delay [s]	9.27	0.00	10.33	25.21	29.69	29.69	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.45	0.00	0.55	0.53	4.74	4.74	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.44	0.00	0.56	0.42	0.86	0.86	
d, Delay for Lane Group [s/veh]	9.72	0.00	10.88	25.74	34.43	34.43	
Lane Group LOS	A	A	B	C	C	C	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh/ln]	4.36	0.00	6.20	3.85	8.71	8.71	
50th-Percentile Queue Length [ft/ln]	109.06	0.00	155.11	96.36	217.81	217.81	
95th-Percentile Queue Length [veh/ln]	7.79	0.00	10.29	6.94	13.55	13.55	
95th-Percentile Queue Length [ft/ln]	194.70	0.00	257.23	173.45	338.83	338.83	

Movement, Approach, & Intersection Results

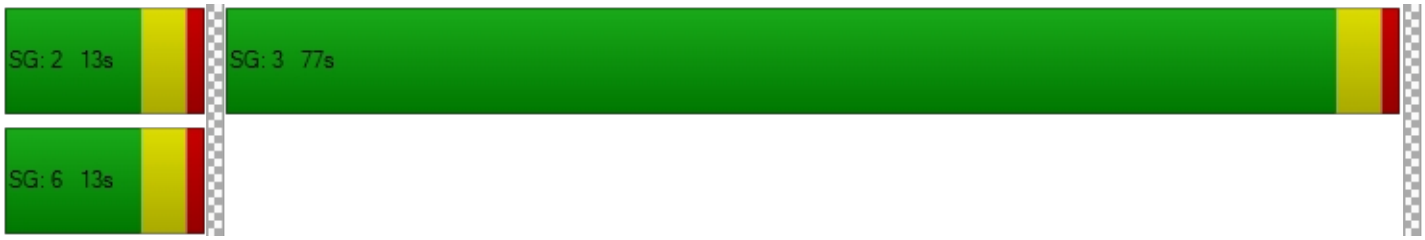
d_M, Delay for Movement [s/veh]	0.00	9.72	0.00	0.00	10.88	0.00	25.74	0.00	34.43	0.00	0.00	0.00
Movement LOS		A	A		B		C		C			
d_A, Approach Delay [s/veh]	9.72			10.88			32.55			0.00		
Approach LOS	A			B			C			A		
d_I, Intersection Delay [s/veh]	15.35											
Intersection LOS	B											
Intersection V/C	0.659											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	200	0	0
d_b, Bicycle Delay [s]	36.45	36.45	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.308	2.518	5.862	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	28.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	195	1308	0	0	2076	311	0	0	0	793	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	195	1308	0	0	2076	311	0	0	0	793	0	1102
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	344	0	0	546	82	0	0	0	209	0	290
Total Analysis Volume [veh/h]	205	1377	0	0	2185	327	0	0	0	835	0	1160
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	17	44	0	0	27	0	0	0	0	56	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	100	100	100	100		100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	13	46	29	29		46	46
g / C, Green / Cycle	0.13	0.46	0.29	0.29		0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.12	0.27	0.21	0.21		0.24	0.41
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	233	2327	2916	455		1602	1303
d1, Uniform Delay [s]	42.71	20.22	32.43	32.07		19.00	24.52
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	10.41	1.11	1.82	9.41		0.26	2.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.59	0.75	0.72		0.52	0.89
d, Delay for Lane Group [s/veh]	53.13	21.33	34.24	41.48		19.26	26.83
Lane Group LOS	D	C	C	D		B	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	5.60	7.92	8.10	8.16		6.68	12.29
50th-Percentile Queue Length [ft/ln]	140.03	197.93	202.40	204.03		166.97	307.23
95th-Percentile Queue Length [veh/ln]	9.48	12.53	12.76	12.85		10.92	18.04
95th-Percentile Queue Length [ft/ln]	237.07	313.30	319.06	321.16		272.93	450.96

Movement, Approach, & Intersection Results

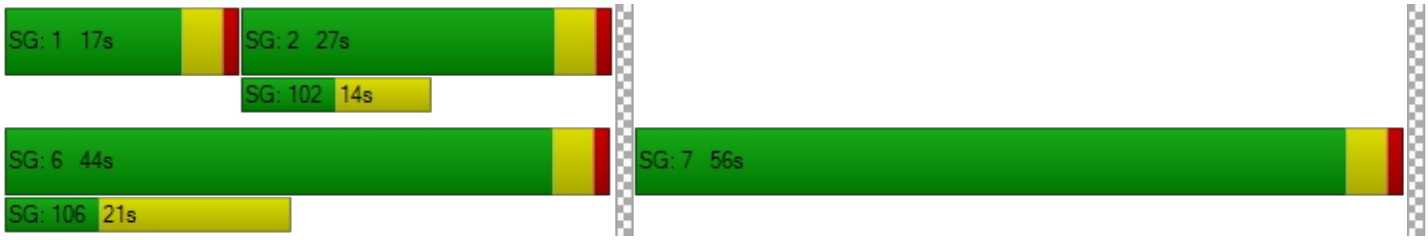
d_M, Delay for Movement [s/veh]	53.13	21.33	0.00	0.00	34.24	41.48	0.00	0.00	0.00	19.26	0.00	26.83
Movement LOS	D	C			C	D				B		C
d_A, Approach Delay [s/veh]	25.45			35.19			0.00			23.66		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	28.88											
Intersection LOS	C											
Intersection V/C	0.843											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.947	2.622
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	460	0	0
d_b, Bicycle Delay [s]	18.00	29.65	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	2.430	2.250	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	22.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1136	546	1128	1734	0	369	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1136	546	1128	1734	0	369	0	442	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	299	144	297	456	0	97	0	116	0	0	0
Total Analysis Volume [veh/h]	0	1196	575	1187	1825	0	388	0	465	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	43	65	0	30	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	95	95	95	95	95	95	95	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	38	38	38	26	68	19	19	
g / C, Green / Cycle	0.40	0.40	0.40	0.28	0.72	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.21	0.22	0.22	0.23	0.36	0.11	0.17	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2023	631	631	1436	3647	691	562	
d1, Uniform Delay [s]	21.82	22.22	22.22	32.23	5.97	34.27	36.45	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.98	3.58	3.58	1.27	0.49	0.72	3.18	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.53	0.56	0.56	0.83	0.50	0.56	0.83	
d, Delay for Lane Group [s/veh]	22.80	25.80	25.80	33.50	6.47	34.98	39.63	
Lane Group LOS	C	C	C	C	A	C	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.01	6.56	6.56	8.48	4.54	4.05	5.33	
50th-Percentile Queue Length [ft/ln]	150.28	164.06	164.06	212.11	113.38	101.35	133.21	
95th-Percentile Queue Length [veh/ln]	10.03	10.76	10.76	13.26	8.03	7.30	9.11	
95th-Percentile Queue Length [ft/ln]	250.81	269.09	269.09	331.53	200.69	182.44	227.85	

Movement, Approach, & Intersection Results

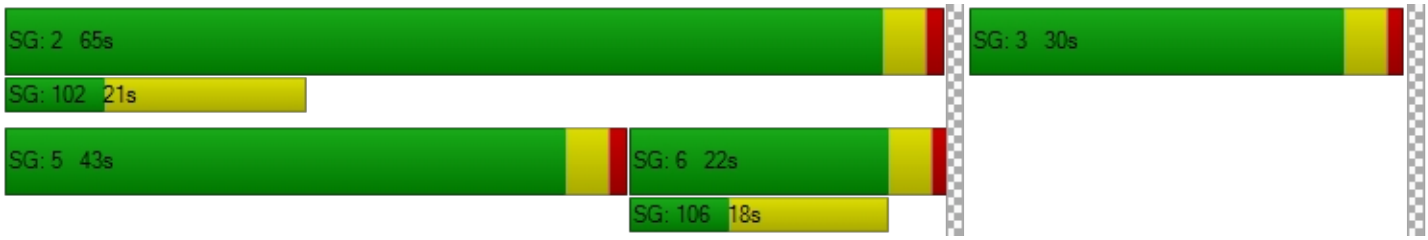
d_M, Delay for Movement [s/veh]	0.00	22.80	25.80	33.50	6.47	0.00	34.98	0.00	39.63	0.00	0.00	0.00
Movement LOS		C	C	C	A		C		D			
d_A, Approach Delay [s/veh]	24.00			17.12			37.51			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	22.37											
Intersection LOS	C											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.341	2.515
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	379	1284	0	0
d_b, Bicycle Delay [s]	31.21	6.08	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.290	3.216	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX D-IV

YEAR 2021 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	31.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	120	255
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	120	255
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	80	0	0	0	32	0
Total Analysis Volume [veh/h]	320	0	0	0	126	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	63	0	0	0	27	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	18	18		64	64
g / C, Green / Cycle	0.20	0.20		0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.18	0.00		0.07	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	363	324		1322	1124
d1, Uniform Delay [s]	34.70	0.00		4.13	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.03	0.00		0.14	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.00		0.10	0.00
d, Delay for Lane Group [s/veh]	41.73	0.00		4.28	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	7.34	0.00		0.65	0.00
50th-Percentile Queue Length [ft/ln]	183.39	0.00		16.32	0.00
95th-Percentile Queue Length [veh/ln]	11.78	0.00		1.17	0.00
95th-Percentile Queue Length [ft/ln]	294.44	0.00		29.37	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.73	0.00	0.00	0.00	4.28	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	41.73		0.00		4.28	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	31.15					
Intersection LOS	C					
Intersection V/C	0.271					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.340
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1640	0	0	1373	1060	0	0	0	457	0	931
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1640	0	0	1373	1060	0	0	0	457	0	931
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	432	0	0	361	0	0	0	0	120	0	245
Total Analysis Volume [veh/h]	0	1726	0	0	1445	0	0	0	0	481	0	980
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	50	50	50		32	32	32
g / C, Green / Cycle	0.55	0.55	0.55		0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.25	0.21	0.00		0.27	0.31	0.31
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1589	1589
c, Capacity [veh/h]	3746	3746	877		640	571	571
d1, Uniform Delay [s]	12.11	11.47	0.00		25.25	26.65	26.65
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	0.30	0.00		1.81	3.87	3.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.39	0.00		0.75	0.86	0.86
d, Delay for Lane Group [s/veh]	12.52	11.77	0.00		27.06	30.52	30.52
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.93	3.90	0.00		8.95	9.90	9.90
50th-Percentile Queue Length [ft/ln]	123.13	97.51	0.00		223.87	247.38	247.38
95th-Percentile Queue Length [veh/ln]	8.56	7.02	0.00		13.86	15.05	15.05
95th-Percentile Queue Length [ft/ln]	214.11	175.52	0.00		346.56	376.35	376.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	12.52	0.00	0.00	11.77	0.00	0.00	0.00	0.00	27.06	0.00	30.52
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	12.52			11.77			0.00			29.38		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	17.61											
Intersection LOS	B											
Intersection V/C	0.617											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.415
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.272	2.156	4.132	6.543
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1248	1799	0	1749	0	481	0	454	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1248	1799	0	1749	0	481	0	454	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	328	0	0	460	0	127	0	119	0	0	0
Total Analysis Volume [veh/h]	0	1314	0	0	1841	0	506	0	478	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	0	0	22	0	68	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	60	60	60	22	22	22	
g / C, Green / Cycle	0.66	0.66	0.66	0.25	0.25	0.25	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.00	0.27	0.18	0.19	0.21	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1688	1589	
c, Capacity [veh/h]	3382	1055	4509	440	417	393	
d1, Uniform Delay [s]	6.84	0.00	6.96	31.21	31.60	32.08	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.34	0.00	0.28	2.53	3.32	4.72	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.39	0.00	0.41	0.75	0.79	0.84	
d, Delay for Lane Group [s/veh]	7.18	0.00	7.24	33.74	34.92	36.80	
Lane Group LOS	A	A	A	C	C	D	
Critical Lane Group	No	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.37	0.00	3.57	6.70	6.86	7.09	
50th-Percentile Queue Length [ft/ln]	84.15	0.00	89.34	167.62	171.51	177.21	
95th-Percentile Queue Length [veh/ln]	6.06	0.00	6.43	10.95	11.16	11.45	
95th-Percentile Queue Length [ft/ln]	151.47	0.00	160.81	273.78	278.89	286.37	

Movement, Approach, & Intersection Results

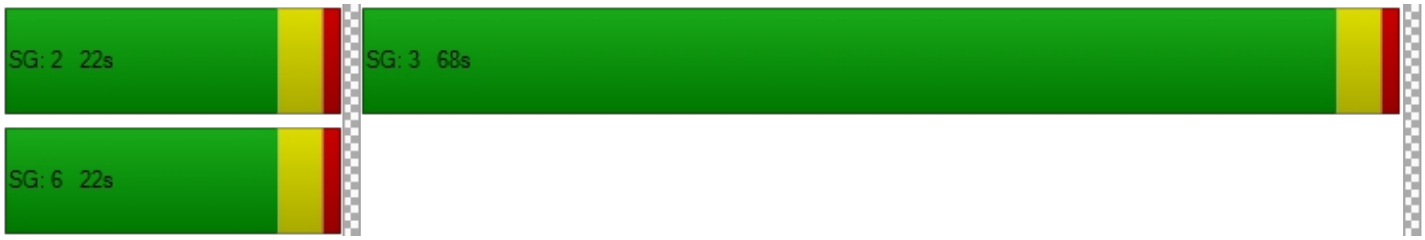
d_M, Delay for Movement [s/veh]	0.00	7.18	0.00	0.00	7.24	0.00	34.15	0.00	36.21	0.00	0.00	0.00
Movement LOS		A	A		A		C		D			
d_A, Approach Delay [s/veh]	7.18			7.24			35.15			0.00		
Approach LOS	A			A			D			A		
d_I, Intersection Delay [s/veh]	13.85											
Intersection LOS	B											
Intersection V/C	0.524											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.282	2.319	5.756	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.785

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	263	836	0	0	2061	299	0	0	0	668	0	849
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	836	0	0	2061	299	0	0	0	668	0	849
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	220	0	0	542	79	0	0	0	176	0	223
Total Analysis Volume [veh/h]	277	880	0	0	2169	315	0	0	0	703	0	894
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	32	50	0	0	18	0	0	0	0	45	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	95	95	95	95		95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	17	52	31	31		35	35
g / C, Green / Cycle	0.18	0.55	0.33	0.33		0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.16	0.17	0.21	0.20		0.20	0.32
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	317	2807	3372	526		1261	1026
d1, Uniform Delay [s]	38.02	11.57	27.01	26.52		24.07	28.11
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.51	0.29	0.96	4.97		0.39	2.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.31	0.64	0.60		0.56	0.87
d, Delay for Lane Group [s/veh]	45.53	11.87	27.97	31.49		24.46	30.57
Lane Group LOS	D	B	C	C		C	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	6.83	3.25	6.93	6.53		6.19	9.45
50th-Percentile Queue Length [ft/ln]	170.82	81.34	173.28	163.17		154.84	236.20
95th-Percentile Queue Length [veh/ln]	11.12	5.86	11.25	10.72		10.27	14.49
95th-Percentile Queue Length [ft/ln]	277.99	146.42	281.23	267.92		256.87	362.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.53	11.87	0.00	0.00	27.97	31.49	0.00	0.00	0.00	24.46	0.00	30.57
Movement LOS	D	B			C	C				C		C
d_A, Approach Delay [s/veh]	19.93			28.42			0.00			27.88		
Approach LOS	B			C			A			C		
d_I, Intersection Delay [s/veh]	26.38											
Intersection LOS	C											
Intersection V/C	0.785											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.003	2.523
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	968	295	0	0
d_b, Bicycle Delay [s]	12.64	34.53	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.196	2.243	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	24.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.823

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	950	1071	1213	1514	0	155	0	331	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	950	1071	1213	1514	0	155	0	331	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	250	282	319	398	0	41	0	87	0	0	0
Total Analysis Volume [veh/h]	0	1000	1127	1277	1594	0	163	0	348	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	53	75	0	25	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	100	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	43	43	43	30	77	15	15	
g / C, Green / Cycle	0.43	0.43	0.43	0.30	0.77	0.15	0.15	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.35	0.35	0.25	0.31	0.05	0.12	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2213	691	691	1536	3925	517	420	
d1, Uniform Delay [s]	19.90	24.78	24.78	32.86	3.83	37.97	41.28	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.67	10.29	10.29	1.23	0.31	0.35	4.22	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.45	0.82	0.82	0.83	0.41	0.32	0.83	
d, Delay for Lane Group [s/veh]	20.57	35.06	35.06	34.09	4.14	38.31	45.50	
Lane Group LOS	C	D	D	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.46	13.17	13.17	9.59	2.81	1.80	4.37	
50th-Percentile Queue Length [ft/ln]	136.38	329.17	329.17	239.66	70.23	44.99	109.15	
95th-Percentile Queue Length [veh/ln]	9.29	19.12	19.12	14.66	5.06	3.24	7.79	
95th-Percentile Queue Length [ft/ln]	232.14	477.94	477.94	366.61	126.41	80.97	194.81	

Movement, Approach, & Intersection Results

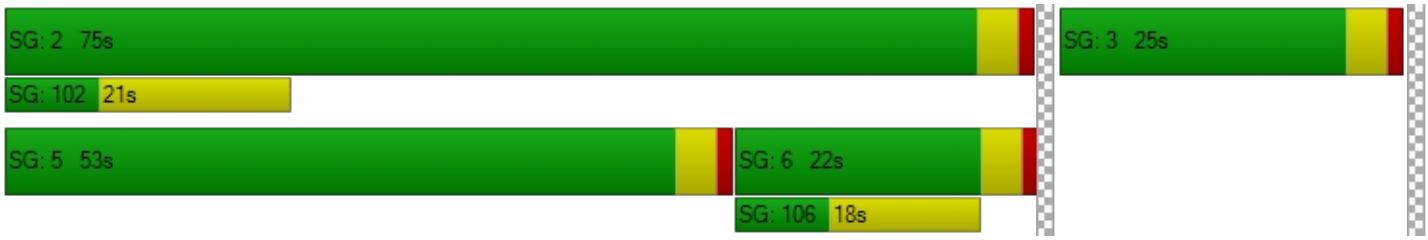
d_M, Delay for Movement [s/veh]	0.00	20.57	35.06	34.09	4.14	0.00	38.31	0.00	45.50	0.00	0.00	0.00
Movement LOS		C	D	C	A		D		D			
d_A, Approach Delay [s/veh]	28.25			17.46			43.21			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	24.02											
Intersection LOS	C											
Intersection V/C	0.823											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.260	2.726
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	360	1420	0	0
d_b, Bicycle Delay [s]	33.62	4.21	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	2.437	3.139	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	426	0	0	555	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	426	0	0	555	882
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	96	0	0	0	146	0
Total Analysis Volume [veh/h]	383	0	0	0	584	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	67	0	0	0	23	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	22	22		60	60
g / C, Green / Cycle	0.24	0.24		0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.22	0.00		0.31	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	427	381		1255	1067
d1, Uniform Delay [s]	33.09	0.00		7.05	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.95	0.00		1.24	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.00		0.47	0.00
d, Delay for Lane Group [s/veh]	40.03	0.00		8.29	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	8.68	0.00		4.96	0.00
50th-Percentile Queue Length [ft/ln]	216.90	0.00		124.10	0.00
95th-Percentile Queue Length [veh/ln]	13.51	0.00		8.62	0.00
95th-Percentile Queue Length [ft/ln]	337.67	0.00		215.45	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.03	0.00	0.00	0.00	8.29	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	40.03		0.00		8.29	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	20.87					
Intersection LOS	C					
Intersection V/C	0.579					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	5.096
Bicycle LOS	D	D	F

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	21.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1588	0	0	1456	1237	0	0	0	794	0	1173
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1588	0	0	1456	1237	0	0	0	794	0	1173
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	418	0	0	383	0	0	0	0	209	0	309
Total Analysis Volume [veh/h]	0	1672	0	0	1533	0	0	0	0	836	0	1235
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	37	37	37		45	45	45
g / C, Green / Cycle	0.41	0.41	0.41		0.50	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.25	0.23	0.00		0.39	0.42	0.43
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1626	1589
c, Capacity [veh/h]	2818	2818	660		883	807	788
d1, Uniform Delay [s]	20.40	19.86	0.00		18.63	19.82	20.17
k, delay calibration	0.50	0.50	0.50		0.13	0.17	0.18
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.93	0.76	0.00		1.85	4.20	5.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.54	0.00		0.78	0.86	0.88
d, Delay for Lane Group [s/veh]	21.32	20.62	0.00		20.48	24.02	25.44
Lane Group LOS	C	C	A		C	C	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.69	5.96	0.00		11.38	12.57	12.98
50th-Percentile Queue Length [ft/ln]	167.27	148.97	0.00		284.50	314.14	324.53
95th-Percentile Queue Length [veh/ln]	10.93	9.96	0.00		16.91	18.38	18.89
95th-Percentile Queue Length [ft/ln]	273.32	249.06	0.00		422.81	459.47	472.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	21.32	0.00	0.00	20.62	0.00	0.00	0.00	0.00	21.10	0.00	24.81
Movement LOS		C			C	A				C		C
d_A, Approach Delay [s/veh]	21.32			20.62			0.00			23.31		
Approach LOS	C			C			A			C		
d_I, Intersection Delay [s/veh]	21.90											
Intersection LOS	C											
Intersection V/C	0.747											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.613
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.249	2.192	4.132	7.550
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.666

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1351	1294	0	2244	0	242	0	781	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1351	1294	0	2244	0	242	0	781	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	356	0	0	591	0	64	0	206	0	0	0
Total Analysis Volume [veh/h]	0	1422	0	0	2362	0	255	0	822	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	12	0	0	12	0	78	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	55	55	55	27	27	27	
g / C, Green / Cycle	0.61	0.61	0.61	0.30	0.30	0.30	
(v / s)_i Volume / Saturation Flow Rate	0.28	0.00	0.35	0.14	0.26	0.26	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1589	1589	
c, Capacity [veh/h]	3109	970	4145	536	478	478	
d1, Uniform Delay [s]	9.46	0.00	10.46	25.64	29.63	29.63	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.49	0.00	0.57	0.66	4.65	4.65	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.46	0.00	0.57	0.48	0.86	0.86	
d, Delay for Lane Group [s/veh]	9.95	0.00	11.03	26.29	34.28	34.28	
Lane Group LOS	A	A	B	C	C	C	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh/ln]	4.65	0.00	6.38	4.43	8.69	8.69	
50th-Percentile Queue Length [ft/ln]	116.34	0.00	159.48	110.83	217.31	217.31	
95th-Percentile Queue Length [veh/ln]	8.19	0.00	10.52	7.89	13.53	13.53	
95th-Percentile Queue Length [ft/ln]	204.79	0.00	263.04	197.15	338.19	338.19	

Movement, Approach, & Intersection Results

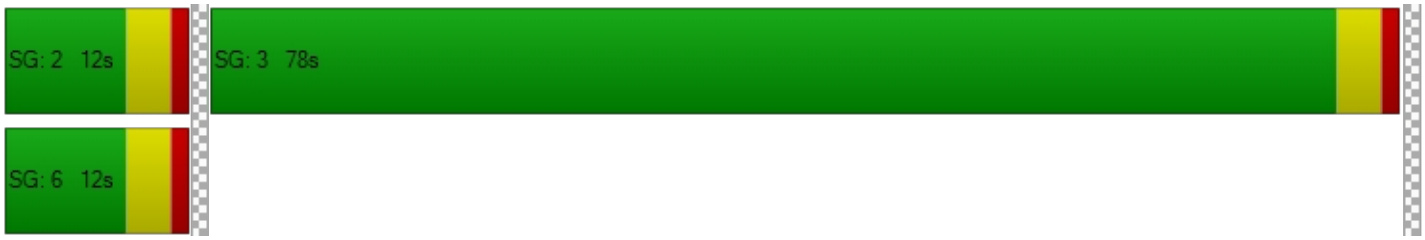
d_M, Delay for Movement [s/veh]	0.00	9.95	0.00	0.00	11.03	0.00	26.29	0.00	34.28	0.00	0.00	0.00
Movement LOS		A	A		B		C		C			
d_A, Approach Delay [s/veh]	9.95			11.03			32.39			0.00		
Approach LOS	A			B			C			A		
d_I, Intersection Delay [s/veh]	15.45											
Intersection LOS	B											
Intersection V/C	0.666											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	178	178	0	0
d_b, Bicycle Delay [s]	37.36	37.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.342	2.534	5.909	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	28.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.844

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	195	1327	0	0	2087	311	0	0	0	793	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	195	1327	0	0	2087	311	0	0	0	793	0	1102
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	349	0	0	549	82	0	0	0	209	0	290
Total Analysis Volume [veh/h]	205	1397	0	0	2197	327	0	0	0	835	0	1160
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	17	44	0	0	27	0	0	0	0	56	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	100	100	100	100		100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	13	46	29	29		46	46
g / C, Green / Cycle	0.13	0.46	0.29	0.29		0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.12	0.27	0.22	0.21		0.24	0.41
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	233	2327	2916	455		1602	1303
d1, Uniform Delay [s]	42.71	20.33	32.48	32.07		19.00	24.52
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	10.41	1.15	1.85	9.41		0.26	2.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.60	0.75	0.72		0.52	0.89
d, Delay for Lane Group [s/veh]	53.13	21.48	34.33	41.48		19.26	26.83
Lane Group LOS	D	C	C	D		B	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	5.60	8.08	8.16	8.16		6.68	12.29
50th-Percentile Queue Length [ft/ln]	140.03	201.99	203.91	204.03		166.97	307.23
95th-Percentile Queue Length [veh/ln]	9.48	12.74	12.84	12.85		10.92	18.04
95th-Percentile Queue Length [ft/ln]	237.07	318.53	321.00	321.16		272.93	450.96

Movement, Approach, & Intersection Results

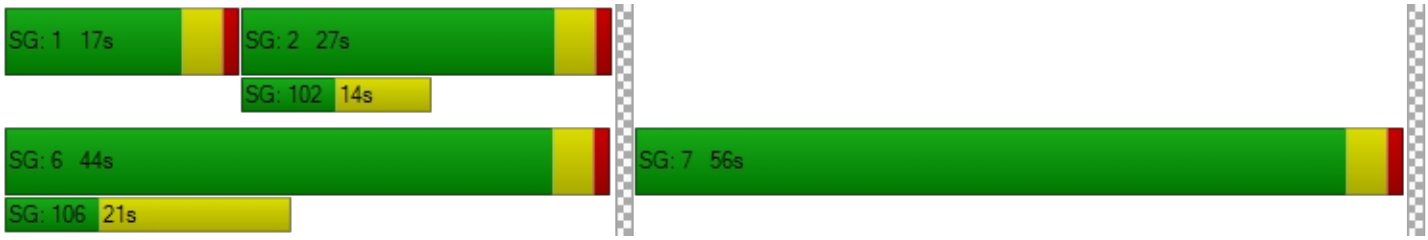
d_M, Delay for Movement [s/veh]	53.13	21.48	0.00	0.00	34.33	41.48	0.00	0.00	0.00	19.26	0.00	26.83
Movement LOS	D	C			C	D				B		C
d_A, Approach Delay [s/veh]	25.53			35.26			0.00			23.66		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	28.93											
Intersection LOS	C											
Intersection V/C	0.844											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.947	2.622
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	460	0	0
d_b, Bicycle Delay [s]	18.00	29.65	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	2.441	2.254	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	22.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1155	546	1128	1745	0	369	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1155	546	1128	1745	0	369	0	442	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	304	144	297	459	0	97	0	116	0	0	0
Total Analysis Volume [veh/h]	0	1216	575	1187	1837	0	388	0	465	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	43	65	0	30	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	95	95	95	95	95	95	95	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	38	38	38	26	68	19	19	
g / C, Green / Cycle	0.40	0.40	0.40	0.28	0.72	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.21	0.23	0.23	0.23	0.36	0.11	0.17	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2023	631	631	1436	3647	691	562	
d1, Uniform Delay [s]	21.88	22.29	22.29	32.23	5.99	34.27	36.45	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.00	3.67	3.67	1.27	0.50	0.72	3.18	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.53	0.57	0.57	0.83	0.50	0.56	0.83	
d, Delay for Lane Group [s/veh]	22.89	25.96	25.96	33.50	6.49	34.98	39.63	
Lane Group LOS	C	C	C	C	A	C	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.10	6.66	6.66	8.48	4.58	4.05	5.33	
50th-Percentile Queue Length [ft/ln]	152.48	166.62	166.62	212.11	114.56	101.35	133.21	
95th-Percentile Queue Length [veh/ln]	10.15	10.90	10.90	13.26	8.09	7.30	9.11	
95th-Percentile Queue Length [ft/ln]	253.73	272.46	272.46	331.53	202.32	182.44	227.85	

Movement, Approach, & Intersection Results

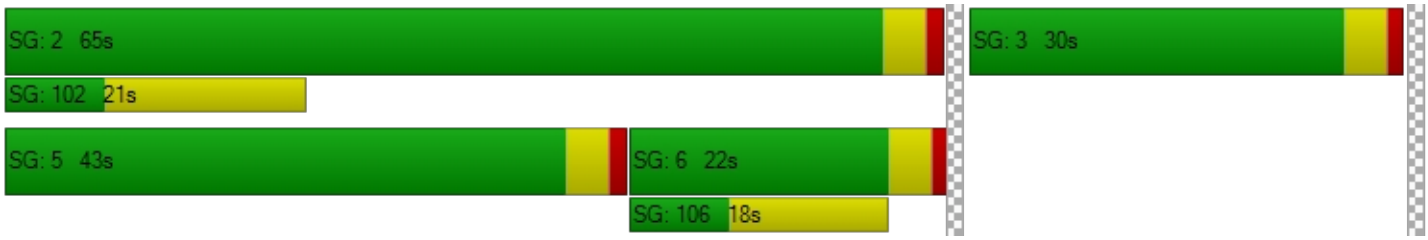
d_M, Delay for Movement [s/veh]	0.00	22.89	25.96	33.50	6.49	0.00	34.98	0.00	39.63	0.00	0.00	0.00
Movement LOS		C	C	C	A		C		D			
d_A, Approach Delay [s/veh]	24.12			17.10			37.51			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	22.39											
Intersection LOS	C											
Intersection V/C	0.709											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	37.14	37.14
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.341	2.515
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	379	1284	0	0
d_b, Bicycle Delay [s]	31.21	6.08	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	2.298	3.223	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX D-V

YEAR 2035 BUILDOUT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.320

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	199	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	199	260
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	80	0	0	0	52	0
Total Analysis Volume [veh/h]	320	0	0	0	209	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	55	0	0	0	35	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	18	18		64	64
g / C, Green / Cycle	0.20	0.20		0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.18	0.00		0.11	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	362	323		1323	1125
d1, Uniform Delay [s]	34.70	0.00		4.31	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.23	0.00		0.25	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.00		0.16	0.00
d, Delay for Lane Group [s/veh]	41.93	0.00		4.57	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	7.35	0.00		1.13	0.00
50th-Percentile Queue Length [ft/ln]	183.76	0.00		28.37	0.00
95th-Percentile Queue Length [veh/ln]	11.80	0.00		2.04	0.00
95th-Percentile Queue Length [ft/ln]	294.92	0.00		51.07	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.93	0.00	0.00	0.00	4.57	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	41.93		0.00		4.57	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	27.17					
Intersection LOS	C					
Intersection V/C	0.320					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.477
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.692

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	2142	0	0	1330	1224	0	0	0	457	0	893
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2142	0	0	1330	1224	0	0	0	457	0	893
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	564	0	0	350	0	0	0	0	120	0	235
Total Analysis Volume [veh/h]	0	2255	0	0	1400	0	0	0	0	481	0	940
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	51	51	51		31	31	31
g / C, Green / Cycle	0.56	0.56	0.56		0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.33	0.21	0.00		0.27	0.30	0.30
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1592	1589
c, Capacity [veh/h]	3821	3821	894		620	555	554
d1, Uniform Delay [s]	12.86	10.82	0.00		25.98	27.15	27.17
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.68	0.27	0.00		1.99	3.87	3.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.37	0.00		0.76	0.85	0.86
d, Delay for Lane Group [s/veh]	13.54	11.10	0.00		27.97	31.02	31.09
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.98	3.62	0.00		8.97	9.62	9.63
50th-Percentile Queue Length [ft/ln]	174.41	90.57	0.00		224.35	240.40	240.72
95th-Percentile Queue Length [veh/ln]	11.31	6.52	0.00		13.89	14.70	14.72
95th-Percentile Queue Length [ft/ln]	282.70	163.03	0.00		347.18	367.55	367.94

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	13.54	0.00	0.00	11.10	0.00	0.00	0.00	0.00	28.02	0.00	31.06
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	13.54			11.10			0.00			30.03		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	17.48											
Intersection LOS	B											
Intersection V/C	0.692											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.402
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.490	2.137	4.132	6.477
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	18.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1430	1799	0	1706	0	712	0	798	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1430	1799	0	1706	0	712	0	798	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	376	0	0	449	0	187	0	210	0	0	0
Total Analysis Volume [veh/h]	0	1505	0	0	1796	0	749	0	840	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	9	0	0	9	0	81	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	47	47	47	35	35	35	
g / C, Green / Cycle	0.52	0.52	0.52	0.39	0.39	0.39	
(v / s)_i Volume / Saturation Flow Rate	0.30	0.00	0.26	0.30	0.32	0.33	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1664	1589	
c, Capacity [veh/h]	2672	834	3563	688	643	614	
d1, Uniform Delay [s]	14.41	0.00	13.80	24.07	24.81	25.36	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.87	0.00	0.51	1.86	2.74	3.74	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.56	0.00	0.50	0.77	0.82	0.86	
d, Delay for Lane Group [s/veh]	15.28	0.00	14.32	25.92	27.55	29.11	
Lane Group LOS	B	A	B	C	C	C	
Critical Lane Group	Yes	No	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.63	0.00	5.62	9.72	10.14	10.51	
50th-Percentile Queue Length [ft/ln]	165.66	0.00	140.60	243.03	253.59	262.70	
95th-Percentile Queue Length [veh/ln]	10.85	0.00	9.51	14.83	15.37	15.82	
95th-Percentile Queue Length [ft/ln]	271.20	0.00	237.83	370.86	384.18	395.61	

Movement, Approach, & Intersection Results

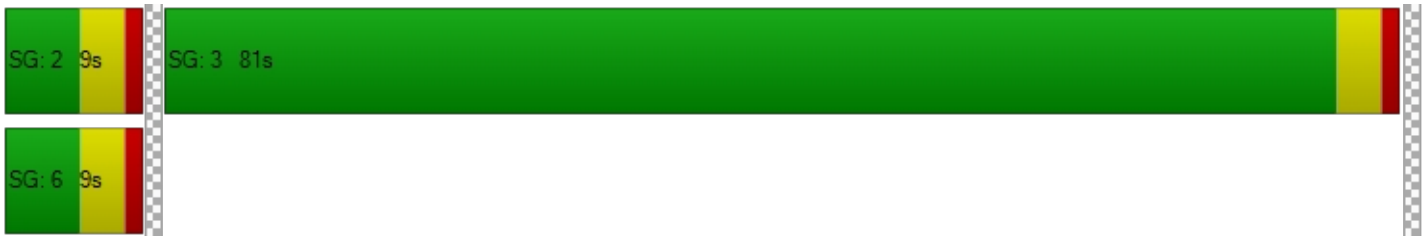
d_M, Delay for Movement [s/veh]	0.00	15.28	0.00	0.00	14.32	0.00	26.40	0.00	28.53	0.00	0.00	0.00
Movement LOS		B	A		B		C		C			
d_A, Approach Delay [s/veh]	15.28			14.32			27.53			0.00		
Approach LOS	B			B			C			A		
d_I, Intersection Delay [s/veh]	18.90											
Intersection LOS	B											
Intersection V/C	0.690											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	111	111	0	0
d_b, Bicycle Delay [s]	40.14	40.14	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.387	2.300	6.754	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	37.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.934

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	270	1142	0	0	2047	300	0	0	0	668	0	1232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	1142	0	0	2047	300	0	0	0	668	0	1232
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	301	0	0	539	79	0	0	0	176	0	324
Total Analysis Volume [veh/h]	284	1202	0	0	2155	316	0	0	0	703	0	1297
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	23	51	0	0	28	0	0	0	0	59	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	110	110	110	110		110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	19	48	25	25		54	54
g / C, Green / Cycle	0.17	0.44	0.23	0.23		0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.16	0.24	0.21	0.20		0.20	0.46
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	309	2242	2348	366		1685	1370
d1, Uniform Delay [s]	44.70	22.55	41.28	40.62		18.15	26.83
k, delay calibration	0.15	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	14.11	0.92	7.16	22.58		0.17	4.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.54	0.92	0.86		0.42	0.95
d, Delay for Lane Group [s/veh]	58.81	23.48	48.44	63.20		18.31	31.09
Lane Group LOS	E	C	D	E		B	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	8.77	7.66	10.18	10.43		5.67	16.17
50th-Percentile Queue Length [ft/ln]	219.26	191.39	254.38	260.84		141.79	404.32
95th-Percentile Queue Length [veh/ln]	13.63	12.19	15.41	15.73		9.58	22.77
95th-Percentile Queue Length [ft/ln]	340.68	304.83	385.16	393.27		239.43	569.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.81	23.48	0.00	0.00	48.44	63.20	0.00	0.00	0.00	18.31	0.00	31.09
Movement LOS	E	C			D	E				B		C
d_A, Approach Delay [s/veh]	30.23			50.33			0.00			26.60		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	37.35											
Intersection LOS	D											
Intersection V/C	0.934											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	44.55	44.55
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.018	2.628
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	855	436	0	0
d_b, Bicycle Delay [s]	18.04	33.62	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	2.377	2.239	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	29.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.861

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1132	1180	1213	1500	0	310	0	370	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1132	1180	1213	1500	0	310	0	370	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	298	311	319	395	0	82	0	97	0	0	0
Total Analysis Volume [veh/h]	0	1192	1242	1277	1579	0	326	0	389	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	40	40	52	92	0	28	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	120	120	120	120	120	120	120	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	54	54	54	34	93	19	19	
g / C, Green / Cycle	0.45	0.45	0.45	0.29	0.77	0.16	0.16	
(v / s)_i Volume / Saturation Flow Rate	0.23	0.39	0.39	0.25	0.31	0.09	0.14	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2308	720	720	1482	3933	558	454	
d1, Uniform Delay [s]	23.41	29.44	29.44	40.60	4.51	46.58	48.96	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.83	12.94	12.94	1.60	0.31	0.98	4.80	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.52	0.86	0.86	0.86	0.40	0.58	0.86	
d, Delay for Lane Group [s/veh]	24.24	42.38	42.38	42.19	4.82	47.55	53.76	
Lane Group LOS	C	D	D	D	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	8.14	18.23	18.23	12.03	3.71	4.59	5.96	
50th-Percentile Queue Length [ft/ln]	203.47	455.80	455.80	300.73	92.67	114.66	149.00	
95th-Percentile Queue Length [veh/ln]	12.82	25.23	25.23	17.72	6.67	8.10	9.96	
95th-Percentile Queue Length [ft/ln]	320.43	630.86	630.86	442.93	166.80	202.46	249.09	

Movement, Approach, & Intersection Results

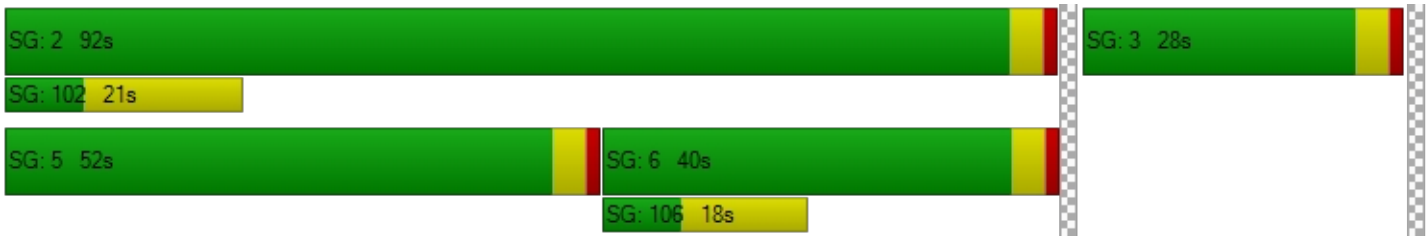
d_M, Delay for Movement [s/veh]	0.00	24.24	42.38	42.19	4.82	0.00	47.55	0.00	53.76	0.00	0.00	0.00
Movement LOS		C	D	D	A		D		D			
d_A, Approach Delay [s/veh]	33.50			21.53			50.93			0.00		
Approach LOS	C			C			D			A		
d_I, Intersection Delay [s/veh]	29.88											
Intersection LOS	C											
Intersection V/C	0.861											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	49.50	49.50
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.319	2.773
Crosswalk LOS	F	F	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	1467	0	0
d_b, Bicycle Delay [s]	29.40	4.27	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	2.564	3.130	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	730	0	0	912	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	730	0	0	912	882
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	96	0	0	0	240	0
Total Analysis Volume [veh/h]	383	0	0	0	960	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	67	0	0	0	23	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	22	22		60	60
g / C, Green / Cycle	0.24	0.24		0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.22	0.00		0.51	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	427	381		1255	1067
d1, Uniform Delay [s]	33.09	0.00		9.97	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.95	0.00		4.47	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.00		0.76	0.00
d, Delay for Lane Group [s/veh]	40.03	0.00		14.44	0.00
Lane Group LOS	D	A		B	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	8.68	0.00		12.09	0.00
50th-Percentile Queue Length [ft/ln]	216.90	0.00		302.14	0.00
95th-Percentile Queue Length [veh/ln]	13.51	0.00		17.79	0.00
95th-Percentile Queue Length [ft/ln]	337.67	0.00		444.67	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.03	0.00	0.00	0.00	14.44	0.00
Movement LOS	D	A			B	A
d_A, Approach Delay [s/veh]	40.03		0.00		14.44	
Approach LOS	D		A		B	
d_I, Intersection Delay [s/veh]	21.74					
Intersection LOS	C					
Intersection V/C	0.800					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	5.716
Bicycle LOS	D	D	F

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	24.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.831

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1703	0	0	1819	1143	0	0	0	987	0	1166
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1703	0	0	1819	1143	0	0	0	987	0	1166
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	448	0	0	479	0	0	0	0	260	0	307
Total Analysis Volume [veh/h]	0	1793	0	0	1915	0	0	0	0	1039	0	1227
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34		48	48	48
g / C, Green / Cycle	0.37	0.37	0.37		0.54	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.26	0.28	0.00		0.42	0.46	0.48
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1656	1589
c, Capacity [veh/h]	2533	2533	593		958	891	855
d1, Uniform Delay [s]	23.99	24.59	0.00		16.65	17.62	18.27
k, delay calibration	0.50	0.50	0.50		0.17	0.20	0.22
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.70	2.16	0.00		2.30	4.29	6.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.76	0.00		0.79	0.85	0.88
d, Delay for Lane Group [s/veh]	25.69	26.75	0.00		18.95	21.91	24.61
Lane Group LOS	C	C	A		B	C	C
Critical Lane Group	No	Yes	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.09	8.90	0.00		11.95	13.06	13.95
50th-Percentile Queue Length [ft/ln]	202.15	222.62	0.00		298.78	326.60	348.71
95th-Percentile Queue Length [veh/ln]	12.75	13.80	0.00		17.62	18.99	20.07
95th-Percentile Queue Length [ft/ln]	318.73	344.96	0.00		440.52	474.79	501.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	25.69	0.00	0.00	26.75	0.00	0.00	0.00	0.00	19.76	0.00	23.57
Movement LOS		C			C	A				B		C
d_A, Approach Delay [s/veh]	25.69			26.75			0.00			21.83		
Approach LOS	C			C			A			C		
d_I, Intersection Delay [s/veh]	24.57											
Intersection LOS	C											
Intersection V/C	0.831											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.676
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.299	2.350	4.132	7.871
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	19.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.831

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1499	1849	0	2796	0	204	0	977	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1499	1849	0	2796	0	204	0	977	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	394	0	0	736	0	54	0	257	0	0	0
Total Analysis Volume [veh/h]	0	1578	0	0	2943	0	215	0	1028	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	14	0	0	14	0	76	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	49	49	49	33	33	33	
g / C, Green / Cycle	0.54	0.54	0.54	0.37	0.37	0.37	
(v / s)_i Volume / Saturation Flow Rate	0.31	0.00	0.43	0.12	0.32	0.32	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1589	1589	
c, Capacity [veh/h]	2768	864	3690	655	584	584	
d1, Uniform Delay [s]	13.57	0.00	16.53	20.43	26.55	26.55	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.86	0.00	1.88	0.29	4.50	4.50	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.57	0.00	0.80	0.33	0.88	0.88	
d, Delay for Lane Group [s/veh]	14.43	0.00	18.41	20.72	31.05	31.05	
Lane Group LOS	B	A	B	C	C	C	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh/ln]	6.72	0.00	11.56	3.21	10.52	10.52	
50th-Percentile Queue Length [ft/ln]	168.12	0.00	289.11	80.14	263.12	263.12	
95th-Percentile Queue Length [veh/ln]	10.98	0.00	17.14	5.77	15.85	15.85	
95th-Percentile Queue Length [ft/ln]	274.45	0.00	428.54	144.26	396.13	396.13	

Movement, Approach, & Intersection Results

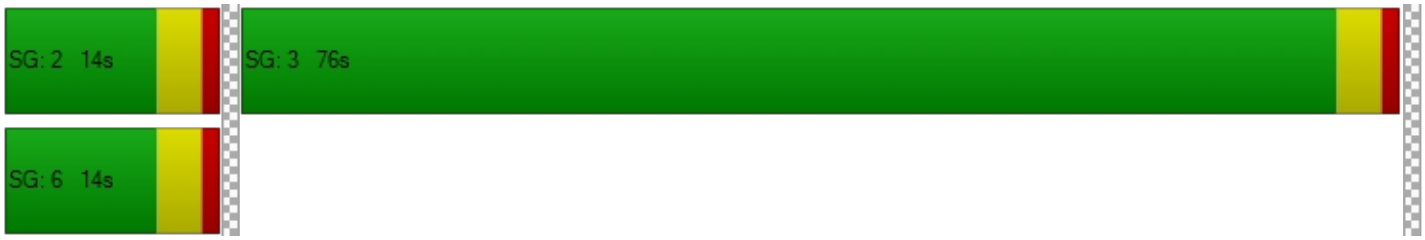
d_M, Delay for Movement [s/veh]	0.00	14.43	0.00	0.00	18.41	0.00	20.72	0.00	31.05	0.00	0.00	0.00
Movement LOS		B	A		B		C		C			
d_A, Approach Delay [s/veh]	14.43			18.41			29.26			0.00		
Approach LOS	B			B			C			A		
d_I, Intersection Delay [s/veh]	19.66											
Intersection LOS	B											
Intersection V/C	0.831											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	222	0	0
d_b, Bicycle Delay [s]	35.56	35.56	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.428	2.774	6.183	4.132
Bicycle LOS	B	C	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	41.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.952

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	320	1577	0	0	2468	311	0	0	0	900	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	320	1577	0	0	2468	311	0	0	0	900	0	1102
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	415	0	0	649	82	0	0	0	237	0	290
Total Analysis Volume [veh/h]	337	1660	0	0	2598	327	0	0	0	947	0	1160
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	28	63	0	0	35	0	0	0	0	57	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	120	120	120	120		120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	24	60	32	32		52	52
g / C, Green / Cycle	0.20	0.50	0.27	0.27		0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.19	0.33	0.26	0.21		0.27	0.41
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	356	2543	2708	423		1501	1221
d1, Uniform Delay [s]	47.33	22.31	43.39	40.69		26.45	32.68
k, delay calibration	0.27	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	24.12	1.32	10.10	12.94		0.44	4.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.95	0.65	0.96	0.77		0.63	0.95
d, Delay for Lane Group [s/veh]	71.45	23.63	53.49	53.63		26.89	37.63
Lane Group LOS	E	C	D	D		C	D
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	12.27	11.65	13.81	10.41		10.50	16.60
50th-Percentile Queue Length [ft/ln]	306.72	291.17	345.34	260.15		262.57	414.95
95th-Percentile Queue Length [veh/ln]	18.01	17.24	19.91	15.70		15.82	23.28
95th-Percentile Queue Length [ft/ln]	450.33	431.10	497.73	392.41		395.44	581.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.45	23.63	0.00	0.00	53.49	53.63	0.00	0.00	0.00	26.89	0.00	37.63
Movement LOS	E	C			D	D				C		D
d_A, Approach Delay [s/veh]	31.70			53.50			0.00			32.81		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	41.10											
Intersection LOS	D											
Intersection V/C	0.952											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	49.50	49.50
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.085	2.658
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	983	517	0	0
d_b, Bicycle Delay [s]	15.50	33.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	2.658	2.364	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1397	546	1474	1884	0	510	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1397	546	1474	1884	0	510	0	442	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	368	144	388	496	0	134	0	116	0	0	0
Total Analysis Volume [veh/h]	0	1471	575	1552	1983	0	537	0	465	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	44	66	0	24	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	29	29	29	32	64	18	18	
g / C, Green / Cycle	0.32	0.32	0.32	0.35	0.72	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.24	0.26	0.26	0.30	0.39	0.16	0.17	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	1616	504	504	1832	3642	679	552	
d1, Uniform Delay [s]	27.65	28.26	28.26	26.87	5.99	34.43	34.85	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	3.41	13.28	13.28	1.16	0.59	2.12	3.58	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.76	0.81	0.81	0.85	0.54	0.79	0.84	
d, Delay for Lane Group [s/veh]	31.06	41.54	41.54	28.03	6.58	36.56	38.42	
Lane Group LOS	C	D	D	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	8.16	9.67	9.67	10.01	4.79	5.67	5.07	
50th-Percentile Queue Length [ft/ln]	203.89	241.87	241.87	250.21	119.70	141.84	126.77	
95th-Percentile Queue Length [veh/ln]	12.84	14.78	14.78	15.20	8.38	9.58	8.76	
95th-Percentile Queue Length [ft/ln]	320.98	369.40	369.40	379.92	209.42	239.50	219.10	

Movement, Approach, & Intersection Results

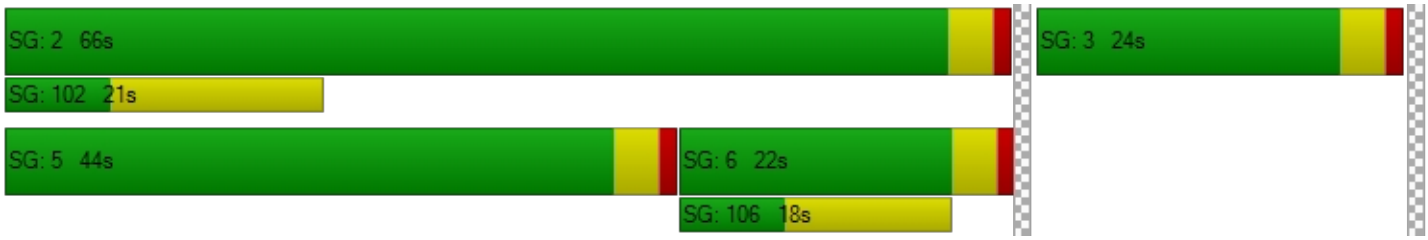
d_M, Delay for Movement [s/veh]	0.00	31.06	41.54	28.03	6.58	0.00	36.56	0.00	38.42	0.00	0.00	0.00
Movement LOS		C	D	C	A		D		D			
d_A, Approach Delay [s/veh]	35.25			16.00			37.42			0.00		
Approach LOS	D			B			D			A		
d_I, Intersection Delay [s/veh]	25.24											
Intersection LOS	C											
Intersection V/C	0.833											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	34.67	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.375	2.631
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	1378	0	0
d_b, Bicycle Delay [s]	28.80	4.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.404	3.504	4.132	4.132
Bicycle LOS	B	D	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX D-VI

YEAR 2035 BUILDOUT PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	26.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.338

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	304	57	0	0	228	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	57	0	0	228	260
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	80	0	0	0	60	0
Total Analysis Volume [veh/h]	320	0	0	0	240	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	55	0	0	0	35	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	18	18		64	64
g / C, Green / Cycle	0.20	0.20		0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.18	0.00		0.13	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	362	323		1323	1125
d1, Uniform Delay [s]	34.70	0.00		4.40	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.23	0.00		0.30	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.00		0.18	0.00
d, Delay for Lane Group [s/veh]	41.93	0.00		4.70	0.00
Lane Group LOS	D	A		A	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	7.35	0.00		1.33	0.00
50th-Percentile Queue Length [ft/ln]	183.76	0.00		33.22	0.00
95th-Percentile Queue Length [veh/ln]	11.80	0.00		2.39	0.00
95th-Percentile Queue Length [ft/ln]	294.92	0.00		59.80	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.93	0.00	0.00	0.00	4.70	0.00
Movement LOS	D	A			A	A
d_A, Approach Delay [s/veh]	41.93		0.00		4.70	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	25.97					
Intersection LOS	C					
Intersection V/C	0.338					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	4.528
Bicycle LOS	D	D	E

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	18.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	2353	0	0	1376	1263	0	0	0	457	0	943
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2353	0	0	1376	1263	0	0	0	457	0	943
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	619	0	0	362	0	0	0	0	120	0	248
Total Analysis Volume [veh/h]	0	2477	0	0	1448	0	0	0	0	481	0	993
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49		33	33	33
g / C, Green / Cycle	0.54	0.54	0.54		0.37	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.36	0.21	0.00		0.27	0.32	0.31
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1589	1589
c, Capacity [veh/h]	3697	3697	865		653	583	583
d1, Uniform Delay [s]	14.68	11.85	0.00		24.68	26.33	26.08
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.98	0.31	0.00		1.64	3.89	3.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.39	0.00		0.74	0.86	0.84
d, Delay for Lane Group [s/veh]	15.66	12.17	0.00		26.33	30.21	29.50
Lane Group LOS	B	B	A		C	C	C
Critical Lane Group	Yes	No	No		No	Yes	No
50th-Percentile Queue Length [veh/ln]	8.55	4.00	0.00		8.81	10.10	9.74
50th-Percentile Queue Length [ft/ln]	213.69	99.90	0.00		220.30	252.49	243.54
95th-Percentile Queue Length [veh/ln]	13.34	7.19	0.00		13.68	15.31	14.86
95th-Percentile Queue Length [ft/ln]	333.56	179.82	0.00		342.00	382.79	371.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	15.66	0.00	0.00	12.17	0.00	0.00	0.00	0.00	26.33	0.00	29.86
Movement LOS		B			B	A				C		C
d_A, Approach Delay [s/veh]	15.66			12.17			0.00			28.71		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	18.29											
Intersection LOS	B											
Intersection V/C	0.747											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.419
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.581	2.157	4.132	6.565
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.740

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1545	1799	0	1752	0	809	0	798	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1545	1799	0	1752	0	809	0	798	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	407	0	0	461	0	213	0	210	0	0	0
Total Analysis Volume [veh/h]	0	1626	0	0	1844	0	852	0	840	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	11	0	0	11	0	79	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	45	45	45	37	37	37	
g / C, Green / Cycle	0.50	0.50	0.50	0.41	0.41	0.41	
(v / s)_i Volume / Saturation Flow Rate	0.32	0.00	0.27	0.32	0.34	0.35	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1682	1589	
c, Capacity [veh/h]	2552	796	3402	730	690	652	
d1, Uniform Delay [s]	16.43	0.00	15.35	22.88	23.52	24.23	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.23	0.00	0.62	1.78	2.46	3.62	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.64	0.00	0.54	0.77	0.82	0.87	
d, Delay for Lane Group [s/veh]	17.66	0.00	15.98	24.66	25.98	27.86	
Lane Group LOS	B	A	B	C	C	C	
Critical Lane Group	Yes	No	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	7.93	0.00	6.22	10.13	10.51	11.00	
50th-Percentile Queue Length [ft/ln]	198.22	0.00	155.47	253.24	262.87	275.07	
95th-Percentile Queue Length [veh/ln]	12.55	0.00	10.31	15.35	15.83	16.44	
95th-Percentile Queue Length [ft/ln]	313.66	0.00	257.71	383.74	395.82	411.07	

Movement, Approach, & Intersection Results

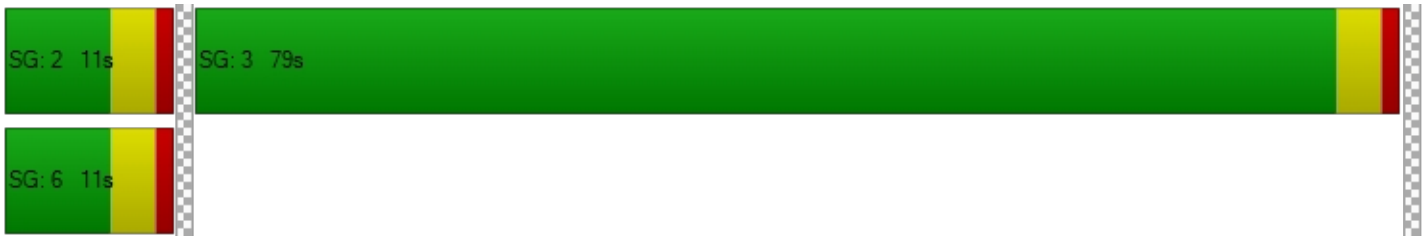
d_M, Delay for Movement [s/veh]	0.00	17.66	0.00	0.00	15.98	0.00	25.11	0.00	27.24	0.00	0.00	0.00
Movement LOS		B	A		B		C		C			
d_A, Approach Delay [s/veh]	17.66			15.98			26.17			0.00		
Approach LOS	B			B			C			A		
d_I, Intersection Delay [s/veh]	19.85											
Intersection LOS	B											
Intersection V/C	0.740											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	156	156	0	0
d_b, Bicycle Delay [s]	38.27	38.27	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.454	2.320	6.924	4.132
Bicycle LOS	B	B	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	38.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.926

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	270	1183	0	0	2062	300	0	0	0	668	0	1232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	1183	0	0	2062	300	0	0	0	668	0	1232
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	311	0	0	543	79	0	0	0	176	0	324
Total Analysis Volume [veh/h]	284	1245	0	0	2171	316	0	0	0	703	0	1297
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	25	56	0	0	31	0	0	0	0	64	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	120	120	120	120		120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	54	29	29		58	58
g / C, Green / Cycle	0.17	0.45	0.24	0.24		0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.16	0.24	0.21	0.20		0.20	0.46
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	309	2275	2444	381		1683	1369
d1, Uniform Delay [s]	48.75	24.30	44.02	43.24		19.83	29.31
k, delay calibration	0.18	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	16.87	0.95	5.29	18.42		0.17	4.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.55	0.89	0.83		0.42	0.95
d, Delay for Lane Group [s/veh]	65.62	25.26	49.31	61.65		20.00	33.63
Lane Group LOS	E	C	D	E		B	C
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	9.78	8.75	10.92	10.81		6.31	17.92
50th-Percentile Queue Length [ft/ln]	244.47	218.74	273.11	270.19		157.72	448.02
95th-Percentile Queue Length [veh/ln]	14.91	13.60	16.34	16.20		10.43	24.86
95th-Percentile Queue Length [ft/ln]	372.68	340.01	408.62	404.98		260.70	621.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.62	25.26	0.00	0.00	49.31	61.65	0.00	0.00	0.00	20.00	0.00	33.63
Movement LOS	E	C			D	E				B		C
d_A, Approach Delay [s/veh]	32.75			50.88			0.00			28.84		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	38.95											
Intersection LOS	D											
Intersection V/C	0.926											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	49.50	49.50
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.022	2.632
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	867	450	0	0
d_b, Bicycle Delay [s]	19.27	36.04	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	2.401	2.244	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	29.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.861

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1173	1180	1213	1515	0	310	0	370	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1173	1180	1213	1515	0	310	0	370	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	309	311	319	399	0	82	0	97	0	0	0
Total Analysis Volume [veh/h]	0	1235	1242	1277	1595	0	326	0	389	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	40	40	52	92	0	28	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	120	120	120	120	120	120	120	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	54	54	54	34	93	19	19	
g / C, Green / Cycle	0.45	0.45	0.45	0.29	0.77	0.16	0.16	
(v / s)_i Volume / Saturation Flow Rate	0.24	0.39	0.39	0.25	0.31	0.09	0.14	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	2308	720	720	1482	3933	558	454	
d1, Uniform Delay [s]	23.68	29.44	29.44	40.60	4.54	46.58	48.96	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.89	12.94	12.94	1.60	0.31	0.98	4.80	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.54	0.86	0.86	0.86	0.41	0.58	0.86	
d, Delay for Lane Group [s/veh]	24.57	42.38	42.38	42.19	4.85	47.55	53.76	
Lane Group LOS	C	D	D	D	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	8.53	18.23	18.23	12.03	3.76	4.59	5.96	
50th-Percentile Queue Length [ft/ln]	213.29	455.80	455.80	300.73	94.04	114.66	149.00	
95th-Percentile Queue Length [veh/ln]	13.32	25.23	25.23	17.72	6.77	8.10	9.96	
95th-Percentile Queue Length [ft/ln]	333.04	630.86	630.86	442.93	169.27	202.46	249.09	

Movement, Approach, & Intersection Results

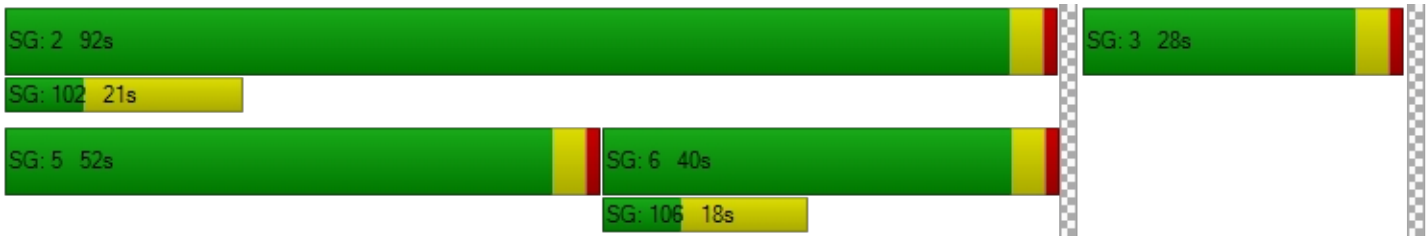
d_M, Delay for Movement [s/veh]	0.00	24.57	42.38	42.19	4.85	0.00	47.55	0.00	53.76	0.00	0.00	0.00
Movement LOS		C	D	D	A		D		D			
d_A, Approach Delay [s/veh]	33.50			21.45			50.93			0.00		
Approach LOS	C			C			D			A		
d_I, Intersection Delay [s/veh]	29.85											
Intersection LOS	C											
Intersection V/C	0.861											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	49.50	49.50
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.319	2.773
Crosswalk LOS	F	F	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	1467	0	0
d_b, Bicycle Delay [s]	29.40	4.27	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	2.581	3.139	4.132	4.132
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Hyland Avenue at South Coast Drive/I-405 NB On-Ramp

Control Type:	Signalized	Delay (sec / veh):	23.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No				No	
Crosswalk	No		No		No	

Volumes

Name	Hyland Ave		I-405 NB On-Ramp		South Coast Dr	
Base Volume Input [veh/h]	364	730	0	0	1002	882
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	364	730	0	0	1002	882
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	0.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	96	0	0	0	264	0
Total Analysis Volume [veh/h]	383	0	0	0	1055	0
Presence of On-Street Parking	No	No			No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	5	0
Maximum Green [s]	30	0	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0
Split [s]	67	0	0	0	23	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0
Rest In Walk	No				No	
l1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
l2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No				No	
Maximum Recall	No				No	
Pedestrian Recall	No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R		C	R
C, Cycle Length [s]	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	22	22		60	60
g / C, Green / Cycle	0.24	0.24		0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.22	0.00		0.56	0.00
s, saturation flow rate [veh/h]	1781	1589		1870	1589
c, Capacity [veh/h]	427	381		1255	1067
d1, Uniform Delay [s]	33.09	0.00		11.13	0.00
k, delay calibration	0.11	0.11		0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.95	0.00		6.89	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.00		0.84	0.00
d, Delay for Lane Group [s/veh]	40.03	0.00		18.02	0.00
Lane Group LOS	D	A		B	A
Critical Lane Group	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	8.68	0.00		15.32	0.00
50th-Percentile Queue Length [ft/ln]	216.90	0.00		382.96	0.00
95th-Percentile Queue Length [veh/ln]	13.51	0.00		21.74	0.00
95th-Percentile Queue Length [ft/ln]	337.67	0.00		543.43	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.03	0.00	0.00	0.00	18.02	0.00
Movement LOS	D	A			B	A
d_A, Approach Delay [s/veh]	40.03		0.00		18.02	
Approach LOS	D		A		B	
d_I, Intersection Delay [s/veh]	23.88					
Intersection LOS	C					
Intersection V/C	0.855					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	5.873
Bicycle LOS	D	D	F

Sequence

Ring 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Harbor Boulevard at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	25.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.851

Intersection Setup

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd						I-405 NB Ramps		
Base Volume Input [veh/h]	0	1817	0	0	1924	1259	0	0	0	987	0	1175
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1817	0	0	1924	1259	0	0	0	987	0	1175
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	478	0	0	506	0	0	0	0	260	0	309
Total Analysis Volume [veh/h]	0	1913	0	0	2025	0	0	0	0	1039	0	1237
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	0	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	0	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	0	22	0	0	22	0	0	0	0	68	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall		No			No					No		
Maximum Recall		No			No					No		
Pedestrian Recall		No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R		L	C	R
C, Cycle Length [s]	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33		49	49	49
g / C, Green / Cycle	0.37	0.37	0.37		0.54	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.28	0.30	0.00		0.43	0.46	0.48
s, saturation flow rate [veh/h]	6792	6792	1589		1781	1655	1589
c, Capacity [veh/h]	2518	2518	589		962	894	859
d1, Uniform Delay [s]	24.75	25.33	0.00		16.55	17.54	18.17
k, delay calibration	0.50	0.50	0.50		0.17	0.21	0.23
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.21	2.84	0.00		2.33	4.35	6.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.80	0.00		0.79	0.85	0.88
d, Delay for Lane Group [s/veh]	26.97	28.18	0.00		18.87	21.89	24.57
Lane Group LOS	C	C	A		B	C	C
Critical Lane Group	No	Yes	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.94	9.76	0.00		11.98	13.11	13.99
50th-Percentile Queue Length [ft/ln]	223.38	243.95	0.00		299.39	327.82	349.86
95th-Percentile Queue Length [veh/ln]	13.84	14.88	0.00		17.65	19.05	20.13
95th-Percentile Queue Length [ft/ln]	345.94	372.03	0.00		441.28	476.29	503.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	26.97	0.00	0.00	28.18	0.00	0.00	0.00	0.00	19.69	0.00	23.53
Movement LOS		C			C	A				B		C
d_A, Approach Delay [s/veh]	26.97			28.18			0.00			21.78		
Approach LOS	C			C			A			C		
d_I, Intersection Delay [s/veh]	25.46											
Intersection LOS	C											
Intersection V/C	0.851											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.679
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	0	0
d_b, Bicycle Delay [s]	28.80	28.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.349	2.395	4.132	7.888
Bicycle LOS	B	B	D	F

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Harbor Boulevard at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.849

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			No			No		

Volumes

Name	Harbor Blvd			Harbor Blvd			I-405 SB Ramps					
Base Volume Input [veh/h]	0	1571	1849	0	2901	0	245	0	977	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1571	1849	0	2901	0	245	0	977	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	413	0	0	763	0	64	0	257	0	0	0
Total Analysis Volume [veh/h]	0	1654	0	0	3054	0	258	0	1028	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	0	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	13	0	0	13	0	77	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No			No		No					
Maximum Recall		No			No		No					
Pedestrian Recall		No			No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	49	49	49	33	33	33	
g / C, Green / Cycle	0.54	0.54	0.54	0.37	0.37	0.37	
(v / s)_i Volume / Saturation Flow Rate	0.32	0.00	0.45	0.14	0.32	0.32	
s, saturation flow rate [veh/h]	5094	1589	6792	1781	1589	1589	
c, Capacity [veh/h]	2762	862	3683	657	586	586	
d1, Uniform Delay [s]	13.94	0.00	17.10	20.93	26.46	26.46	
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.97	0.00	2.30	0.38	4.39	4.39	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.60	0.00	0.83	0.39	0.88	0.88	
d, Delay for Lane Group [s/veh]	14.90	0.00	19.40	21.32	30.84	30.84	
Lane Group LOS	B	A	B	C	C	C	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh/ln]	7.24	0.00	12.47	3.95	10.49	10.49	
50th-Percentile Queue Length [ft/ln]	180.98	0.00	311.75	98.79	262.21	262.21	
95th-Percentile Queue Length [veh/ln]	11.65	0.00	18.26	7.11	15.80	15.80	
95th-Percentile Queue Length [ft/ln]	291.29	0.00	456.53	177.83	394.99	394.99	

Movement, Approach, & Intersection Results

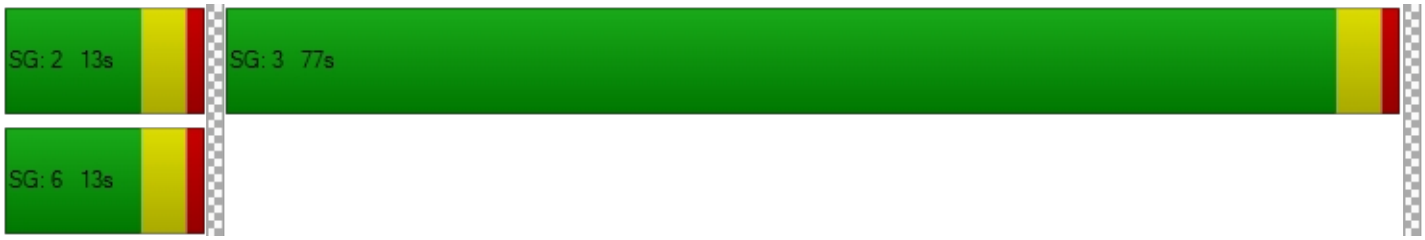
d_M, Delay for Movement [s/veh]	0.00	14.90	0.00	0.00	19.40	0.00	21.32	0.00	30.84	0.00	0.00	0.00
Movement LOS		B	A		B		C		C			
d_A, Approach Delay [s/veh]	14.90			19.40			28.93			0.00		
Approach LOS	B			B			C			A		
d_I, Intersection Delay [s/veh]	20.21											
Intersection LOS	C											
Intersection V/C	0.849											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	200	0	0
d_b, Bicycle Delay [s]	36.45	36.45	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.469	2.819	6.254	4.132
Bicycle LOS	B	C	F	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Fairview Road at I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	41.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.956

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	320	1601	0	0	2505	311	0	0	0	900	0	1102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	320	1601	0	0	2505	311	0	0	0	900	0	1102
Peak Hour Factor	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	421	0	0	659	82	0	0	0	237	0	290
Total Analysis Volume [veh/h]	337	1685	0	0	2637	327	0	0	0	947	0	1160
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Permiss	Split
Signal Group	1	6	0	0	2	0	0	0	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	30	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	28	64	0	0	36	0	0	0	0	56	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	7	0	0	0	0	0	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					No		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		L	R
C, Cycle Length [s]	120	120	120	120		120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	24	60	32	32		52	52
g / C, Green / Cycle	0.20	0.50	0.27	0.27		0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.19	0.33	0.26	0.21		0.27	0.41
s, saturation flow rate [veh/h]	1781	5094	10188	1589		3459	2813
c, Capacity [veh/h]	356	2568	2758	430		1484	1207
d1, Uniform Delay [s]	47.33	22.03	43.03	40.16		26.91	33.25
k, delay calibration	0.27	0.50	0.50	0.50		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	24.12	1.33	9.59	11.93		0.46	5.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.95	0.66	0.96	0.76		0.64	0.96
d, Delay for Lane Group [s/veh]	71.45	23.36	52.62	52.08		27.37	39.15
Lane Group LOS	E	C	D	D		C	D
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	12.27	11.77	13.93	10.25		10.61	16.91
50th-Percentile Queue Length [ft/ln]	306.72	294.30	348.25	256.18		265.26	422.66
95th-Percentile Queue Length [veh/ln]	18.01	17.40	20.05	15.50		15.95	23.65
95th-Percentile Queue Length [ft/ln]	450.33	434.97	501.28	387.43		398.82	591.24

Movement, Approach, & Intersection Results

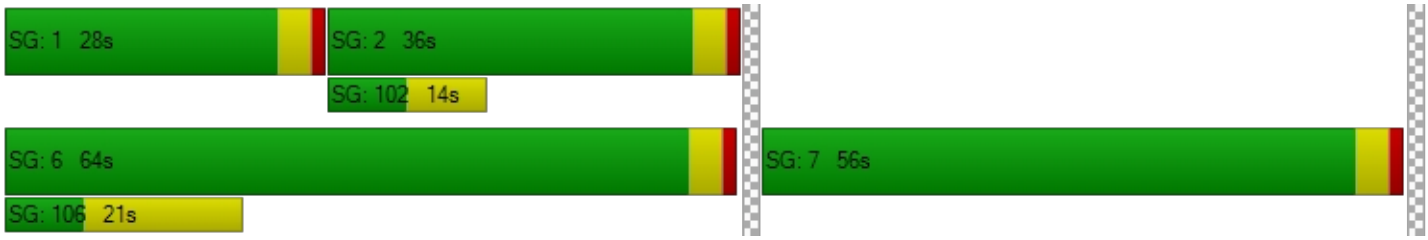
d_M, Delay for Movement [s/veh]	71.45	23.36	0.00	0.00	52.62	52.08	0.00	0.00	0.00	27.37	0.00	39.15
Movement LOS	E	C			D	D				C		D
d_A, Approach Delay [s/veh]	31.38			52.56			0.00			33.85		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	40.96											
Intersection LOS	D											
Intersection V/C	0.956											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	49.50	49.50
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.085	2.658
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	533	0	0
d_b, Bicycle Delay [s]	15.00	32.27	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	2.672	2.375	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Fairview Road at I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.837

Intersection Setup

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Fairview Rd			Fairview Rd			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1421	546	1474	1921	0	510	0	442	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1421	546	1474	1921	0	510	0	442	0	0	0
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	374	144	388	506	0	134	0	116	0	0	0
Total Analysis Volume [veh/h]	0	1496	575	1552	2022	0	537	0	465	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Split	Permiss	Permiss	Permiss
Signal Group	0	6	6	5	2	0	3	0	0	0	0	0
Auxiliary Signal Groups			3,6									
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	5	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	30	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	22	22	44	66	0	24	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	7	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	11	11	0	14	0	0	0	0	0	0	0
Rest In Walk		No			No		No					
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No		No					
Maximum Recall		No		No	No		No					
Pedestrian Recall		No		No	No		No					
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	L	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	29	29	29	32	64	18	18	
g / C, Green / Cycle	0.32	0.32	0.32	0.35	0.72	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.24	0.26	0.26	0.30	0.40	0.16	0.17	
s, saturation flow rate [veh/h]	5094	1589	1589	5188	5094	3459	2813	
c, Capacity [veh/h]	1616	504	504	1832	3642	679	552	
d1, Uniform Delay [s]	27.76	28.38	28.38	26.87	6.07	34.43	34.85	
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	3.58	13.98	13.98	1.16	0.62	2.12	3.58	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.77	0.82	0.82	0.85	0.56	0.79	0.84	
d, Delay for Lane Group [s/veh]	31.34	42.36	42.36	28.03	6.68	36.56	38.42	
Lane Group LOS	C	D	D	C	A	D	D	
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	8.30	9.90	9.90	10.01	4.95	5.67	5.07	
50th-Percentile Queue Length [ft/ln]	207.62	247.55	247.55	250.21	123.66	141.84	126.77	
95th-Percentile Queue Length [veh/ln]	13.03	15.06	15.06	15.20	8.59	9.58	8.76	
95th-Percentile Queue Length [ft/ln]	325.77	376.56	376.56	379.92	214.85	239.50	219.10	

Movement, Approach, & Intersection Results

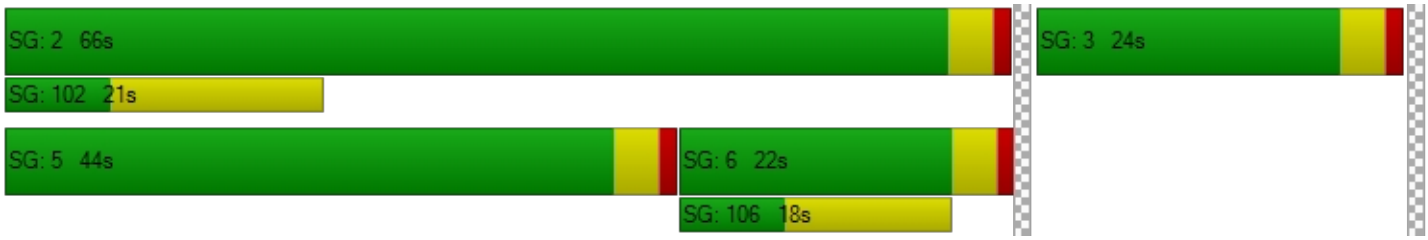
d_M, Delay for Movement [s/veh]	0.00	31.34	42.36	28.03	6.68	0.00	36.56	0.00	38.42	0.00	0.00	0.00
Movement LOS		C	D	C	A		D		D			
d_A, Approach Delay [s/veh]	35.75			15.95			37.42			0.00		
Approach LOS	D			B			D			A		
d_I, Intersection Delay [s/veh]	25.36											
Intersection LOS	C											
Intersection V/C	0.837											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	34.67	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.375	2.631
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	1378	0	0
d_b, Bicycle Delay [s]	28.80	4.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.414	3.525	4.132	4.132
Bicycle LOS	B	D	D	D

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX E

PROJECT DRIVEWAY LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX E-I

YEAR 2021 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 19: Project Driveway 1 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	2	12	509	12	76	381
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	12	509	12	76	381
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	3	134	3	20	100
Total Analysis Volume [veh/h]	2	13	536	13	80	401
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.01	0.00	0.08	0.00
d_M, Delay for Movement [s/veh]	19.06	10.10	0.00	0.00	8.79	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.25	0.00
95th-Percentile Queue Length [ft/ln]	1.96	1.96	0.00	0.00	6.30	0.00
d_A, Approach Delay [s/veh]	11.29		0.00		1.46	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.83					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 20: Project Driveway 2 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	0	2	511	10	0	457
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	511	10	0	457
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	134	3	0	120
Total Analysis Volume [veh/h]	0	2	538	11	0	481
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.95	0.00	0.00	0.00	0.00
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.21	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.95		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 21: Harbor Boulevard at Project Driveway 3/Law Court

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.502

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Base Volume Input [veh/h]	16	1794	76	24	2183	7	2	0	5	12	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1794	76	24	2183	7	2	0	5	12	0	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	472	20	6	574	2	1	0	1	3	0	1
Total Analysis Volume [veh/h]	17	1888	80	25	2298	7	2	0	5	13	0	4
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.31	0.31	0.02	0.48	0.48	0.00	0.00	0.00	0.01	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.502											

Intersection Level Of Service Report
Intersection 22: Project Driveway 4 at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.328

Intersection Setup

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	65	129	186	351	325	169
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	65	129	186	351	325	169
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	34	49	92	86	44
Total Analysis Volume [veh/h]	68	136	196	369	342	178
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Permissive
Signal Group	7	4	5	2	6	0
Auxiliary Signal Groups		4,5				
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.00	0.12	0.12	0.16	0.16
Intersection LOS	A					
Intersection V/C	0.328					

Intersection Level Of Service Report
Intersection 23: Project Driveway 5 at South Coast Drive

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	0	2	0	416	492	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	0	416	492	10
Peak Hour Factor	1.0000	0.9500	1.0000	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	109	129	3
Total Analysis Volume [veh/h]	0	2	0	438	518	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	9.88	0.00	0.00	0.00	0.00
Movement LOS		A		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.20	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.88		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 19: Project Driveway 1 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	26.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

Intersection Setup

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	10	74	523	2	14	1135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	74	523	2	14	1135
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	19	138	1	4	299
Total Analysis Volume [veh/h]	11	78	551	2	15	1195
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.11	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	25.97	11.31	0.00	0.00	8.56	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.60	0.60	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	14.90	14.90	0.00	0.00	1.11	0.00
d_A, Approach Delay [s/veh]	13.12		0.00		0.11	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.70					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 20: Project Driveway 2 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	0	10	595	2	0	1149
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	10	595	2	0	1149
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	157	1	0	302
Total Analysis Volume [veh/h]	0	11	626	2	0	1209
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	10.32	0.00	0.00	0.00	0.00
Movement LOS		B	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.22	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.32		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.06					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 21: Harbor Boulevard at Project Driveway 3/Law Court

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.485

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Base Volume Input [veh/h]	7	2287	14	4	1926	3	6	0	14	74	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	2287	14	4	1926	3	6	0	14	74	0	23
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	602	4	1	507	1	2	0	4	19	0	6
Total Analysis Volume [veh/h]	7	2407	15	4	2027	3	6	0	15	78	0	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.38	0.38	0.00	0.42	0.42	0.00	0.00	0.01	0.05	0.00	0.02
Intersection LOS	A											
Intersection V/C	0.485											

Intersection Level Of Service Report
Intersection 22: Project Driveway 4 at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.702

Intersection Setup

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	94	231	171	307	1439	163
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	231	171	307	1439	163
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	61	45	81	379	43
Total Analysis Volume [veh/h]	99	243	180	323	1515	172
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Permissive
Signal Group	7	4	5	2	6	0
Auxiliary Signal Groups		4,5				
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.04	0.11	0.10	0.53	0.53
Intersection LOS	C					
Intersection V/C	0.702					

Intersection Level Of Service Report
Intersection 23: Project Driveway 5 at South Coast Drive

Control Type:	Two-way stop	Delay (sec / veh):	16.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	0	10	0	402	1592	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	10	0	402	1592	2
Peak Hour Factor	1.0000	0.9500	1.0000	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	0	106	419	1
Total Analysis Volume [veh/h]	0	11	0	423	1676	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	0.00	16.91	0.00	0.00	0.00	0.00
Movement LOS		C		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.11	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	2.72	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.91		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.09					
Intersection LOS	C					

APPENDIX E-II

YEAR 2035 BUILDOUT PLUS PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 19: Project Driveway 1 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	21.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	2	17	589	12	99	380
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	17	589	12	99	380
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	147	3	25	95
Total Analysis Volume [veh/h]	2	17	589	12	99	380
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.01	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	21.26	10.35	0.00	0.00	9.06	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.33	0.00
95th-Percentile Queue Length [ft/ln]	2.57	2.57	0.00	0.00	8.34	0.00
d_A, Approach Delay [s/veh]	11.49		0.00		1.87	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.01					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 20: Project Driveway 2 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	0	2	591	14	0	480
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	591	14	0	480
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	148	4	0	120
Total Analysis Volume [veh/h]	0	2	591	14	0	480
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	10.16	0.00	0.00	0.00	0.00
Movement LOS		B	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.22	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.16		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 21: Harbor Boulevard at Project Driveway 3/Law Court

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.481

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Base Volume Input [veh/h]	16	1967	100	32	2193	7	2	0	5	16	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1967	100	32	2193	7	2	0	5	16	0	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	492	25	8	548	2	1	0	1	4	0	1
Total Analysis Volume [veh/h]	16	1967	100	32	2193	7	2	0	5	16	0	5
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.32	0.32	0.02	0.46	0.46	0.00	0.00	0.00	0.01	0.00	0.00
Intersection LOS	A											
Intersection V/C	0.481											

Intersection Level Of Service Report
Intersection 22: Project Driveway 4 at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.334

Intersection Setup

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	67	135	210	782	326	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	135	210	782	326	189
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	34	53	196	82	47
Total Analysis Volume [veh/h]	67	135	210	782	326	189
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Permissive
Signal Group	7	4	5	2	6	0
Auxiliary Signal Groups		4,5				
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.00	0.13	0.24	0.16	0.16
Intersection LOS	A					
Intersection V/C	0.334					

Intersection Level Of Service Report
Intersection 23: Project Driveway 5 at South Coast Drive

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	0	2	0	849	513	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	0	849	513	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	212	128	4
Total Analysis Volume [veh/h]	0	2	0	849	513	14
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	9.87	0.00	0.00	0.00	0.00
Movement LOS		A		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.20	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.87		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.01					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 19: Project Driveway 1 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	26.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.070

Intersection Setup

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 1		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	13	97	564	3	18	1136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	97	564	3	18	1136
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	24	141	1	5	284
Total Analysis Volume [veh/h]	13	97	564	3	18	1136
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.13	0.01	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	26.10	11.72	0.00	0.00	8.61	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.76	0.76	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	19.05	19.05	0.00	0.00	1.35	0.00
d_A, Approach Delay [s/veh]	13.42		0.00		0.13	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.89					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 20: Project Driveway 2 at Sunflower Avenue

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 2		Sunflower Ave		Sunflower Ave	
Base Volume Input [veh/h]	0	13	657	3	0	1154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	13	657	3	0	1154
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	164	1	0	289
Total Analysis Volume [veh/h]	0	13	657	3	0	1154
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	10.47	0.00	0.00	0.00	0.00
Movement LOS		B	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.48	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.47		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.07					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 21: Harbor Boulevard at Project Driveway 3/Law Court

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.538

Intersection Setup

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Harbor Blvd			Harbor Blvd			Law Ct			Project Dwy 3		
Base Volume Input [veh/h]	7	2512	18	6	2228	3	6	0	14	96	0	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	2512	18	6	2228	3	6	0	14	96	0	31
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	628	5	2	557	1	2	0	4	24	0	8
Total Analysis Volume [veh/h]	7	2512	18	6	2228	3	6	0	14	96	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.40	0.40	0.00	0.46	0.46	0.00	0.00	0.01	0.06	0.00	0.02
Intersection LOS	A											
Intersection V/C	0.538											

Intersection Level Of Service Report
Intersection 22: Project Driveway 4 at South Coast Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.846

Intersection Setup

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 4		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	102	264	175	375	1987	166
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	102	264	175	375	1987	166
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	66	44	94	497	42
Total Analysis Volume [veh/h]	102	264	175	375	1987	166
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Permissive
Signal Group	7	4	5	2	6	0
Auxiliary Signal Groups		4,5				
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.06	0.11	0.12	0.67	0.67
Intersection LOS	D					
Intersection V/C	0.846					

Intersection Level Of Service Report
Intersection 23: Project Driveway 5 at South Coast Drive

Control Type:	Two-way stop	Delay (sec / veh):	22.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

Intersection Setup

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Dwy 5		South Coast Dr		South Coast Dr	
Base Volume Input [veh/h]	0	13	0	478	2140	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	13	0	478	2140	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	0	120	535	1
Total Analysis Volume [veh/h]	0	13	0	478	2140	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.06	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	0.00	22.41	0.00	0.00	0.00	0.00
Movement LOS		C		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.19	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	4.68	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	22.41		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.11					
Intersection LOS	C					

APPENDIX E

SHARED PARKING ANALYSIS

MEMORANDUM

TO: Jonathan Hastanan, Steelwave, LLC

FROM: Brian Hartshorn

DATE: October 28, 2019

RE: Shared Parking Analysis
for Times Press Building
Costa Mesa, California **Ref:** J1611

Gibson Transportation Consulting, Inc. (GTC) has prepared a shared parking analysis for the proposed mixed-use redevelopment of the Times Press Building (Project), located on Harbor Boulevard between S. Coast Drive and Sunflower Avenue, in the City of Costa Mesa, California (City).

PURPOSE

The redevelopment of this parcel includes a land use program with a mix of office, restaurant, and retail components. This memorandum determines the expected parking demand for the site based on the proposed land use components which have the capability to share parking spaces due to the operational characteristics of this mixed use development. It is intended to satisfy the requirements of Section 13-89 (Table 13-89) of the City's Municipal Code for mixed-use developments which share the same parking facilities in accordance with the City of Costa Mesa Procedure for Determining Shared Parking Requirements.

EXISTING CONDITIONS

The Project proposes the following mix of land uses which were used for determining the potential shared parking demand based on the gross leasable area (GLA):

Office
Retail Shopping
Fine/Casual Dining Restaurant
Fast Food Restaurant
Nightclub Restaurant (which includes speakeasy/brewery/bars)
Event Space

SHARED PARKING ANALYSIS

A shared parking demand analysis was conducted based on typical weekday and weekend rates and methodologies recommended in *Shared Parking*, *2nd Edition* (Urban Land Institute [ULI] and the International Council of Shopping Centers [ICSC], 2005).

As part of the national research on shared parking in mixed-use developments, ULI/ICSC developed a database that identifies the peak parking demand for every land use within a mixed-use development. This national research database forms the basis for the assumptions in the shared parking model. *Shared Parking, 2nd Edition* describes shared parking as follows:

> "Shared parking is defined as parking space that can be used to serve two or more individual land uses without conflict or encroachment. The opportunity to implement shared parking is the result of two conditions:
>
> - Variations in the peak accumulation of parked vehicles as the result of different activity patterns of adjacent or nearby land uses (by hour, by day, by season)
>
> - Relationships among land use activities that result in people's attraction to two or more land uses on a single auto trip to a given area or development"

Most zoning codes are based upon peak parking demand ratios for individual land uses. While this appropriately recognizes that separate land uses generate different parking demands on an individual basis, it does not reflect the fact that the combined peak parking demand, when a mixture of land uses shares the same parking supply, can be substantially less than the sum of the individual demands. For example, office uses peak in the early afternoon of a weekday, while a cinema peaks in the evening hours of a weekend. Thus, these two land uses are excellent candidates for sharing a parking supply between them.

Shared Parking Assumptions

The shared parking model utilizes a series of assumptions, in addition to the base ULI/ICSC and empirical data, to develop the parking demand model. For each land use in the Project, the shared parking analysis calculates the parking demand for that land use based on the seasonal, hourly, monthly, and weekday vs. weekend adjustment ratios set forth in *Shared Parking*, *2nd Edition*. The resulting sum of the individual land use hourly parking demands represents the total parking demand for the entire site.

The following terms are used in the shared parking models. These variable factors are shown on subsequent tables of the model output.

Parking Demand Ratio. The parking demand ratio is utilized by the model to generate parking demand estimates for the selected land uses. The base rates were developed through ULI/ICSC's extensive nationwide research efforts; these base rates reflect a national average. For the purposes of this analysis, the base rates reflect the empirical data collected at the Project to achieve calibration to the local conditions.

Time of Day. The time of day factor is one of the key assumptions of the shared parking model. This factor reveals the hourly parking pattern of the analyzed land use; essentially, the peak demands are indicated by this factor. ULI/ICSC's research efforts have yielded comprehensive data which document the time of day factors for a large number of individual land uses. As the demand for each land use fluctuates over the course of the day, the ability to implement shared parking emerges.

Weekday vs. Weekend. Each shared parking analysis measured the parking demand on a weekday as well as on a Saturday. Research has indicated that a source for variation in parking demand can be traced to the difference between weekday and weekend demand.

Seasonal Variation. The shared parking analysis was based on the peak month of the year. The total parking demand of the Project was compared over the course of the year; the peak month's demand is reported.

Mode Split and Captive Market. One factor that affects the overall parking demand at a particular development is the number of residents, visitors, and employees that arrive by automobile. It is common that mixed-use projects and districts have patrons/visitors captured within the site itself based on the mixed-use nature of the Project. The mode split accounts for the number of residents, visitors, and employees that do not arrive by individual automobile or are internally captured (transit, walk, and other means).

Auto Occupancy. The Project's shared parking analysis used the national averages for auto occupancy, i.e., the typical number of passengers in each vehicle parking at the site for all land uses.

PARKING MODEL ADJUSTMENTS

The ULI/ICSC shared parking model was adjusted from default values for specific components that are relevant to the combined uses and expected utilization by patrons for this facility. These modifications are detailed below.

Mode Split

The mode split adjustment redefines the default value from 100% of all patrons using an individual vehicle to arrive and park, to a certain percentage who will arrive in a carpool with other persons (those not assumed in the auto occupancy rate), walk, bike, bus, or use a shared-car service (i.e., Uber/Lyft), particularly with restaurant/fast food/drinking establishment uses which are community/neighborhood focused and not expected to draw regional users. With the exception of the office usage, reductions were only applied to guests and not to employees.

- Retail Shopping: 5% reduction (which assumes that 1 out of every 20 retail shoppers arrive in alternative transportation)

- Fine/Casual Dining Restaurant: 10% reduction (1 out of 10 patrons)

- Fast Food Restaurant: 10% reduction (1 out of 10 patrons)
- Nightclub: 10% reduction (1 out of 10 patrons)
- Event Space: 0% reduction
- Office: 5% reduction (1 out of 20 employees, zero guest reduction)

Non-Captive Ratio

The non-captive ratio adjustment redefines the default value of 100% of patrons who arrive specifically for a particular land use, to a value which represents those who are already on site for other uses and will utilize a secondary component during that same trip without requiring an additional parking space. These reductions were only applied to guests and not to employees and the values are consistent with the reductions presented in the traffic study for the site.

- Retail Shopping: 0% reduction
- Fine/Casual Dining Restaurant: 10% reduction (which assumes that 1 out of every 10 restaurant users are already on site for other reasons, i.e., office workers)
- Fast Food Restaurant: 10% reduction (1 out of 10 patrons)
- Nightclub: 10% reduction
- Event Space: 0% reduction
- Office: 0% reduction

Time-of-Day

While the shared parking model provides empirical data for the time-of-day patterns, the model was adjusted for only one component to represent expected/known operations for the following:

Event Space: This component was adjusted to reflect expected operational use of occasional events in the weekday evenings and on weekends rather than a consistent mid-weekday component that the base model defaults assume. The demand was loaded more heavily in the weekday evenings and on weekends.

Shared Parking Model Results

Table 1 summarizes the results of the shared parking demand model. This table shows the Mode Adjustments and the Non-Captive ratio adjustments described above. Table 1 provides the highest demand peak weekday and weekend parking demand as follows:

Weekday (2:00 PM/December) = 1401 parking spaces
Weekend (8:00 PM/December) = 738 parking spaces

Charts A, B and C, attached, provide supplemental data to summarize month-by-month demand throughout the year and hourly parking demand throughout the day.

SUMMARY

- The Project consists of a mix of land uses which provide an operational opportunity to share parking spaces based on hourly demand throughout the day.

- The ULI/CSC shared parking model was prepared for the proposed land use program. The shared parking model is not based on City Municipal Code parking, but rather empirical data collected over decades for mixed use developments.

- Modifications to the shared parking model include minor adjustments to the mode adjustment (i.e., travel type) and the non-captive ratio (i.e., parked vehicles which are present for more than a single land use component). These values are set to match the assumptions in the traffic study for the site.

- The weekday peak parking demand for this Project occurs during December at 2:00 PM and anticipates a worst-case demand for 1,401 parking spaces, which can be shared between varying land use components.

- The weekend peak parking demand requires significantly fewer parking spaces (primarily due to office usage being less intensive on weekends) and occurs during December at 8:00 PM showing a demand of 738 shared parking spaces.

TABLE 1
SHARED PARKING DEMAND SUMMARY

PEAK MONTH: DECEMBER -- PEAK PERIOD: 2 PM, WEEKDAY

Projected Parking Supply:			Weekday					Weekend					Weekday			Weekend		
Land Use	Project Data Quantity	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj 2 PM	Peak Mo Adj December	Estimated Parking Demand	Peak Hr Adj 8 PM	Peak Mo Adj December	Estimated Parking Demand
Community Shopping Center (<400 ksf)	3,966	sf GLA	2.90	0.95	1.00	2.76	/ksf GLA	3.20	0.95	1.00	3.04	/ksf GLA	1.00	1.00	11	0.65	1.00	8
Employee			0.70	1.00	1.00	0.70	/ksf GLA	0.80	1.00	1.00	0.80	/ksf GLA	1.00	1.00	3	0.75	1.00	2
Fine/Casual Dining Restaurant	32,781	sf GLA	15.25	0.90	0.90	12.35	/ksf GLA	17.00	0.90	1.00	15.30	/ksf GLA	0.65	1.00	263	1.00	1.00	501
Employee			2.75	1.00	1.00	2.75	/ksf GLA	3.00	1.00	1.00	3.00	/ksf GLA	0.90	1.00	81	1.00	1.00	98
Fast Food Restaurant	3,528	sf GLA	12.75	0.90	0.90	10.33	/ksf GLA	12.00	0.90	1.00	10.80	/ksf GLA	0.90	1.00	33	0.50	1.00	19
Employee			2.25	1.00	1.00	2.25	/ksf GLA	2.00	1.00	1.00	2.00	/ksf GLA	0.95	1.00	8	0.60	1.00	4
Nightclub	7,644	sf GLA	15.25	0.90	0.90	12.35	/ksf GLA	17.50	0.90	1.00	15.75	/ksf GLA	0.00	1.00	0	0.75	1.00	90
Employee			1.25	1.00	1.00	1.25	/ksf GLA	1.00	1.00	1.00	1.00	/ksf GLA	0.10	1.00	1	1.00	1.00	11
Event Space	1,808	sf GLA	5.50	1.00	1.00	5.50	/ksf GLA	5.50	1.00	1.00	5.50	/ksf GLA	0.00	0.60	0	0.75	0.60	5
Employee			0.50	1.00	1.00	0.50	/ksf GLA	0.50	1.00	1.00	0.50	/ksf GLA	0.25	0.70	0	0.70	0.70	0
Office 100 to 500 ksf	346,576	sf GLA	0.22	1.00	1.00	0.22	/ksf GLA	0.02	1.00	1.00	0.02	/ksf GLA	1.00	1.00	76	0.00	1.00	0
Employee			2.81	0.95	1.00	2.67	/ksf GLA	0.28	0.95	1.00	0.27	/ksf GLA	1.00	1.00	925	0.00	1.00	0

ULI base data have been modified from default values.

Customer	383	Customer	623
Employee	1018	Employee	115
Reserved	0	Reserved	0
Total	**1401**	**Total**	**738**

CHART A
WEEKDAY MONTH-BY-MONTH ESTIMATED PARKING DEMAND

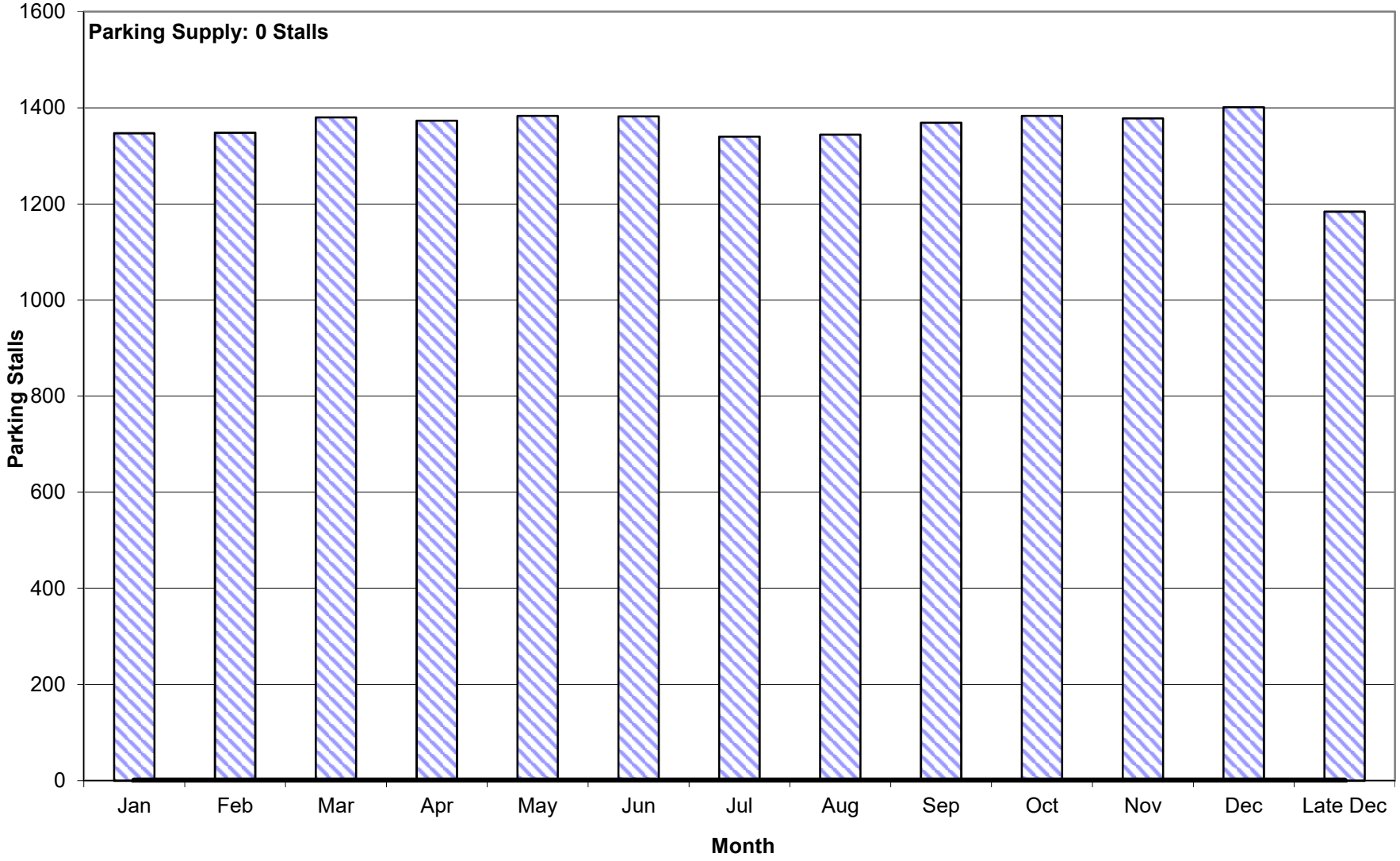


CHART B
WEEKEND MONTH-BY-MONTH ESTIMATED PARKING DEMAND

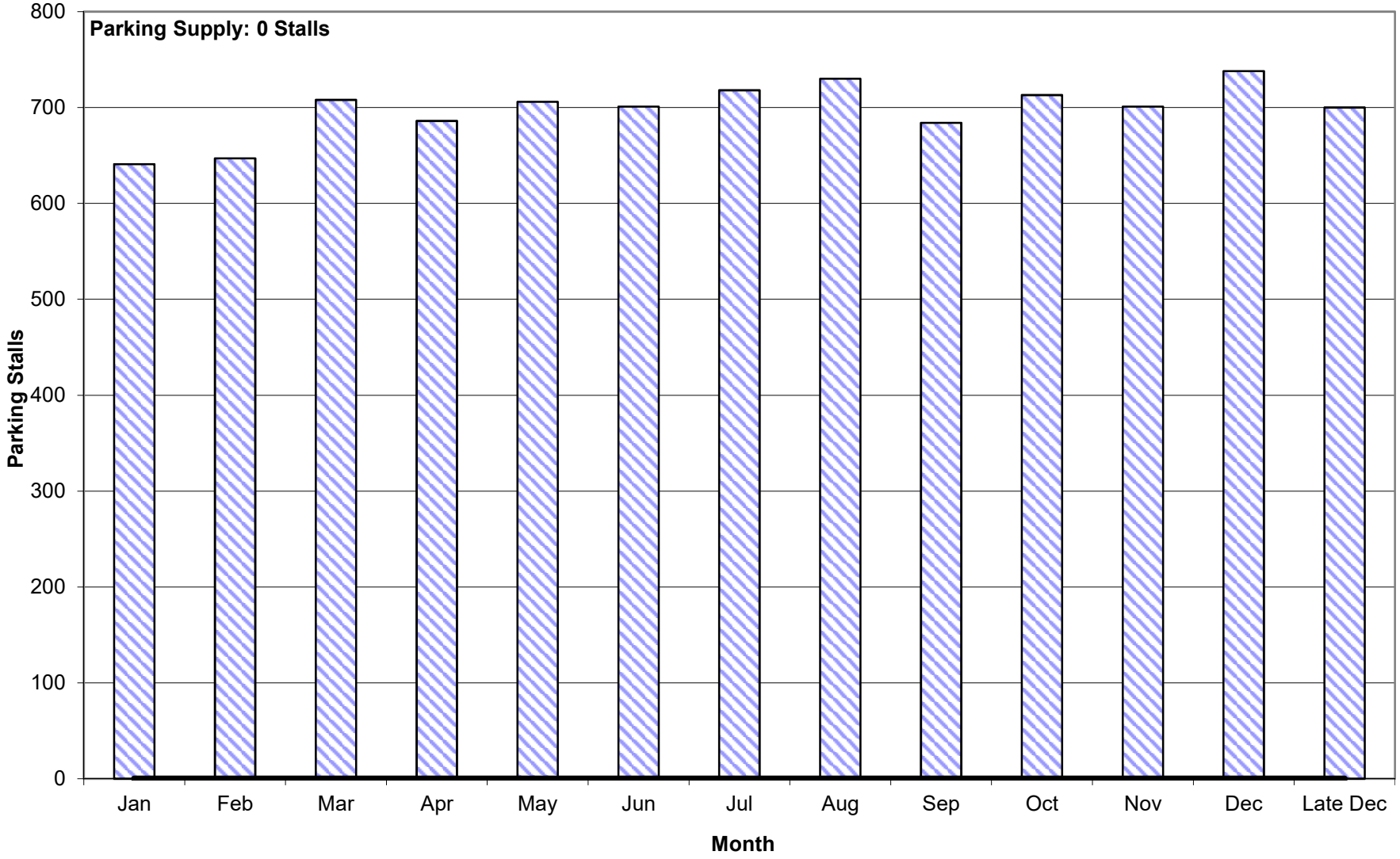
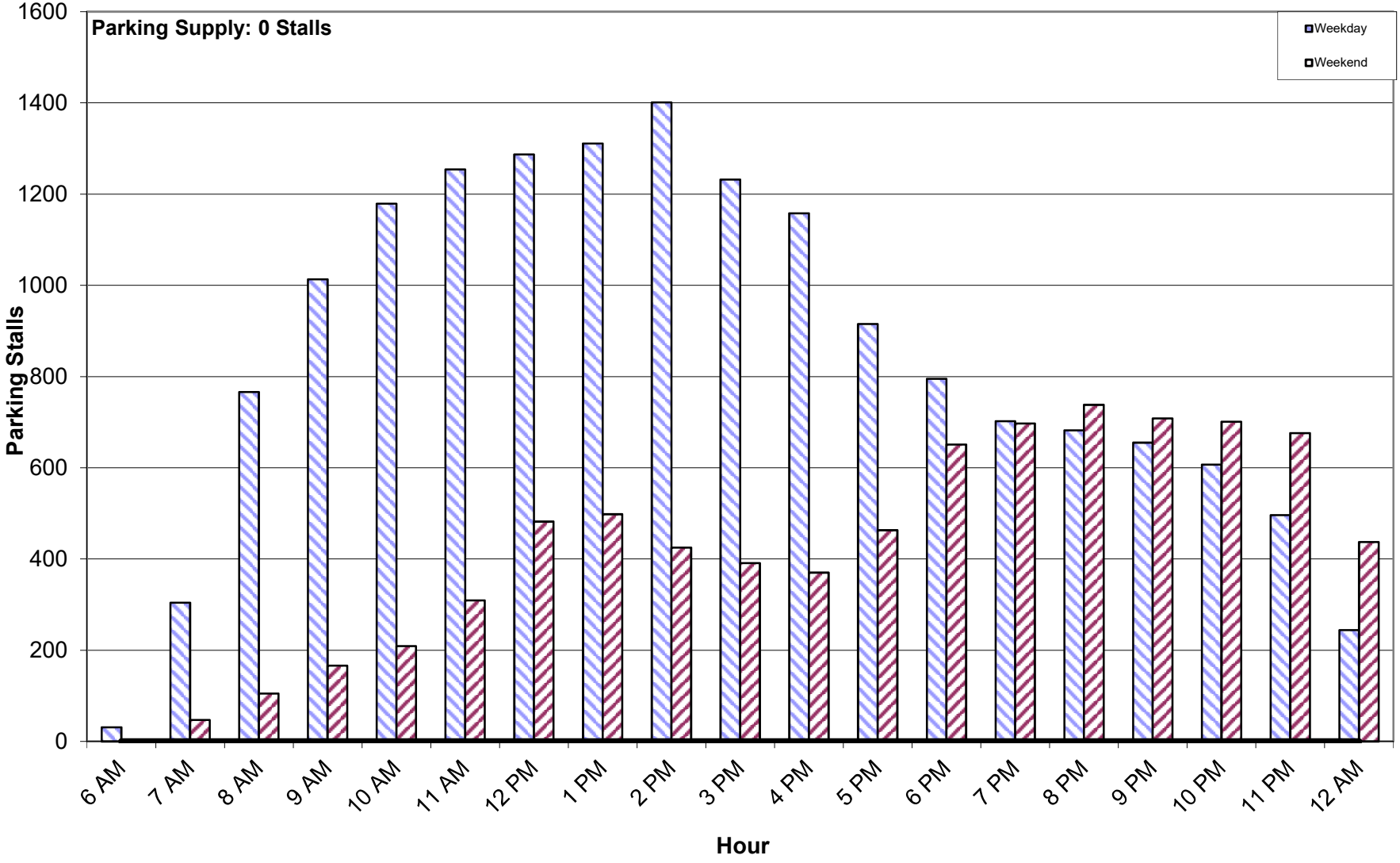


CHART C
PEAK MONTH DAILY PARKING DEMAND BY HOUR



APPENDIX F

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR 2017 APPROVED PROJECT

Initial Study and Mitigated Negative Declaration

Preliminary Master Plan for Former LA Times Site (PA-17-030)

(1375 Sunflower Ave., 1376 South Coast Dr., and 3370 Harbor Blvd.)

Prepared for

City of Costa Mesa
77 Fair Drive
Costa Mesa, California 92626

Prepared by

BonTerra Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707-8794
T: 714.751.7373

June 20, 2017

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SECTION 1.0 PURPOSE OF THE INITIAL STUDY

In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code §21000 et seq.) and its Guidelines (*California Code of Regulations*, Title 14, §15000 et seq.), this Initial Study (IS) has been to evaluate the proposed Los Angeles (LA) Times Building Reuse Project. This IS includes a description of the proposed project, location of the project site, evaluation of the potential environmental impacts, findings from the environmental review, and proposed mitigation measures to lessen or avoid environmental impacts on the environment.

Pursuant to Section 15367 of the State CEQA Guidelines, the City of Costa Mesa (hereafter referred to as "the City") is the lead agency for the project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project. The City, as the lead agency, shall have the authority for project approval and adoption of the accompanying environmental documentation.

The purpose of this document is to evaluate the reuse of the existing 339,063 sf LA Times building and associated surface parking, and construction of 315,000 sf of office building campus and 3 parking structures. The project would include three separate buildings, 3 parking structures, and surface parking lots to be renovated/constructed in three phases. Access to the project site would be from South Coast Drive, Harbor Boulevard and Sunflower Avenue. As appropriate, this document incorporates, by reference, information that was presented in *Final Environmental Impact Report for the 2015-2035 General Plan* (State Clearinghouse No. 2015111053; Costa Mesa 2016).

1.1 SUMMARY OF FINDINGS

Based on the environmental checklist form completed for the project and supporting environmental analysis, the proposed project would have no impact or a less than significant impact on the following environmental impact areas: aesthetics, agriculture and forest resources, air quality, biological resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use/planning, noise, mineral resources, population and housing, public services, recreation, transportation/circulation, and utilities and service systems. An explanation as to why this finding has been made for these issues can be found under each of these topics referenced in the Checklist form.

The proposed project has the potential to have significant impacts on cultural resources without the incorporation of the recommended mitigation measures into the project.

According to the State CEQA Guidelines, it is appropriate to prepare an MND for the proposed project because, after incorporation of the recommended mitigation measures, potentially significant environmental impacts would be eliminated or reduced to a level considered less than significant.

1.2 PROJECT APPROVAL

The IS and proposed MND, which comprise this CEQA document, have been submitted to potentially affected groups and agencies. Notices of availability of the IS and MND have been posted at the project site, at the Orange County Clerk/Recorder's Office, on the City of Costa Mesa website, and at the City of Costa Mesa Clerk's Office for review and comment.

There will be a 30-day public review period for the IS/MND in accordance with Section 15073 of the State CEQA Guidelines. In reviewing the IS and proposed MND, the reviewer should focus

on the sufficiency of the document in identifying and analyzing the potential impacts of the project on the environment and the ways in which the potentially significant effects are avoided or mitigated through components of the project and mitigation measures to be applied. Comments on the analysis contained herein may be sent to:

Ms. Minoo Ashabi, AIA
Principal Planner
City of Costa Mesa Development Services Department
77 Fair Drive
Costa Mesa, California 92626
Email: minoo.ashabi@costamesaca.gov

Following receipt and evaluation of comments from agencies, organizations and/or individuals, the City will determine whether any substantial new environmental issues have been raised. If not, or if the new issues do not provide substantial evidence that the project will have a significant effect on the environment, the project and environmental documentation will be considered for approval.

1.3 REPORT ORGANIZATION

This document has been organized into the following sections:

- ***Section 1 – Introduction.*** This section provides an introduction and overview describing the conclusions of the IS.
- ***Section 2 – Project Location and Environmental Setting.*** This section provides an overview of the proposed project location; a description of existing on-site and surrounding land uses; and a statement of purpose and need.
- ***Section 3 – Project Description.*** This section identifies key project characteristics and includes a list of anticipated discretionary actions.
- ***Section 4 – Environmental Checklist.*** The completed Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.
- ***Section 5 – Environmental Evaluation.*** This section contains an analysis of environmental impacts identified in the environmental checklist. As necessary, the narrative responses are followed by mitigation measures (MMs).
- ***Section 6 – Report Preparers.*** This section identifies those individuals responsible for preparing the IS.
- ***Section 7 – References.*** The References section identifies resources used to prepare this document.

SECTION 2.0 PROJECT LOCATION AND ENVIRONMENTAL SETTING

The proposed project would be implemented on the site of the former Los Angeles (LA) Times Building in the City of Costa Mesa (City). In July 2016, the GP FEIR was certified and the 2015-2035 General Plan was approved. These documents addressed the development of the LA Times site with up to 655,000 square feet (sf) of office development or 553,000 sf of commercial/retail development. As analyzed, the site is allowed to generate a maximum trip budget of 1,015 AM trips and 976 PM trips and development is limited to 5 stories/75 feet.

2.1 PROJECT LOCATION

The LA Times Building Reuse project (proposed project) site is located at 1375 West Sunflower Avenue and 3370 Harbor Boulevard in the City of Costa Mesa as shown on Exhibit 1, Regional Location/Local Vicinity Map. The LA Times building and associated surface parking areas encompass approximately 19.5 acres on 2 adjacent parcels currently owned by Tribune Publishing (Assessor Parcel Numbers [APNs] 140-041-24 and 140-041-40). The adjacent baseball field is approximately 4 acres on an additional parcel owned by Tribune Publishing (APN 140-041-62). The 23.5-acre project site is bound to the west by the National University campus, office buildings, and Harbor Boulevard; to the north by Sunflower Avenue and commercial and industrial development; to the east by commercial development, an isolated open space area and Susan Street; to the south by the IKEA retail center; and to the southeast by an active agricultural area.

2.2 PROJECT SETTING

The project site is located in a developed and urbanized area of the City of Costa Mesa, north of Interstate 405 (I-405) as shown on Exhibit 2, Aerial Photograph. The 23.5-acre project site, consisting of 3 parcels owned by Tribune Publishing, is currently occupied by the 339,063 sf former LA Times building and ancillary structures, surface parking areas, and an active baseball field. The site is relatively flat with no notable elevation changes. Landscaping on the site consists of planters along the LA Times building and throughout the associated parking lot, trees lining the perimeter of the baseball field, turf associated with the baseball fields, and an approximately 0.6-acre strip of trees and vegetation along the southern edge of the LA Times site.

The original LA Times building opened in 1968, with its first expansion occurring in 1980 and its final expansion in 1989. In 2010, the LA Times ceased printing operations at their Costa Mesa facility in line with efforts to consolidate their printing facilities into their Los Angeles and Irwindale facilities. This LA Times site was closed in October 2014. (The Press OC 2016; LA Times 2016)

The project site is designated Commercial Center and the site is located in the MP – Industrial Park zone in the Zoning Code.

Regional Location/Local Vicinity Map

Exhibit 1

LA Times Building Reuse Project

N W E S

1,000 500 0 1,000 Feet

BonTerra PSOMAS

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Aerial Source: Aerials Express 2009

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Aerial Photograph

Exhibit 2

LA Times Building Reuse Project

N W E S

200 100 0 200 Feet

BonTerra PSOMAS

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SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT CHARACTERISTICS

The proposed project involves the reuse of the existing 339,063 sf LA Times building and associated surface parking lot. The existing on-site building has historically been used as a newsroom and printing press for the Los Angeles Times newspaper and currently exists as a vacant space. The project also involves the renovation of the existing building and construction of approximately 315,000 sf of office building campus in two additional separate buildings, as shown on Exhibit 3, Site Plan. The proposed project would be renovated/constructed in three phases. Phase 1 of the proposed project would renovate the existing LA Times building, which would have a maximum building height of 56.5 feet with 2 levels of tiered mezzanine and would use the existing steel-structure of the building, and would construct 87 surface parking spaces and a 1,277-space, 3-level parking structure. Approximately three acres of outdoor amenities would be incorporated into the proposed project, including an amphitheater area, sports court, and dedicated bike path. In addition, the project would include 20,000 sf of covered patio areas. These outdoor amenities would be constructed under Phase 1.

Phase 2 would involve the construction of a 190,000 sf, 5-story building with a 220-space surface parking lot and an 697-space, 4-level parking structure to be located north of the LA Times building. Phase 3 would involve the construction a 125,000 SF, 5-story building with 84 surface parking spaces and a 423-space, 3-level parking structure to be located east of Harbor Boulevard.

A total of 2,788 parking spaces are proposed in three parking structures and several surface parking lots. All buildings under the proposed project would be Leadership in Energy and Environmental Design (LEED) certified.

3.1.1 CIRCULATION

Phase 1 of the proposed project would be accessed via two driveways located along South Coast Drive. Internal to the project site, vehicles would be directed to three surface parking areas or the proposed 3-level parking structure. As shown on Exhibit 3, Site Plan, the surface lots would be located south and southeast of the proposed building along South Coast Drive and northwest of the proposed building, north of the proposed parking structure.

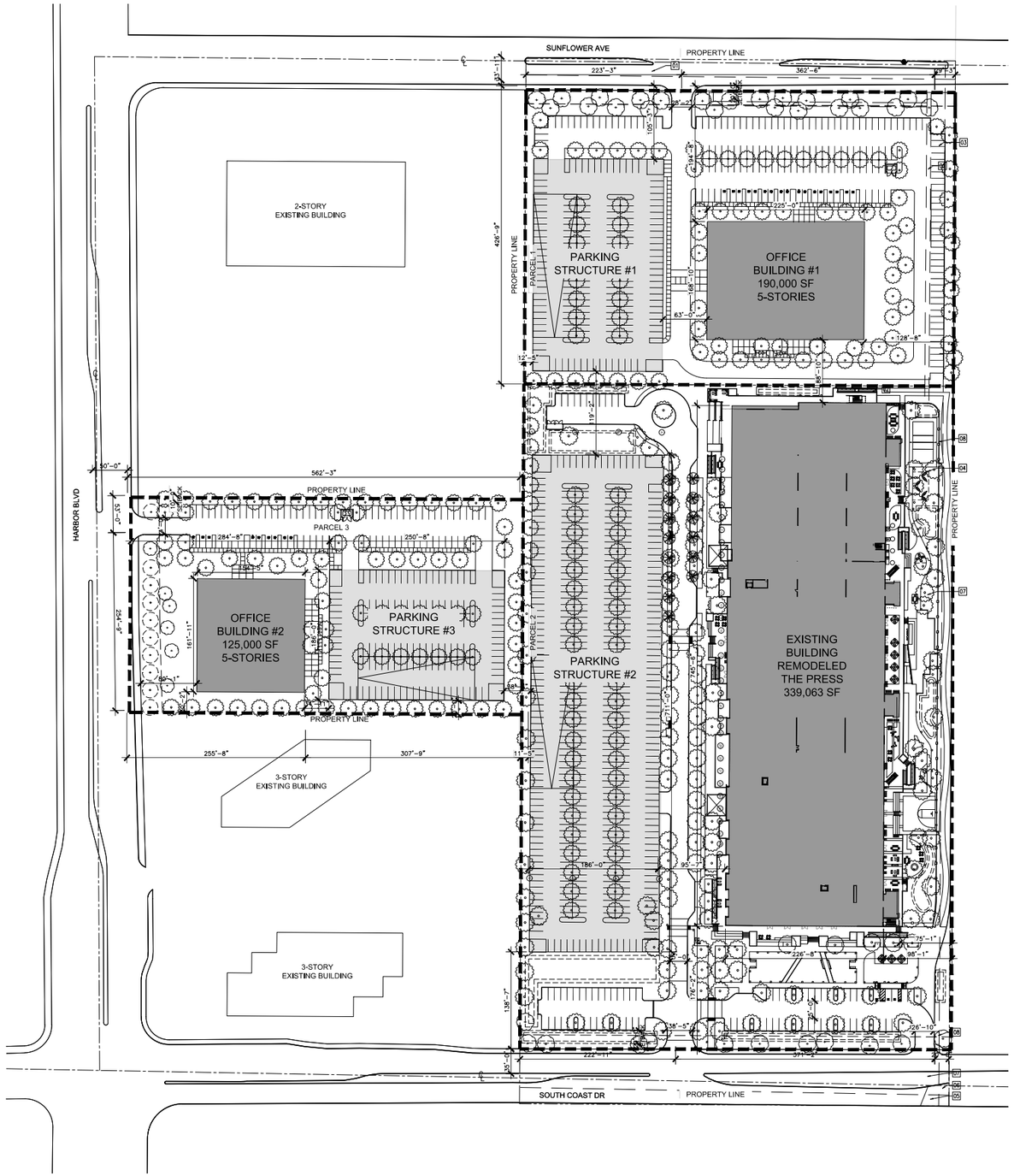
Phase 2 of the proposed project would be accessed via a single driveway off of Sunflower Avenue. Vehicles would be directed to the surface parking areas proposed to be located adjacent to Sunflower Avenue, or to the proposed parking structure which would be constructed in the western portion of the site.

Phase 3 would be accessed via a driveway off of Harbor Boulevard and vehicular traffic would be directed to the surface parking areas along the northern edge of the site or to the proposed parking structure in the southeastern corner of the site.

3.1.2 LANDSCAPE AND HARDSCAPE

The eastern side of the proposed building in Phase 1 would be restricted to pedestrian and bicycle access and would include concrete walkways, a meandering bike lane, a basketball court, and an amphitheater. Additional pedestrian connections would be located throughout Phases 2 and 3 of the proposed project, as well.

Proposed landscaping would include a variety of drought-tolerant trees, shrubs and groundcover and would comply with City of Costa Mesa landscape standards.



LOT COVERAGE

PARCEL 1:
BUILDING(S) FOOTPRINT: 94,200 SF
TOTAL LOT AREA: 266,909 SF
LOT COVERAGE: 35%
TOTAL GSF: 190,000 SF
FLOOR AREA RATIO: 0.71 F.A.R.
TOTAL OPEN SPACE: 75,857 SF
TOTAL DRIVEWAY & SURFACE PARKING: 96,852 SF

PARCEL 2:
BUILDING(S) FOOTPRINT: 310,984 SF
TOTAL LOT AREA: 578,527 SF
LOT COVERAGE: 54%
TOTAL GSF: 339,063 SF
FLOOR AREA RATIO: 0.59 F.A.R.
TOTAL OPEN SPACE: 164,961 SF
TOTAL DRIVEWAY & SURFACE PARKING: 102,582 SF

PARCEL 3:
BUILDING(S) FOOTPRINT: 71,625 SF
TOTAL LOT AREA: 174,265 SF
LOT COVERAGE: 41%
TOTAL GSF: 125,000 SF
FLOOR AREA RATIO: 0.72 F.A.R.
TOTAL OPEN SPACE: 71,208 SF
TOTAL DRIVEWAY & SURFACE PARKING: 31,432 SF

DEVELOPMENT STANDARDS

DEVELOPMENT STANDARDS PER SEC. 13-53: INDUSTRIAL-MP (CURRENT ZONING STANDARDS)		
	REQUIRED	PROPOSED
MIN. LOT AREA	10,000 SF	1,019,701 SF (NET)
MIN. LOT AREA FOR NEWLY SUBDIVIDED LOTS	10,000 SF	PARCEL 1: 266,909 SF (NET) PARCEL 2: 578,527 SF (NET) PARCEL 3: 174,265 SF (NET)
MIN. LOT WIDTH FOR NEWLY SUBDIVIDED LOTS	120'-0"	PARCEL 1: 615'-0" PARCEL 2: 614'-1" PARCEL 3: 307'-9"
MAX. FLOOR AREA RATIO		655,000 GSF / 1,019,701 SF = 0.64 FAR
MAXIMUM BUILDING/STRUCTURE HEIGHT	3 STORIES/45'-0"	OFFICE BUILDING #1: 75'-0" OFFICE BUILDING #2: 75'-0" THE PRESS: 56'-5" PARKING STRUCTURE #1: 32'-0" PARKING STRUCTURE #2: 41'-4" PARKING STRUCTURE #3: 32'-0"
MINIMUM SETBACKS FOR MAIN BUILDINGS AND ACCESSORY BUILDINGS AND STRUCTURES		
FRONT	ALL LOTS: 20'-0"	OFFICE BUILDING #1: 194'-8" OFFICE BUILDING #2: 80'-1" THE PRESS: 165'-5" PARKING STRUCTURE #1: 98'-2" PARKING STRUCTURE #2: 138'-7" PARKING STRUCTURE #3: 284'-8"
SIDE	INTERIOR LOT: 10'-0" CORNER LOT: 20'-0" ON STREET SIDE	OFFICE BUILDING #1: 128-8" OFFICE BUILDING #2: 337'-4" THE PRESS: 165'-5" PARKING STRUCTURE #1: 12'-5" PARKING STRUCTURE #2: 11'-5" PARKING STRUCTURE #3: 20'-0"
REAR	ALL LOTS: 0'-0"	OFFICE BUILDING #1: 99'-1" OFFICE BUILDING #2: 30'-0" THE PRESS: 75'-4" PARKING STRUCTURE #1: 264'-5" PARKING STRUCTURE #2: 119'-2" PARKING STRUCTURE #3: 38'-6"
REAR ABUTTING A PUBLIC STREET	20'-0"	N/A
PROJECTIONS		
ROOF OR EAVES OVERHANG; AWNING	2'-6" INTO REQUIRED SIDE SETBACK 5'-0" INTO REQUIRED FRONT OR REAR SETBACK	N/A
OPEN, UNENCLOSED STAIRWAYS	2'-6" INTO REQUIRED SETBACK AREA	N/A
PARKING	SEE PARKING TABULATIONS BELOW	
LANDSCAPING	REFER TO SHEET L1.00 FOR LANDSCAPE REQUIREMENTS	
SIGNS	UNDER SEPARATE PERMIT FOR APPROVAL	

Source: LPA 2017

Site Plan

Exhibit 3

LA Times Building Reuse Project

N W E S

0 60 120 Feet

BonTerra PSOMAS

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3.2 PROJECT PHASING AND CONSTRUCTION

Construction of the proposed project is anticipated to begin in January 2018 with completion of Phase 3 in March 2022. As mentioned above, construction of the proposed project would be sequenced in three phases, which are generalized as follows:

- Clearing and grubbing (1 month per phase)
- Demolition (2 months for Phases 1 and 2; 1 month for Phase 3)
- Grading (2 months per phase)
- Renovation (10 months for Phase 1; not applicable to Phases 2 or 3)
- New construction (12 months per phase)

Depending on the construction phase, implementation of the proposed project would require common equipment on-site such as excavators, loaders, scrapers, graders, compactors, cranes, forklifts, scissor lifts, paving machines, rollers, and asphalt delivery trucks. Grading activities for the proposed project would involve cut and fill of approximately 25,000 cubic yards (cy) of soils, which will be balanced on-site.

3.3 DISCRETIONARY ACTIONS

As part of the project, the following discretionary action would be required:

- Approval of Master Plan and/or Preliminary Master Plan

SECTION 4.0 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency.)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because al potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date: 6-19-17
Printed Name: Minoo Ashabi	For: City of Costa Mesa

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

This section includes the completed Environmental Checklist Form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed project. The Environmental Checklist Form identifies potential project effects as follows: (1) Potentially Significant Impact; (2) Less Than Significant With Mitigation Incorporated; (3) Less Than Significant Impact; and, (4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5.0, Environmental Evaluation. Included in each discussion are mitigation measures, as appropriate, that are recommended for implementation as part of the proposed project.

ENVIRONMENTAL ISSUES (See attachments for information sources)	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project**:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
e) Cause a substantial adverse change in the significance of a Tribal Cultural Resources as defined in Public Resources Code Section 21074?	☐	☒	☐	☐
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, That may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XII. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES.				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other Public Facilities?	☐	☐	☒	☐
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/CIRCULATION. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system. Including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreased the performance or safety of such facilities?	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects – and/or would the project include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

ENVIRONMENTAL ISSUES (See attachments for information sources)	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Fish and Wildlife Determination

(Per Section 21089(b) of the Public Resources Code, all project applicants and public agencies subject to the California Environmental Quality Act shall pay a Fish and Game filing fee for each proposed project that would adversely affect wildlife resources.)*

Based on the responses contained in this Environmental Checklist, there is no evidence that the project has a potential for a change that would adversely affect wildlife resources or the habitat upon which the wildlife depends. Has the presumption of adverse effect set forth in 14 CCR 753.5 (d) been rebutted by substantial evidence?

___ Yes (Certificate of Fee Exemption and County Administrative fee required)

___ No (Pay fee)

***Note:** Fish and Game Code Section 711.4(c)(2)(A) states that projects that are Categorically Exempt from CEQA are also exempt from filing fee.

SECTION 5.0 ENVIRONMENTAL EVALUATION

5.1 AESTHETICS

Impact Analysis

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact. According to Section 4.1 of the *Final Environmental Impact Report (EIR) for the 2015 - 2035 General Plan* (GP FEIR), scenic vistas are defined as locations within the City that would provide views of large, undeveloped areas such as the Upper Newport Bay, the Santa Ana River, and the Santa Ana Mountains. The GP FEIR only notes two sites where development may impact existing views: Segerstrom Home Ranch and Sakioka Lot 2. The project is not located within either of these sites, and the project site does not have views of any scenic vistas. Therefore, the project would not have an adverse effect on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway or local scenic expressway, scenic highway, or eligible scenic highway?

No Impact. According to the GP FEIR, there are no designated or eligible State scenic highways in the City of Costa Mesa. As the City of Santa Ana is also adjacent to the project site, scenic highways within Santa Ana should also be considered; however, no scenic highways are identified in the *City of Santa Ana General Plan,* Scenic Corridors Element (Santa Ana 2010). Additionally, the California Scenic Highway Mapping System does not identify any Eligible or Officially Designated Scenic Highways within the vicinity of the project (Caltrans 2016). No State scenic highways have been identified adjacent to or in the vicinity of the project site; therefore, the project would not substantially damage scenic resources within a State scenic highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The proposed project would reuse the existing 339,063 sf building associated with the former LA Times Printing Plant and would involve upgrades to the existing industrial building into an office building façade, compatible with other office buildings in the area, including additions of windows, glass features, and elements of color. Additionally, approximately 315,000 sf of office development would be developed within the adjacent areas currently occupied by surface parking and a baseball field. Reuse of the existing building would not substantially change the existing visual character or quality of the site and its surroundings; however, development of the adjacent parking lot and ball field may impact visual character or quality of the site through the introduction of additional development.

The Land Use Element of the GP FEIR identifies surrounding land uses as Industrial Park and Commercial Center. As the proposed project would introduce office uses to the project site which would be similar to existing development in the area, the project would be compatible with surrounding uses. The GP FEIR also notes that any new development within the City may impact the City's visual character and quality. Goals and policies are provided in the GP FEIR to avoid impacts to visual character or quality from development. The proposed project would be consistent with Goals CD-8 and CD-10 of the General Plan and all related policies that promote quality commercial and industrial/business park development through various design standards

and requirements; therefore, although the project would alter the existing visual character, the project would not degrade the character or quality of the site. A less than significant impact would occur related to the visual character or quality of the site or surrounding areas.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Under existing conditions, the on-site building, ancillary structures, the parking lot, and the baseball field are all sources of night lighting. Additionally, the project site is located in an urban, developed area and surrounding development in the project area, including industrial and commercial development and roadway lighting, all contribute to night lighting in the project area. Project implementation would add additional sources of light through the development of up to 315,000 sf of additional development; however, in accordance with Policy CD-8.1.H of the General Plan, all new exterior lighting sources would be designed to avoid spillover, light pollution, and glare. Additionally, all building finishes would consist of non-reflective materials and would minimize potential glare impacts. Therefore, project impacts pertaining to light or glare would be less than significant and no mitigation is required.

5.2 AGRICULTURE AND FOREST RESOURCES

Impact Analysis

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. According to the GP FEIR, there are no areas within the City that contain land designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The project site is not used for agricultural purposes and is not under Williamson Act contract. One area in the vicinity of the project site, the Segerstrom Home Ranch property, is currently used for production of row crops. The project site is located approximately 0.1 mile from this property and is physically separated from the property by Susan Street and South Coast Drive as well as a vacant, undeveloped parcel. There is no direct connection between the project site and the agricultural property. Additionally, the project site has historically functioned as a commercial space without impacting the agricultural operations; therefore, the proposed project would not affect this property. No agricultural-related impacts would result from project implementation. Therefore, no impacts would occur and no mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. According to the GP FEIR, Section 4.2, there are no forest lands or timberlands within the City or in the vicinity of the project site. Therefore, the project would have no impact to forest lands or timberlands and no mitigation is required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As discussed previously, the proposed project site is not designated as farmland of significance and is not being used for agricultural production. There are areas in the vicinity of the project site that are currently used for agricultural purposes; however, as discussed previously under Section 5.2 a and b, proposed project actions would not convert these areas to non-agricultural use. Further, there are no forest lands in the vicinity of the project site; therefore, the project would not convert forest land to non-forest use. No impacts would occur and no mitigation is required.

5.3 AIR QUALITY

The City of Costa Mesa is located in the South Coast Air Basin (SoCAB), a 6,600-square-mile area bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County. Air quality in Orange County is regulated by the South Coast Air Quality Management District (SCAQMD), which is the agency principally responsible for comprehensive air pollution control in the SoCAB.

Criteria Pollutants and Attainment Status

The criteria pollutants for which federal standards have been promulgated and that are most relevant to this air quality impact analysis are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), and particulate matter (PM10 and PM2.5). Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM10. Fine particulate matter, PM2.5, is a subgroup of PM10 that consists of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. O_3 is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Thus, VOCs and NOx are O_3 precursors. The State of California has ambient air quality standards for these pollutants and also for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

Based on monitored air pollutant concentrations, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) designate an area's status in attaining the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), respectively, for selected criteria pollutants. These attainment designations are shown in Table 1.

TABLE 1
ATTAINMENT STATUS OF CRITERIA POLLUTANTS
IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1-hour)	Nonattainment	Extreme Nonattainment[a]
O_3 (8-hour)		Extreme Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment[b]
All others	Attainment[c]	No Standard

O_3: ozone; PM10: particulate matter 10 microns or less in diameter; PM2.5: particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide.

[a] 1-hour O_3 standard was revoked, effective June 15, 2005 ; however, the Basin has not attained this standard and is still subject to anti-backsliding requirements.
[*b] Los Angeles County is classified Nonattainment for lead; the remainder of the SoCAB, including Orange County, is in attainment of the federal standard.
[c] CAAQS pollutants Hydrogen sulfide, sulfates, and vinyl chloride

Source: SCAQMD 2016a.

Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and people who spend hours outdoors in vigorous exercise. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes (Costa Mesa 2016b).

Impact Analysis

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The SCAQMD *2016 Air Quality Management Plan* (2016 AQMP) is the current air quality plan. On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which was a regional and multi-agency effort, including SCAQMD, the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the United States Environmental Protection Agency (USEPA). The 2016 AQMP includes an analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. The purpose of the 2016 AQMP is to set forth a comprehensive program that would promote reductions in criteria pollutants, greenhouse gases, and toxic risk as well as efficiencies in energy use, transportation, and the goods movement (SCAQMD 2017a). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emission inventory methods for various source categories; and SCAG's latest growth forecasts. The 2016 AQMP includes strategies and measures necessary to meet the National Ambient Air Quality Standards (NAAQS).

Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the 2016 AQMP is affirmed when a project: (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP (SCAQMD 1993).

With respect to criterion 1, as discussed in thresholds "b" and "c" below, construction and operational direct and cumulative emissions would not exceed applicable SCAQMD air quality thresholds. Therefore, the project would not increase the frequency or severity of an air quality standards violation or cause a new violation, and the impact would be less than significant.

With respect to criterion 2, the project site General Plan designation was Industrial Park prior to adoption of the 2015-2035 General Plan, which changed the designation to Commercial Center. The assumptions for the 2016 AQMP are based on the prior Industrial Park designation. Office land uses generate more vehicle trips than industrial land uses of the same size. Therefore, the proposed project is not consistent with the growth assumptions for the 2016 AQMP. However, as shown in the analysis in threshold "b", the net increase in long-term emissions would be less than half of the SCAQMD project significance thresholds. Therefore, the increase is not considered considerable, nor does it constitute a conflict with the 2016 AQMP. The impact would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The SCAQMD provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds shown in Table 2 to assess impacts of Project-related air pollutant emissions.

TABLE 2
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds (lbs/day)		
Pollutant	**Construction**	**Operation**
VOC	75	55
NOx	100	55
CO	550	550
PM10	150	150
PM2.5	55	55
SOx	150	150
Lead	3	3

SCAQMD: South Coast Air Quality Management District; lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; and, SOx: sulfur oxides.

Source: SCAQMD 2015.

Construction Emissions – Regional

Short-term criteria pollutant emissions would occur during site preparation, grading, building construction, paving, and painting activities associated with construction of the new buildings. Emissions would occur from use of off-road construction equipment, worker, vendor, and hauling

trips, and disturbance of on-site soils (fugitive dust). Emissions were calculated with the California Emission Estimator Model (CalEEMod) Version 2016.3.1 computer program (CAPCOA 2016). CalEEMod is designed to model construction emissions for land development projects and allows for the input of project- and County-specific information. Construction emissions impacts are based on the intensity of construction, as measured in pounds of pollutant emissions per day. Construction emissions for two general office buildings totaling 360,000 square feet, the renovation of an existing building (339,063 sf), construction of three parking structures (totaling 2,437 parking spaces) and 452 surface parking spaces were calculated using the CalEEMod program described above. Demolition and export of 15,529 tons of existing structures and pavement, and export of 1,040 cubic yards (cy) of soil was included in the CalEEMod program. It was estimated that construction would start in January 2017; a later start would have the same or less emissions. The project would be required to comply with SCAQMD Rule 403, Fugitive Dust, which requires dust control measures, typically watering all active grading and demolition activities, thereby minimizing fugitive dust, PM10, and PM 2.5 emissions. The project would also be required to comply with SCAQMD Rule 1113, Architectural Coatings, which limits the VOC content of paints, thereby minimizing VOC emissions. Model details are included in Appendix A. Estimated construction emissions are shown in Table 3.

TABLE 3
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS
(POUNDS/DAY)

Year of Construction[a]	ROG	NOx	CO	PM10	PM2.5
2018	60	78	58	9	3
2019	35	50	42	9	3
2021	4	34	26	4	2
2022	50	1	2	<1	<1
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*55*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

ROG: reactive organic gases; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District.

[a] No construction planned for 2020.

Source: CalEEMod and architectural coating data in Appendix A.

As shown in Table 3, construction emissions would be less than the applicable significance thresholds and the impact would be less than significant.

Construction Emissions – Local/Ambient Air Quality

The localized effects from the on-site portion of daily emissions were evaluated at receptor locations potentially impacted by the project according to the SCAQMD's localized significance threshold (LST) method, which utilizes on-site emissions rate look up tables and project-specific modeling, where appropriate. LSTs are applicable to the following criteria pollutants: NO_2, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest receptor; all receptors are considered, not just the sensitive receptors described above. For LST CO and NO_2 exposure analysis, receptors who could be exposed for one hour or more are considered. For initial demolition and construction, the commercial building south of the western portion of the site is considered. For later

construction, the existing uses on the project site have been considered for CO and NO_2 analyses. For PM10 and PM2.5 exposure analysis, receptors who could be exposed for 24 hours are considered. Residences 200 meters east of the project site were considered for PM10 and PM 2.5 analyses. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres, which means this is the appropriate method for the project. When quantifying mass emissions for localized analysis, only emissions that occur on site are considered. Consistent with the SCAQMD's LST method guidelines, emissions related to off-site delivery/haul truck activity and employee trips are not considered in the evaluation of localized impacts.

LST analyses for the project site are shown in Table 4. The highest maximum daily emissions for LST purposes would occur during the grading phase of Phase 1, in 2018. As shown in Table 4, localized emissions for all criteria pollutants would be less than their respective SCAQMD LST significance thresholds for all pollutants. Thus, impacts would be less than significant and no mitigation is required.

TABLE 4
MAXIMUM LOCALIZED CONSTRUCTION POLLUTANT EMISSIONS
(LBS/DAY)

	NOx	CO	PM10	PM2.5
Maximum Daily Emissions	24	13	2	1
SCAQMD LSTs*	112	805	58	24
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District; LST: Local Significance Threshold.

* Thresholds for Source Receptor Area 18, North Coastal Orange County, 5-acre site, 25 meter receptor distance for NOx and CO, 200 meter receptor distance for PM10 and PM2.5

Source: SCAQMD 2009.

Operational Emissions

Operational emissions are composed of area, energy, and mobile (i.e., vehicle) source emissions. Emissions were calculated with CalEEMod for the assumed project buildout of 655,000 square feet of General Office use and three parking structures. The primary source of operational criteria pollutant emissions from the proposed project would be vehicles used by project employees, customers, and vendors. The proposed project's mobile source emissions are based on the project-related trip generation rate, as contained in the proposed project's traffic analysis for full development in 2022 (Stantec 2017). Estimated peak daily operational emissions are shown in Table 5.

As presented in Table 5, operational emissions generated by the proposed project would be below the SCAQMD regional thresholds of significance. Therefore, the impact would be less than significant and no mitigation is required.

TABLE 5
PEAK DAILY OPERATIONAL EMISSIONS

Emissions Source	Emissions (lbs/day)				
	VOC	NOx	CO	PM10	PM2.5
Area sources	15	<1	<1	<1	<1
Energy sources	<1	2	1	<1	<1
Mobile sources	11	18	139	49	13
Emergency Generator	<1	<1	<1	<1	<1
Total Gross Operational Emissions	**26**	**20**	**140**	**50**	**13**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*55*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District.

Totals may not add due to rounding.

Notes: Emissions are the higher of summer or winter seasons.
SOx and lead emissions are not shown; these emissions would be negligible for the proposed project.
CalEEMod model data sheets are included in Appendix A.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (Including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. The region is a nonattainment area for PM10, PM2.5, and O_3 (refer to Table 1). SCAQMD's policy with respect to cumulative impacts associated with the above referenced pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant (SCAQMD 2003). Therefore, the proposed project's long-term operational emissions of the nonattainment pollutants would be cumulatively less than significant.

As discussed under threshold "b", short-term construction emissions would be reduced to less than significant levels. Therefore, consistent with SCAQMD policy, the cumulative construction impact of nonattainment pollutants would be less than significant. As shown in Table 5, project long-term operational emissions of PM10, PM2.5, and the O_3 precursors VOC and NOx would be less than significant. Therefore, the proposed project's long-term operational emissions of the nonattainment pollutants would be cumulatively less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

<u>Concentrations of Criteria Pollutants</u>

Exposure of persons to construction period NO_2, CO, PM10, and PM2.5 emissions is discussed in response to Question "b" above. There would be no significant impacts, and no additional mitigation is required.

There would be no notable operational criteria pollutant sources that could expose sensitive receptors to substantial criteria pollutant concentrations.

Toxic Air Contaminants

The majority of health risk from toxic emission sources within the SoCAB is from diesel particulate matter and pollutants associated with industrial uses. The proposed office use project is not anticipated to involve emission sources that would generate substantial levels of toxic emissions. The proposed project would likewise not develop industrial uses nor would it place sensitive receptors near industrial uses. The project impact would be less than significant.

Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate state and federal CO standards at intersections, even if the broader Basin is in attainment for federal and state levels. The *City of Costa Mesa Year 2015 - 2035 General Plan EIR* states, "Pursuant to existing regulations, future development projects associated with buildout of the proposed General Plan will be screened and analyzed pursuant to the CO Protocol to determine if a CO hotspot may occur at congested intersections." The California Department of Transportation *Project-Level Carbon Monoxide Protocol* (CO Protocol) indicates that there is a potential impact if a project worsens traffic at intersections operating at level of service (LOS) E or F (UCD ITS 1997). The project traffic analysis forecasts that no intersections would operate at LOS E or F in the Opening Day (2018) scenario. In the long range (2035) scenario, one intersection, Harbor Boulevard and MacArthur Boulevard, would operate at LOS E in the PM peak hour. However, the intersection capacity utilization factor would not change from the No-Project to the Full Project condition (Stantec 2017). Therefore, project traffic contributions to this intersection would not be substantial. In addition, the SoCAB is in a state of attainment for CO, and future concentrations would be expected to be less than current levels. As such, there would be no potential for a CO hotspot and the impact would be less than significant.

e) Create objectionable odors affecting a substantial number of people?

No Impact. According to the *CEQA Air Quality Handbook*, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.) (SCAQMD 1993). The proposed project would not develop or include these types of activities. There would be no impact.

5.4 BIOLOGICAL RESOURCES

Impact Analysis

Would the Project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The project site is located within an urban area and is fully developed with a vacant building, ancillary structures, associated surface parking areas, and a baseball field. Based on a review of the site's existing conditions and according the Costa Mesa General Plan, the site does not contain habitat which would support candidate, sensitive, or special

status (i.e., threatened or endangered) species. On-site vegetation is limited to ornamental species associated with maintained landscape areas. Therefore, the site does not support areas of natural habitat or areas that would support sensitive biological resources. Specifically, the project site does not support habitat that would be conducive to nesting burrowing owls as discussed in Mitigation 4.3.A-1 of the GP FEIR. No areas of annual or perennial grasslands, desert, or arid scrubland with low-growing vegetation or agricultural use or vegetation exist on the project site; therefore, a focused survey for burrowing owls would not be required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Services?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No Impact. As discussed previously, the project site is located in a largely urban area and is fully developed. The site does not support any riparian habitat, wetlands, or other sensitive natural community. The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. The developed nature of the site and the areas immediately surrounding the site, in combination with the lack of wildlife species in the area, would preclude use of the project site as a migratory wildlife corridor. Additionally, the site does not support native wildlife and does not serve as a native wildlife nursery site. Therefore, the proposed project would not result in a significant impact related to biological resources. No impacts would occur.

5.5 CULTURAL RESOURCES

Impact Analysis

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. Consistent with the analyses provided in the GP FEIR and the 2015-2035 General Plan's Historical and Cultural Resources Element, the project site does not contain any known historically significant resources (Costa Mesa 2016a,b). The State-recommended threshold under which buildings may be considered historic resources is a construction age of 50 years (California Code of Regulations, §4852.d.2). As detailed in Table CUL-1, City of Costa Mesa Historic Resources Inventory, of the GP FEIR there are two properties (Segerstrom House and Segerstrom Barn) located approximately ½ mile southeast of the project site; however, these

properties would not be impacted by development of the proposed project. No other historic resources were identified within ½ mile of the project site. Therefore, no impacts to historic resources would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant With Mitigation. Due to the location of the project site in a developed, urban area that has been subjected to previous disturbance related to urban development, the potential for discovery of archaeological resources or disturbances of human resources is low. Development of the proposed project is not expected to uncover any archaeological resources. However, there is the possibility that resources exist at subsurface levels, and the uncovering of such resources could occur during excavation activities. Therefore, there is the potential that grading and excavation activities related to the development of the proposed project could result in the disturbance of undiscovered archaeological resources, thereby resulting in a potentially significant impact. Potential effects to unknown resources would be reduced to less than significant levels through the implementation of **MM CULT-1**.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation. The majority of the project site has previously been disturbed. Still, the possibility exists that as-yet unidentified paleontological sites are present beneath the site. Similar to the discussion provided under threshold "b" above, impacts to paleontological resources would be reduced to less than significant levels through the implementation of **MM CULT-2.**

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. The nearest cemetery is located 0.65 miles southwest of the project site, and there are no known formal cemeteries on the project site; however, the potential exists that undiscovered human remains may be encountered during development activities. Per the GP FEIR, compliance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code, which require the County Coroner to be notified immediately if any human remains are encountered, would reduce potential impacts to less than significant levels.

e) Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074?

Less Than Significant With Mitigation. Pursuant to Assembly Bill 52, the City of Costa Mesa contacted 14 Native American Tribes regarding the proposed project. The tribes were mailed an informational letter on August 19, 2016 that describes the project and requests any information regarding resources that may exist on or near the project site. To date, one tribe, the Gabrielino Band of Mission Indians – Kizh Nation, responded and requested consultation. In their response letter, the tribe requested that a Certified Native American Monitor be present during any and all ground disturbance in an effort to protect any cultural resources that may be effected. As discussed previously in the Response to Threshold b, there is the potential that grading and excavation activities related to the development of the proposed project could result in the disturbance of undiscovered archaeological resources, thereby resulting in a potentially significant impact. These undiscovered resources may include Tribal Cultural Resources. Potential effects to unknown resources would be reduced to less than significant levels through the implementation of **MM CULT-1**.

Mitigation Measures

MM CULT-1 Prior to approval of each grading plan, the Property Owner/Developer shall submit a letter to the Development Services Department, Planning Division, which identifies the Archaeologist who has been hired to ensure that the following actions are implemented:

a. All on-site demolition, excavation, and grading activities shall be monitored by a qualified Archaeologist and Certified Native American Monitor. The Archaeologist must be present at the pre-grading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of artifacts if potentially significant artifacts are uncovered. If artifacts are uncovered and determined to be significant, the archaeological monitor shall determine appropriate actions in cooperation with the Property Owner/Developer and Certified Native American Monitor for exploration and/or salvage.

b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.

c. Any archaeological work at the site shall be conducted under the direction of the certified Archaeologist. If any artifacts are discovered during grading operations when the archaeological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.

d. A final report detailing the findings and disposition of the specimens shall be submitted to the City Engineer. Upon completion of the grading, the Archaeologist shall notify the City as to when the final report will be submitted.

MM CULT-2 Prior to approval of each grading plan, the Property Owner/Developer shall submit a letter to the Development Services Department, Planning Division, identifying the Paleontologist that has been hired to ensure that the following actions are implemented:

a. Site excavation and grading that would disturb soils at a depth of 5 feet or more and in areas deemed sensitive by the Paleontologist shall be monitored by a qualified Paleontologist. The Paleontologist must be present at the pre-grading conference in order to establish procedures to temporarily halt or redirect work to permit the sampling, identification, and evaluation of fossils if potentially significant paleontological resources are uncovered. If artifacts are uncovered and found to be significant, the paleontological monitor shall determine appropriate actions in cooperation with the Property Owner/Developer for exploration and/or salvage.

b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.

c. Any paleontological work at the site shall be conducted under the direction of the certified Paleontologist. If any fossils are discovered during grading operations when the paleontological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.

d. A final report detailing the findings and disposition of the specimens shall be submitted. Upon completion of the grading, the Paleontologist shall notify the City as to when the final report will be submitted.

5.6 GEOLOGY AND SOILS

Impact Analysis

Would the Project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The project site, as with the entire Southern California region, is subject to secondary effects from earthquakes, including ground shaking due to future earthquakes on regionally active faults. The project site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone. According to the GP FEIR, the nearest Alquist-Priolo fault zones to the project site are the Newport-Inglewood structural zone and the Whittier-Elsinore fault zone, both of which contain active faults. The Whittier-Elsinore fault zone is over 17 miles from the project site. The Newport-Inglewood structural zone extends into the City of Costa Mesa and is the closest fault zone to the project site. According to Exhibit 4.6-6, Geological Hazards Map, of the GP FEIR, the nearest fault to the project site is located approximately 1.3 miles away and the main fault is located 0.3 miles south of the City limits (Costa Mesa 2016). The *City of Santa Ana General Plan* (identified because the City of Santa Ana abuts the northern edge of the project site) also notes that the Newport-Inglewood structural zone is the closest active fault zone to the City of Santa Ana; however, there are no known active faults within Santa Ana (Santa Ana 2010). Implementation of the proposed project would be consistent with existing codes and regulations, including the *California Building Code* (CBC) and the requirements of the Alquist-Priolo Special Studies Zone Act (*California Public Resources Code* §§2621 et seq.). Therefore, development of the proposed project would result in a less than significant impact related to rupture of a known earthquake fault, and no mitigation is required.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project site is situated in a seismically active area. As discussed previously, the site is located proximate to several active faults; therefore, during the life of the project, the property would likely experience similar moderate to occasionally high ground shaking from these fault zones as well as some background shaking from other seismically active areas in the Southern California region. Design and construction in accordance with current *California Building Code* (CBC) requirements is anticipated to address the issues related to potential ground shaking; therefore, impacts related to strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Less Than Significant Impact. Adverse effects due to rupture of nearby known earthquake faults and seismic ground shaking, including soil liquefaction, lateral spreading, ground lurching, and landsliding, would be prevented through project design. The proposed project would incorporate all guidance set forth by General Plan policies S-1.A and S-1.E related to construction and site design. The project would also comply with all applicable CBC standards. Therefore, the proposed

project would have a less than significant impact related to seismic-related ground failure, including liquefaction, and landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. As discussed in the GP FEIR, existing vacant properties and currently developed sites are not likely to contribute to soil erosion or loss of topsoil as the soil is sufficiently covered by either vegetation or impervious surface. Because the project site is currently developed and the proposed project would not introduce new, unvegetated areas to the site, impacts related to soil erosion would be less than significant. Further, as discussed further in Section 5.9, Hydrology and Water Quality, the project would comply with all applicable regulations related to stormwater and soil erosion and would implement best management practices to reduce the potential for soil erosion of the loss of topsoil. Therefore, impacts related to soil erosion of the loss of topsoil would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The project site is currently developed with various industrial uses, surface parking, and a baseball field. Due to the site's relatively flat surface, there is no potential for on- or off-site landslides. Additionally, the site has been exposed to previous grading and site preparation; therefore, the likelihood of geologic instability is low. Therefore, with adherence to General Plan Policy S-1.E related to compliance with applicable building codes relating to the seismic design of structures and compliance with all applicable CBC regulations, the proposed project would have a less than significant impact related to unstable geologic units or soils would not represent a significant impact.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. The project site has been subject to previous development associated with the LA Times Building; therefore, it is expected that any potentially expansive soils were subject to prior removal and/or remediation. Implementation of the proposed project would be subject to City requirements as well as all State requirements as set forth in the CBC. Therefore, with compliance with all applicable local and State regulations, impacts related to expansive soils would not represent a significant impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. As discussed in Section 5.17, Utilities and Service Systems, of this IS, the proposed project would connect to existing City-owned and maintained wastewater infrastructure and would not require the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

5.7 GREENHOUSE GAS EMISSIONS

Climate change refers to any significant change in climate, such as the average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere which, in turn, increases the Earth's surface temperature. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities.

The International Panel on Climate Change (IPCC) has concluded that (IPCC 2013):

> Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased. The atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. Carbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions. Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system.

Table 6 shows the magnitude of GHG emissions on the global, national, State, and regional scales.

TABLE 6
COMPARISON OF WORLDWIDE GREENHOUSE GAS EMISSIONS

Area and Data Year	Annual GHG Emissions ($MMTCO_2e$)
World (2012)	46,049
United States (2014)	6,870
California (2014)	442
Orange County (2011)	21
GHG: greenhouse gas; $MMTCO_2e$: million metric tons of carbon dioxide equivalent. Source: WRI 2016; USEPA 2016; CARB 2015, SCAG 2011.	

GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). General discussions on climate change often include water vapor, ozone, and aerosols in the GHG category. Water vapor and atmospheric ozone are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are not considered by regulatory bodies, such as CARB, or climate change groups, such as the California Climate Action Registry (CCAR), as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, ozone, or aerosols is provided herein.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both its potency and lifespan in the atmosphere as compared to CO_2. For example, since CH_4 and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the emission rate of that gas to produce the CO_2e emissions.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05, which calls for a reduction in GHG emissions to year 2000 levels by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

AB 32, the California Global Warming Solutions Act of 2006, recognizes that California is the source of substantial amounts of GHG emissions. The statute states:

> Global warming poses a serious threat to the economic well being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

In order to avert these consequences, AB 32 establishes a State goal of reducing GHG emissions to 1990 levels by the year 2020, codifying the EO S-3-05 goal, which is a reduction of approximately 28 percent from forecasted emission levels, with further reductions to follow.

On April 4, 2012, SCAG's Regional Council adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future.* The RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. The RTP/SCS contains a host of improvements to the region's multimodal transportation system. These improvements include closures of critical gaps in the network that hinder access to certain parts of the region, as well as the strategic expansion of the transportation system where there is room to grow in order to provide the region with greater mobility. The RTP/SCS demonstrates the region's ability to attain and exceed the GHG emission-reduction targets set forth by the CARB. The SCS outlines a plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The regional vision of the RTP/SCS maximizes current voluntary local efforts that support the goals of SB 375. The RTP/SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network that emphasizes system preservation, active transportation, and transportation demand management measures.

SCAG's SCS is now included in its 2016–2040 RTP/SCS. The document was adopted by SCAG on April 7, 2016. The 2016–2040 RTP/SCS is expected to reduce per capita transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016). On June 28, 2016, CARB accepted SCAG's determination that the Final RTP/SCS would meet the region's GHG reduction target.

On April 29, 2015, Governor Edmund Brown signed EO B-30-15, which orders "A new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050" (COOG 2015).

Impact Analysis

Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. The Working Group was scheduled to meet once per month. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of CO_2 equivalent per year ($MTCO_2e$/year) for industrial projects where the SCAQMD is the lead agency. The policy objective for establishing this significance threshold is to capture projects that represent approximately 90 percent of GHG emissions from new sources and to avoid Environmental Impact Report (EIR)-level analysis for relatively small impacts (SCAQMD 2008).

In September 2010, the Working Group proposed extending the 10,000 $MTCO_2e$/year screening threshold currently applicable to industrial projects where the SCAQMD is the lead agency, described above, to other lead agency industrial projects. For all other projects, SCAQMD staff proposed a multiple tier analysis to determine the appropriate threshold to be used. The draft proposal suggests the following tiers: Tier 1 is any applicable CEQA exemptions, Tier 2 is consistency with a GHG reduction plan, Tier 3 is a screening value or bright-line, Tier 4 is a performance-based standard, and Tier 5 is GHG mitigation offsets.[1] According to the presentation given at the September 28, 2010, Working Group meeting, SCAQMD staff proposed a Tier 3 draft threshold of 1,400 to 3,500 $MTCO_2e$/year depending on whether the project was commercial, mixed use, or residential. For the Tier 4 draft threshold, SCAQMD staff presented a percent emission reduction target option but did not provide any specific recommendation for a numerical target; instead, it referenced the San Joaquin Valley Air Pollution Control District (SJVAPCD) approach. The percent reduction target is based on consistency with AB 32 as it was based on the same numeric reductions calculated in the Scoping Plan to reach 1990 levels by 2020. The second Tier 4 option is to utilize efficiency targets: 2020 targets are 4.8 $MTCO_2e$/year per service population (SP) for project-level thresholds where SP is project residents plus employees and 6.6 $MTCO_2e$/year per SP for a plan-level threshold (SCAQMD 2010). Targets for 2035 are 3.0 $MTCO_2e$/year per SP for project-level thresholds and 4.1 $MTCO_2e$/year per SP for plan-level thresholds. The Working Group has not convened since the fall of 2010. As of the publication of this EIR, the proposal to establish a GHG threshold for developments like the project has not been considered or approved for use by the SCAQMD Board, but the methodology has been used by lead agencies to evaluate GHG impacts under CEQA.

Buildout of the proposed project is anticipated in 2022. Therefore, a project-level threshold of 4.56 $MTCO_2e$/year per SP, interpolated from the 2020 and 2035 values noted above, is used for this impact analysis.

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

[1] A bright-line is a single value, applicable to all projects of one type, regardless of size. Thus, a bright-line is different from performance standards or efficiency standards that are generally based on a per-unit basis.

Less Than Significant Impact.

Short-Term Emissions

Construction GHG emissions for the 655,000 square-foot office building were calculated using the CalEEMod program described in Section 5.3, Air Quality and are shown in Table 7.

TABLE 7
ESTIMATED GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2018	1,618
2019	496
2021	658
2022	8
Total	**2,780**
Amortized over 30 years	**93**

$MTCO_2e$: metric tons of carbon dioxide equivalent

Notes: Totals may not add due to rounding variances.
Detailed calculations in Appendix A.

Because construction activity impacts are relatively short-term, they contribute a relatively small portion of the total lifetime greenhouse gas (GHG) emissions of a project. In addition, GHG emission-reduction measures for construction equipment are relatively limited. Therefore, as originally proposed by the SCAQMD, it has become current practice that construction emissions are amortized over a project lifetime, typically 30 years (SCAQMD 2008). Thus, the amortized construction GHG emissions would be 93 $MTCO_2e$/year.

Long-Term Emissions

The proposed project would generate GHGs, primarily from mobile sources (i.e. the vehicles used by project employees, customers, and vendors) and energy sources (i.e. purchased electricity and the combustion of natural gas). Operational GHG emissions were calculated with CalEEMod for the assumed 2022 project buildout of 655,000 square feet of General Office use, and three parking structures, as described in Section 5.3, Air Quality. Estimated GHG operational emissions are shown in Table 8.

TABLE 8
ESTIMATED PROJECT
GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e$/yr)
Area	<0.5
Energy	3,288
Mobile	5,795
Waste	306
Water	189
Emergency Generator	1
Proposed Project Total Operations	**9,579**
Construction Amortized	93
Proposed Project Gross Emissions	**9,672**

$MTCO_2e$/yr: Metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas

[a] Total derived by dividing construction emissions (see Table 5-9) by 30.

Note: Detailed calculations in Appendix A

As shown in Table 8, the proposed project would generate GHG emissions of 9,672 $MTCO_2e$ per year. As described above, impact is based on the efficiency of the project, which is calculated in Table 9. It is assumed that the project would have 2,620 employees at buildout, which would be the service population. As shown in Table 9, both the gross and net GHG efficiencies would be less than the GHG efficiency threshold. The impact would be less than significant and no mitigation is required.

TABLE 9
GREENHOUSE GAS EMISSIONS EFFICIENCY

Source	Emissions $MTCO_2e$/year
Proposed Project Gross Emissions (Table 8)	9,672
Service Population	2,620
GHG efficiency ($MTCO_2e$/SP/year)	**3.69**
SCAQMD-Recommended Project-level Significance Threshold	4.56
Exceed threshold?	***No***

$MTCO_2e$/year: metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas; SP: service population; SCAQMD: South Coast Air Quality Management District.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. State policies and standards adopted for the purpose of reducing GHG emissions include Executive Order (EO) S-3-05, AB 32, SB 375, and EO B-30-15. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020, to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level,

and compliance at a project level is not addressed. Therefore, the proposed project does not conflict with these plans and regulations.

Additional State regulations, plans, and polices adopted for the purpose of reducing GHG emissions that are directly applicable to the proposed project include California Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the Title 24 California Green Building Standards Code (CALGreen Code). New construction and improvements to existing facilities for the proposed project would be executed in compliance with the requirements of these regulations, thereby supporting and not conflicting with these regulations. Further, the buildings are being designed to achieve a minimum of Leadership in Energy and Environmental Design (LEED) Silver certification, which would likely result in additional GHG emissions reductions.

The proposed project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases. The impact would be less than significant and no mitigation is required.

5.8 HAZARDS AND HAZARDOUS MATERIALS

Impact Analysis

Would the Project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. Project construction activities would require the transport and use of standard construction equipment and materials, some of which may include a hazardous component such as transport and storage of fuels. These activities would be conducted in compliance with existing federal, State, and local regulations.

The proposed project would involve the construction and daily operation of up to 655,000 sf of office space. Due to the type of anticipated uses at the project site, daily project operations are not expected to involve the use or transport of hazardous materials. Additionally, the project site is located near several major arterials that may be used to transport hazardous materials; however, the proposed project would neither increase the frequency of transport, nor would it introduce hazards that would increase the likelihood for accidental release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest schools to the proposed project site are California Elementary School and Killybrooke Elementary School, both located over one-quarter mile from the project site. As noted in the response to thresholds “a” and “b”, above, there is a potential for hazardous materials to be transported to and used at the project site during construction activities; however, these activities would be conducted in compliance with existing federal, State, and local regulations. Specifically, all transporters, users, or generators of hazardous waste must comply with the Toxic Substances Control Act of 1976 (15 U.S.C. Section 2601 et seq.) and the Environmental Health Standards for the Management of Hazardous Waste as set forth in California Code of Regulations

Title 22, Division 4.5 Further, because the two closest schools are located over one-quarter mile from the project site, potential impacts associated with the hazardous emissions or handling of hazardous materials near a school would be less than significant, and no mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. According to Table 4.8-4 of the GP FEIR, two leaking underground storage tanks (LUST) have been identified on-site. These LUSTs contain diesel and gasoline and affect the local groundwater. The GP FEIR also identifies three LUSTs located within 0.5 mile of the project site: Mobil #18-HDR (3195 Harbor Avenue), Mobil #18-JMY (3470 Fairview Road), and Unocal #5404 (3599 Harbor Boulevard). In addition, there is one LUST within one mile of the project site: Shell Oil (1201 Baker Street).

A Phase I Environmental Site Assessment (ESA) was performed for the site by RPS GaiaTech in July 2015 and is included as Appendix B. The ESA identified three LUST incidents on-site involving the release of petroleum. Two of these incidents were discovered in 1988 and 1990. The 1988 LUST remediation activities involved the excavation of soil and received regulatory closure in September 1990. The 1990 LUST incident, identified as the South Tank Release, was investigated and remediated up through the 2000s and received regulatory closure in 2013. The third LUST incident was identified in the ESA as the Northern Tank Release. The Northern Tank Release was discovered in the early 1990s and occurred on the central western portion of the site. (RPS GaiaTech 2015)

According to the *2nd Quarter 2016 – Quarterly Groundwater Monitoring and Remedial Progress Report* prepared for the project site and included as Appendix B, remediation activities (specifically the remedial extraction system) have been nonoperational since April 2014 and on-site activities have been limited to groundwater monitoring. Groundwater will continue to be monitored until the Orange County Health Care Agency finds that the project site meets the criteria of the Low Threat UST Case Closure Policy. Additionally, it is noted that the project site is not included on the Hazardous Waste and Substances Site List compiled by the Department of Toxic Substances Control (DTSC) pursuant to Government Code Section 65962.5(a)(1) (CalEPA 2016). Therefore, impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the Project area?

f) For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

Less Than Significant Impact. The nearest airport to the project site is John Wayne Airport, located approximately 2.6 miles east of the project site; no private airstrips are located in the vicinity of the project site. According to the April 2008 *Airport Environs Land Use Plan for John Wayne Airport* (AELUP), the project site is located within the John Wayne Airport Environs Land Use Plan Airport Planning Areas. The project site, however, is located outside of the designated Safety Compatibility Zones 1 through 6, outside of the established Obstruction Imaginary Surfaces, and outside of the identified CNEL contours. The project would be located within the Notification Area for John Wayne Airport: 20,000-foot Radius at 100:1 Slope influence area and would, therefore, be subject to established notification requirements as detailed in the AELUP. Due to the location of the proposed project site, it is not expected to expose people to safety hazards related to airport operations. There is currently a helipad on the project site; however,

this helipad would be removed as part of the proposed project. Implementation of the proposed project would result in a less than significant impact on airport facilities and operations; no mitigation would be required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The City's Emergency Operations Plan (EOP) provides guidance on emergency and disaster preparedness. Implementation of the proposed project would reuse and redevelop the project site with office uses and would not include any modifications to the local circulation system. Additionally, as discussed in detail in Section 5.16, Traffic/Transportation, no significant traffic impacts would occur; therefore, it is not anticipated that the project-related traffic would interfere with the implementation of the City's EOP through additional vehicle trips on the local circulation system. Therefore, no impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. According to Section 4.8 of the GP FEIR, the project site is not located within or proximate to any Very High, High, or Moderate Fire Hazard Areas. There are also no undeveloped properties adjacent to or in the vicinity of the project site that would have the potential for wildfires. Therefore, implementation of the proposed project would have no impact related to risk of loss, injury, or death involving wildland fires and no mitigation is required.

5.9 HYDROLOGY AND WATER QUALITY

Impact Analysis

Would the Project:

a) Violate any water quality standards or waste discharge requirements?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

Short-Term Construction-Related Water Quality Impacts

Less Than Significant Impact. Potential impacts of construction activities on water quality focus on sediments, turbidity, and pollutants associated with sediments. Construction-related activities that are primarily responsible for sediment releases are related to exposing soils to potential mobilization by rainfall, runoff, and wind. These activities include grading and other earth-disturbance activities. Non-sediment-related pollutants that are also of concern during construction include waste construction materials and chemicals, liquid products, and petroleum products used in building construction or the maintenance of heavy equipment. Construction impacts from implementation of the proposed project would be minimized through compliance with the National Pollutant Discharge Elimination System (NPDES) regulations under the City's municipal separate storm sewer system (MS4) permit. A storm water pollution prevention plan (SWPPP) would be developed as required by and in compliance with the NPDES Construction General Permit. Erosion-control best management practices (BMPs) are designed to prevent

erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. The NPDES Construction General Permit requires the SWPPP to include BMPs to be selected and implemented based on the phase of construction and weather conditions. Erosion-control and treatment-control BMPs would be implemented per NPDES requirements. Full compliance with applicable local, State, and federal regulations, including regulations set forth in Chapter III. Water Quality, Title 8 of the Costa Mesa Municipal Code, the federal Clean Water Act (Title 33, U.S.C. Section 1251 et. seq.), and the NPDES Program, would ensure that water quality impacts associated with construction would be less than significant.

Long-Term Operational Water Quality Impacts

Less Than Significant Impact. Currently, the project site is developed with mostly impervious surfaces and limited areas of landscaping. Therefore, new development on the project site would not substantially increase the amount of impervious surface on-site; however, development would improve control of runoff through mandated incorporation of runoff control features in the project design. Specifically, the proposed project would include a bio-retention planter with underdrains as shown in Exhibit 4, Conceptual Water Quality Management Plan, which would treat runoff from the project site before entering local storm drains. Therefore, the project would not introduce substantial amounts of urban pollutants to the storm water runoff beyond existing conditions and impacts related to long-term operational water quality impacts would not represent a significant impact.

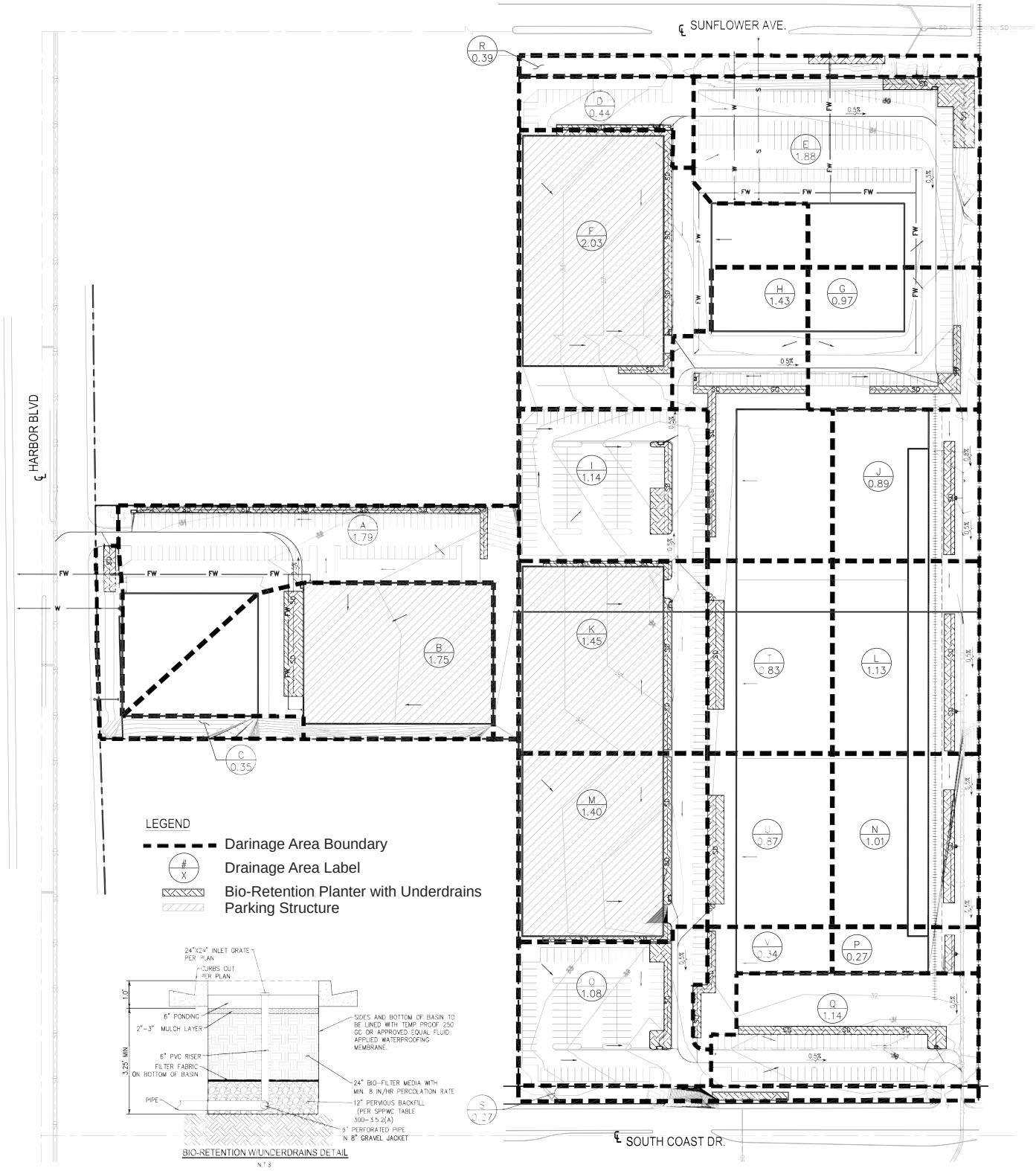
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The project site is currently developed and exists as a primarily impervious site. Pervious areas are limited to landscaped areas surrounding the existing building and the turf baseball field. Therefore, the site does not currently support a substantial amount of groundwater recharge. The proposed project would introduce new, impervious areas; however, project design would include areas of landscaping that would allow for limited collection and percolation of surface water into the underlying groundwater basin. The amount of impervious surface area would be similar in size to existing conditions; therefore, implementation of the project would have a less than significant impact related to the depletion of groundwater supplies and recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. The project site is generally flat and would remain generally flat with development under the proposed project. The proposed project would redevelop a currently developed site with few pervious areas. As shown on Exhibit 4,Conceptual Water Quality Management Plan, and detailed in the preliminary WQMP calculations prepared for the project by Tait & Associates, Inc., the project would implement bio-retention planters with under drains throughout the project site to capture runoff volumes. The planters would allow for up to six inches



Source: TAIT 2016

Conceptual Water Quality Management Plan

Exhibit 4

LA Times Building Reuse Project

BonTerra PSOMAS

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of ponding as well as percolation through a bio-filter media. Under proposed conditions, approximately 10 percent of the project of the project site would be pervious surfaces. Based on calculations prepared for the preliminary WQMP, the proposed bio-retention planters would exceed the minimum required design capture volume for the project site; therefore, the runoff exiting via the existing stormdrain system would not exceed existing conditions. Therefore, a less than significant impact would occur related to changes in the drainage pattern.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less Than Significant Impact. According to Figure 4.9.2 of the GP FEIR, Local Flooding Hazards, the proposed project is not located within a 100-year flood hazard area. Therefore, the project would not expose people or structures to flood hazard conditions nor would any proposed structures impede or redirect flood flows.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. The Santiago Creek Dam is located approximately 12 miles northeast of the project site and the Prado Dam is located approximately 20 miles northeast of the project site. Figure S-4, Dam Inundation Areas, of the GP FEIR shows that the project site is located within the inundation path for both Santiago Creek Dam and Prado Dam should they experience dam failure. However, both Santiago Creek Dam and Prado Dam are subject to regular inspection by the Division of Safety or Dams (DSOD) to ensure that the dams are performing and being maintained in a safe manner. Therefore, impacts would be less than significant.

j) Inundation by seiche or mudflow?

No Impact. As previously discussed, the project site is located in an area that is generally flat with no potential for slope-stability hazards. In addition, Figure S-5, Tsunami and Sea Level Rise Hazard Areas, of the GP FEIR shows that the project site does not lie within a tsunami and sea level rise hazard area. The proposed project would reuse a currently developed site with similar uses; therefore, implementation of the project would not introduce any uses that would expose people or structures to hazards associated with a seiche or mudflows. No impacts are anticipated and no mitigation is required.

5.10 LAND USE AND PLANNING

Impact Analysis

Would the Project:

a) Physically divide an established community?

No Impact. The proposed project is a redevelopment and infill project and is located in an area dominated by commercial and industrial development; however, the project site is not considered to be part of a community or planned development. Because the existing uses on the project site

are unrelated to the surrounding land uses, the proposed project would not physically divide an established community. No impact would occur and no mitigation is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The project site is located in City of Costa Mesa and the 2015-2035 General Plan designates the project site as Commercial Center. The intent of this designation is to allow for large areas with a concentration of diverse commercial uses serving local and regional needs. Anticipated uses include retail stores, professional offices, restaurants, hotels, and theaters. As noted in the 2015-2035 General Plan, the LA Times site is specifically identified for office or retail use. As such, the proposed project would be consistent with the General Plan land use designation for the project site. Additionally, and as discussed throughout this IS, the project would incorporate, or be consistent with, all applicable 2015-2035 General Plan goals, policies and objectives.

The current zoning for the project site is Planned Development Commercial (PDC). Implementation of the proposed project would be consistent with existing zoning and would not conflict with applicable plans, policies, and regulations. Therefore, no impacts would occur and no mitigation is required.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The City does not participate in the County of Orange Natural Community Conservation Plan (NCCP)/habitat conservation plan (HCP), and no other HCPs or NCCPs apply to the project site. Therefore, the proposed project would not conflict with any applicable HCP or NCCP, no impact would occur, and no mitigation is required.

5.11 MINERAL RESOURCES

Impact Analysis

Would the Project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. According to Section 4.11 of the GP FEIR, known mineral resource deposits in the City include oil, peat, and aggregate. There are currently no oil wells on the project site, and peat is only located in areas adjacent to the Santa Ana River. Figure 4.11-1 of the GP FEIR shows that the majority of the City is designated MRZ-3, Areas of Undetermined Mineral Resource Significance. Therefore, it is possible that aggregate resources underlie the project site; however, per the GP FEIR, if aggregate resources were present at the project site, they would remain untouched as the site is currently developed and too urban to consider for mining operations. Therefore, no impact would occur related to the loss of availability of a known mineral resource and no mitigation is required.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Additionally, the GP FEIR notes that no City of Costa Mesa planning documents have identified locally-important mineral resources within the City. Therefore, implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site and no mitigation is required.

5.12 NOISE

Standards for Noise Equivalent

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise have been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:

- **L_{eq} (Equivalent Energy Noise Level):** The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. L_{eq} is typically computed over 1-, 8-, and 24-hour sample periods.
- **CNEL (Community Noise Equivalent Level):** The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 PM to 10:00 PM and of ten decibels to sound levels occurring at night from 10:00 PM to 7:00 AM.

Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. The nearest sensitive receptors to the project site are:

- National University – the building at the southeast corner of Harbor Boulevard and Sunflower Avenue is approximately 200 feet west of the project site,
- Whittier Law School – the campus is located at the southwest corner of Harbor Boulevard and Sunflower Avenue and is approximately 200 feet west of the project site, and
- Multi-family residences east of Susan Street are approximately 630 feet east of the project site.

The proposed project would not be a sensitive receptor.

Impact Analysis

Would the Project:

a) **Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?**

Less than Significant Impact.

Construction

Noise from construction activity would be generated during the demolition and development of the proposed Project. Noise from the construction phase of the project would be primarily

generated by construction vehicle engines, treads, exhaust, worker and truck commutes, back-up bells and demolition activities. Noise levels produced from construction activities are affected by the type of activity performed, the number of construction equipment, the magnitude of noise sources and the proximity of the nearest noise sensitive uses.

Noise levels associated with project-related construction activities have been quantified at the nearest noise sensitive uses for each construction phase. The City of Costa Mesa has developed noise exposure limits at residential uses. The EIR for the City of Costa Mesa General Plan Amendment states that noise levels at sensitive receptors should be analyzed on a case-by-case basis and appropriate mitigation should be applied to bring noise levels down to acceptable levels. Residential uses are considered to be noise sensitive uses, whereas commercial and industrial uses are generally not considered to be noise sensitive uses. Noise levels were evaluated against the construction noise criteria developed by the Federal Transit Administration for construction noise exposure at residential uses. These noise levels are shown under worst-case conditions with construction activities occurring closest to each noise sensitive use as well as under typical conditions with noise sources at the approximated center of the project site. Calculated noise levels are shown in Table 10. As shown in Table 10, project-related construction noise would not exceed the construction noise criteria at the nearest noise sensitive uses, which are the residential uses located along Susan Street. These residences are located approximately 630 feet east of the project site. Because noise levels would not exceed the construction noise criteria, the project would not result in significant impacts related to construction noise exposure at the nearest noise sensitive use.

TABLE 10
CONSTRUCTION NOISE LEVELS

Noise Levels at the Residential Uses Located Along Susan Street				
Worst-Case Noise Levels at 630 Feet Away				
Construction Phase	**All Applicable Equipment in Use**	**Minimum Required Equipment in Use**	**Noise Threshold**	**Exceeds?**
Ground Clearing/Demolition	62	62	80	No
Excavation	67	57	80	No
Foundation Construction	56	56	80	No
Building Construction	65	53	80	No
Finishing and Site Cleanup	67	53	80	No
Typical Noise Levels at 1,250 Feet Away				
Construction Phase	**All Applicable Equipment in Use**	**Minimum Required Equipment in Use**	**Noise Threshold**	**Exceeds?**
Ground Clearing/Demolition	56	56	80	No
Excavation	61	51	80	No
Foundation Construction	50	50	80	No
Building Construction	59	47	80	No
Finishing and Site Cleanup	61	47	80	No
Source: Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.				

Operational

The City of Costa Mesa Municipal Code, Title XIII, Planning, Zoning, and Development, Chapter XIII, Noise Control, Section 13-280, Exterior Noise Standards, requires that noise generated from a property not to exceed, for more than 30 minutes in an hour, 55 decibels (dBA) between 7:00 AM and 11:00 PM and 50 dBA between 11:00 PM and 7:00 AM at a residential property. The proposed project's primary operational noise sources would be heating, ventilating, and air conditioning (HVAC) units. The nearest residential property is approximately 700 feet from the project site. Large HVAC equipment typically have sound power ratings of 85 to 90 decibels, which is equivalent to sound pressure levels of 53 to 58 dBA at a distance of 50 feet.[2] At a distance of 700 feet without assuming any reduction for the buildings between the project site and the off-site residences, the noise level from one large HVAC unit would be 35 dBA L_{eq}, and from four units would be 41 dBA, which is less than the 50 dBA L_{eq} nighttime exterior noise standard. Because there are buildings between the project site and the residences, HVAC noise levels would be less than the values quoted above. The impact would be less than significant.

b) Expose persons to or generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. Typical sources of groundborne vibration and noise include construction activities and heavy vehicle traffic. Excessive vibration can lead to structural damage and general annoyance to the public. Vibration can also adversely affect delicate instruments such as electron microscopes, advanced technology production, and research equipment.

Construction

Pile drivers and rock blasting are generally the primary cause of construction-related vibration impacts. Other than pile driving and blasting, building and roadway construction have the potential to generate perceptible vibration levels to sensitive receptors within 20 feet from the operation of heavy equipment. It is anticipated that drilled piles or caissons would be used for the proposed project. The nearest building to the area of the project site where construction is anticipated is the commercial building on Harbor Boulevard south of the project site, currently occupied by the Automobile Club of Southern California.

As noted in the *City of Costa Mesa Year 2015 - 2035 General Plan EIR*, potential vibration due to future construction activities would be assessed in conjunction with the City's routine review of site-specific geotechnical studies and the recommended grading and foundation design measures and this review will provide an adequate mechanism to require special measures to mitigate potentially significant vibration impacts. The impact would be less than significant.

Operational

The proposed project would not include any operations that would generate notable vibration. The impact would be less than significant.

[2] The noise levels described above and in most of this section are sound pressure levels. However, sound power is often used to describe stationary noise sources. Sound power describes the total sound energy emitted by a source, also in decibels; sound power does not change with distance.

c) Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Less than Significant Impact.

Future Noise Levels along Existing Roadway Segments

At full development, the project would generate 7,225 average daily trips (ADT) at the full development of the project (Stantec 2017). These trips would be distributed among nearby roads. The project traffic analysis lists those roads that would carry two percent or more of the project traffic (145 ADT). Susan Street, south of Sunflower Avenue, the location of the closest residences, is not among those roads. Peak hour traffic volumes are typically approximately 10 percent of ADT. Thus, project-generated traffic on Susan Street south of Sunflower Avenue are anticipated to be less than 14 trips in an hour. The traffic noise increase to the residences on Susan Street would not be substantial and the noise impact would be less than significant.

The addition of project traffic to the existing traffic volume is a conservative method because the no-project traffic volumes at the time of full development of the project would be greater than the existing volumes and the project impact would be less than calculated with existing volumes. This method is used to estimate the traffic noise increase to the National University building at the intersection of Harbor Boulevard and Sunflower Avenue. The existing traffic volume on Sunflower Avenue east of Harbor Boulevard is 13,000 ADT (Stantec 2017). It is estimated that approximately 24 percent of the project traffic (1,734 ADT) would use this segment and the addition of the project traffic would increase the noise level by 0.5 dBA, which would not be perceptible (Stantec 2017). The existing traffic volume on Harbor Boulevard south of Sunflower Avenue is 50,000 ADT (Stantec 2017). It is estimated that approximately 4 percent of the project traffic (289 ADT) would use this segment and the addition of the project traffic would increase the noise level by less than 0.1 dBA, which would not be perceptible. Thus, the project traffic noise increases at National University would not be substantial and the impact would be less than significant.

Stationary Sources

Noise levels from HVAC units are described in response to Threshold 5.12 (a). The existing noise environment in the vicinity of the project site is dominated by traffic noise from Harbor Boulevard and Sunflower Avenue. The HVAC unit noise would likely not be audible in the daytime and perhaps slightly audible if units are operating late at night. The noise increase would not be substantial and the impact would be less than significant.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Less than Significant Impact. As described in response to Threshold 5.12 (a), construction noise would not result in excessive levels of noise exposure at the nearest noise sensitive uses. The impact would be less than significant.

e) For a Project located within an airport land use plan or, where such plan has not been adopted, within two miles of a private or public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. The project site is more than two miles from John Wayne Airport and is outside of the 60 dBA CNEL noise contour for John Wayne Airport. There are no private airstrips in the vicinity of the project site. There would be no impact.

5.13 POPULATION AND HOUSING

Impact Analysis

Would the Project:

a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Less Than Significant Impact. It is anticipated that approximately 1,200 new jobs would be created for the project's first phase (reuse of the existing 339,063 sf building) and an additional 1,400 new jobs would be created for the potential development of 655,000 sf of office uses. The proposed project is included in the GP FEIR which is the basis for future population, housing and employment projections. Therefore, the increase in jobs and associated indirect increase in population and housing demands would be consistent with future projections for the City.

b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No Impact. The proposed project involves the reuse of the LA Times building and the addition of 655,000 sf of office development. The project site does not contain any housing; therefore, the project would not displace any existing housing or substantial numbers of people.

5.14 PUBLIC SERVICES

Impact Analysis

a) **Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, and other public facilities?**

Less Than Significant Impact. The proposed project would result in an increased demand for police and fire protection service resulting from an increase in the number of employees to the project site in addition to an increase of vehicular traffic to the area. However, although the demands for these services would increase with the proposed project beyond existing conditions, development of the site, the associated increase in jobs, and the indirect increase in population and housing would be consistent with what was assumed in the GP FEIR which provides the basis for future planning purposes. Therefore, no significant impacts would occur related to police and fire services.

The project proposes office development and would not include construction of any housing. Although an increase in population is anticipated because some employees of the proposed project are assumed to relocate to the local area, this increase in population would be indirect

and would be within the anticipated population growth in the City as assumed in the GP FEIR. Any related increase in student generation, demand for City parklands, or demand for library services resulting from project implementation would also be consistent with what was assumed in the GP FEIR and would be the basis for future planning purposes. Therefore, no significant impacts would occur related to school, park, and library services.

5.15 RECREATION

Impact Analysis

Would the Project:

a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

b) **Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Less Than Significant Impact. The proposed project involves the reuse of a currently developed site with office building campus uses. As mentioned previously, the project is not anticipated to directly induce population growth; therefore, it would not directly impact any local recreational facilities through increase of use. Additionally, the proposed Project would include a dedicated bike path through the project site and a sports court which would provide space for a variety of recreational activities for employees of the proposed project. Therefore, impacts related to demand or use of recreational facilities would be less than significant and no mitigation is required.

5.16 TRANSPORTATION/TRAFFIC

Impact Analysis

Would the Project:

a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Less Than Significant Impact.

The following information is based on the *Tribune Property Traffic Analysis* (TIA) prepared by Stantec Consulting Services Inc. in March 2017 for the proposed project (Stantec 2017) and included as Appendix C of this document.

The traffic study area for the proposed project includes 18 study intersections (16 intersections in Costa Mesa and two intersections in Santa Ana):

- Harbor & MacArthur (Santa Ana)
- Harbor & Scenic/Lake Center
- Harbor & Sunflower
- Harbor & South Coast
- Hyland & South Coast/I-405 NB On-Ramp
- Harbor & I-405 NB Ramps
- Harbor & I-405 SB Ramps
- Harbor & Gisler
- Harbor & Baker
- Susan & Sunflower
- Susan & South Coast
- Fairview & MacArthur (Santa Ana)
- Fairview & Sunflower
- Fairview & South Coast
- Fairview & I-405 NB Ramps
- Fairview & I-405 SB Ramps
- Fairview & Paularino
- Fairview & Baker

Performance Criteria

A set of performance criteria is utilized in the TIA to determine existing and future operating LOS for the intersections in the study area. Traffic LOS is designated “A” through “F” with LOS “A” representing free flow conditions and LOS “F” representing severe traffic congestion. Table 10 summarizes general LOS descriptions for urban streets and intersections as well as the volume/capacity (V/C) ranges that correspond to LOS “A” through “F”. The V/C ranges listed in the table are designated in the 2015-2035 General Plan Circulation Element as well as the Orange County Congestion Management Program (CMP). The performance criteria applied in this study for the intersections in the study area are based on LOS calculation methodologies and performance standards adopted by the Cities of Costa Mesa and Santa Ana.

The intersection performance criteria applied in the TIA involve the use of peak hour intersection capacity utilization (ICU) values. The ICU calculation methodology adopted by the Cities of Costa Mesa and Santa Ana applies a saturation flow rate of 1,700 vehicles per hour per intersection lane and a 0.05 clearance interval, which is consistent with the Orange County Congestion Management Plan (CMP). The ICU ranges that correspond to LOS “A” through “F” are the same as the V/C ranges shown in Table 10. LOS “D” (ICU not to exceed .90) is the performance standard for City of Costa Mesa and Santa Ana intersections.

Caltrans freeway ramp intersections are analyzed in the TIA using the Highway Capacity Manual (HCM) LOS methodology for signalized intersections in addition to the ICU methodology. In the HCM signalized intersection analysis methodology, the LOS at an intersection location is determined based on the estimated average delay experienced by all traffic using the intersection. The vehicle delay ranges that correspond to LOS “A” through “F” as specified in the HCM are summarized in Table 11.

TABLE 10
LEVEL OF SERVICE DESCRIPTIONS – URBAN STREETS AND INTERSECTIONS

Level of Service (LOS)	Description	Volume/Capacity (V/C) Range
A	LOS A describes primarily free-flow operations. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.	.00 – .60
B	LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.	.61 – .70
C	LOS C describes stable operation. The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at the intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.	.71 – .80
D	LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the intersections. The travel speed is between 40% and 50% of the base free-flow speed.	.81 – .90
E	LOS E is characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the intersections. The travel speed is between 30% and 40% of the base free-flow speed.	.91 – 1.00
F	LOS F is characterized by flow at extremely low speed. Congestion is likely occurring at the intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed.	Above 1.00
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017		

TABLE 11
INTERSECTION LEVEL OF SERVICE RANGES (ICU AND HCM DELAY)

Level of Service (LOS)	Intersection Capacity Utilization (ICU)	Signal Control Delay	Stop Control Delay
A	0.00 – 0.60	0.00 – 10.0 seconds	0.00 – 10.0 seconds
B	0.61 – 0.70	10.1 – 20.0 seconds	10.1 – 15.0 seconds
C	0.71 – 0.80	20.1 – 35.0 seconds	15.1 – 25.0 seconds
D	0.81 – 0.90	35.1 – 55.0 seconds	25.1 – 35.0 seconds
E	0.91 – 1.00	55.1 – 80.0 seconds	35.1 – 50.0 seconds
F	Above 1.00	Above 80.0 seconds	Above 50.0 seconds
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017			

Project Trip Generation and Distribution

Vehicle trip generation estimates are provided for the proposed future land uses on the project site. The trip generation estimates were calculated based on Institute of Transportation Engineers

(ITE) trip generation rates used in the Costa Mesa travel demand model that was applied in the City's General Plan update. The daily and peak hour (AM and PM) trip generation estimates for the approximately 345,000[3] sf of office use with the initial phase of the project and the 655,000 sf of office use with full General Plan buildout of the project are summarized in Table 12.

The project site is currently vacant. As identified previously, traffic distribution patterns for the project were developed based on select zone assignments for the project site using the base year (existing) and long-range (year 2035) versions of the Costa Mesa travel demand model. The resulting project trip distribution patterns for opening day (year 2018) and long-range (year 2035) are summarized in Table 13. The opening day (year 2018) distribution pattern was used to add the trip generation estimates for the 345,000 sf initial development phase to year 2018 no-project traffic forecasts, and the long-range (year 2035) distribution pattern was used to delete the trip generation estimates for the 655,000 square-foot full development of the project from year 2035 with-project traffic forecasts based on the recently adopted 2015-2035 General Plan. Because the site is currently unoccupied, no credit is being taken for trips generated by the site at this time.

TABLE 12
TRIP GENERATION ESTIMATES FOR THE PROJECT SITE

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
Proposed Project									
Initial Development Phase (345,000 Square Feet)[1]									
General Office	TSF	345	473	66	539	86	428	514	3,805
Full General Plan Development (655,000 Square Feet)									
General Office	TSF	655	897	124	1,021	164	812	976	7,225
Trip Generation Rates									
General Office (710)	TSF	--	1.37	0.19	1.56	0.25	1.24	1.49	11.03

Abbreviations: ADT – Average Daily Trips; IB – Inbound Trips OB – Outbound Trips; TSF – Thousand Square Feet

1 The Traffic Impact Analysis analyzed the existing building at 345,000 sf, which is slightly greater than the actual area (339,063 sf) as stated in Section 3.0, Project Description. Therefore, this analysis represents a conservative analysis of traffic impacts by evaluating a slightly larger building during Phase 1.

Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

3 The Traffic Impact Analysis analyzed the existing building at 345,000 sf, which is slightly greater than the actual area (339,063 sf) as stated in Section 3.0, Project Description. Therefore, this analysis represents a conservative analysis of traffic impacts by evaluating a slightly larger building during Phase 1.

TABLE 13
PROJECT TRIP DISTRIBUTION PATTERN

Roadway Location	Percentage of Project Site Trip Generation	
	Opening Day (Year 2018)	Long-Range (Year 2035)
Fairview Road north of Sunflower Avenue	6%	6%
Fairview Road south of I-405 Freeway	2%	2%
Harbor Boulevard north of Sunflower Avenue	16%	19%
Harbor Boulevard south of I-405 Freeway	14%	12%
I-405 Freeway north of Harbor Boulevard	12%	17%
I-405 Freeway south of Fairview Road	27%	21%
South Coast Drive east of Fairview Road	3%	3%
Sunflower Avenue west of Harbor Boulevard	2%	3%
Sunflower Avenue east of Fairview Road	16%	14%
Susan Street north of Sunflower Avenue	2%	3%
Total	100%	100%
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017		

Short-Range Traffic Conditions

Table 14 summarizes AM and PM peak hour intersection capacity utilization (ICU) values and levels of service for the intersections in the study area based on existing (2015/2016) conditions and 2018 opening day conditions with and without the 345,000 sf initial development phase of the proposed project (actual ICU worksheets are provided in Appendix A of the TIA). Table 15 summarizes existing and 2018 AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the Highway Capacity Manual (HCM) signalized intersection level of service (LOS) methodology (HCM intersection LOS calculation worksheets are provided in Appendix B of the TIA). The 2018 volumes are provided both with and without the initial development phase of the project.

Vehicle trip generation estimates for the Vans corporate headquarters project located at the northeast corner of the South Coast Drive/Hyland Avenue intersection and the Steelwave project located on the former Emulex site are summarized in Tables 16 and 17, respectively. The traffic generated by these two projects was distributed to the study area intersections based on Costa Mesa traffic model select zone assignments for their respective project sites. Table 18 summarizes year 2018 AM and PM peak hour ICU values and levels of service with the Vans and Steelwave projects without and with the 345,000 sf initial development phase of the proposed project (ICU worksheets are provided in Appendix A of the TIA), and Table 19 summarizes the corresponding year 2018 AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the HCM signalized intersection LOS methodology (HCM intersection LOS calculation worksheets are provided in Appendix B of the TIA).

As the LOS summary tables indicate, each of the intersections analyzed is forecast to operate at an acceptable LOS “D” or better under 2018 opening day conditions with development of the initial phase of the project. Therefore, the 345,000 sf initial development phase of the proposed project does not significantly impact any of the study area intersections based on 2018 opening day conditions.

TABLE 14
EXISTING AND OPENING DAY (2018) INTERSECTION LOS SUMMARY (ICU METHODOLOGY)

Intersection	Existing (2015/2016)				Opening Day (2018) No-Project				Opening Day (2018) With 345,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
1. Harbor & MacArthur	.73	C	.83	D	.77	C	.85	D	.77	C	.85	D
2. Harbor & Scenic/Lake Center	.66	B	.57	A	.67	B	.58	A	.68	B	.59	A
3. Harbor & Sunflower	.64	B	.68	B	.66	B	.70	B	.68	B	.72	C
4. Harbor & South Coast	.50	A	.69	B	.51	A	.72	C	.52	A	.74	C
5. Hyland & South Coast/I-405 NB On	.26	A	.58	A	.26	A	.59	A	.27	A	.59	A
6. Harbor & I-405 NB Ramps	.59	A	.73	C	.66	B	.79	C	.67	B	.81	D
7. Harbor & I-405 SB Ramps	.44	A	.62	B	.46	A	.64	B	.48	A	.65	B
8. Harbor & Gisler	.58	A	.70	B	.59	A	.72	C	.59	A	.73	C
9. Harbor & Baker	.49	A	.62	B	.51	A	.63	B	.52	A	.63	B
10. Susan & Sunflower	.30	A	.72	C	.31	A	.74	C	.37	A	.74	C
11. Susan & South Coast	.24	A	.52	A	.26	A	.52	A	.28	A	.57	A
12. Fairview & MacArthur	.68	B	.76	C	.69	B	.79	C	.69	B	.79	C
13. Fairview & Sunflower	.55	A	.65	B	.56	A	.66	B	.57	A	.68	B
14. Fairview & South Coast	.68	B	.86	D	.69	B	.87	D	.70	B	.87	D
15. Fairview & I-405 NB Ramps	.52	A	.63	B	.54	A	.65	B	.54	A	.66	B
16. Fairview & I-405 SB Ramps	.58	A	.49	A	.59	A	.51	A	.59	A	.51	A
17. Fairview & Paularino	.46	A	.45	A	.46	A	.47	A	.47	A	.47	A
18. Fairview & Baker	.64	B	.60	A	.66	B	.62	B	.66	B	.62	B

Abbreviations: ICU – intersection capacity utilization; LOS – level of service; NB – northbound SB – southbound
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 15
EXISTING AND OPENING DAY (2018) INTERSECTION LOS SUMMARY (HCM METHODOLOGY)

Intersection	Existing (2015/2016)				Opening Day (2018) No-Project				Opening Day (2018) With 345,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS
5. Hyland & South Coast/I-405 NB On	1.7	A	1.2	A	1.7	A	1.2	A	1.7	A	1.2	A
6. Harbor & I-405 NB Ramps	15.4	B	20.1	C	15.9	B	21.1	C	16.6	B	21.5	C
7. Harbor & I-405 SB Ramps	10.4	B	14.2	B	10.4	B	14.8	B	11.2	B	15.1	B
15. Fairview & I-405 NB Ramps	18.8	B	28.4	C	19.4	B	30.0	C	19.4	B	30.3	C
16. Fairview & I-405 SB Ramps	20.0	C	18.0	B	20.1	C	18.4	B	20.1	C	18.3	B

Abbreviations: HCM – Highway Capacity Manual; LOS – level of service NB – northbound; SB – southbound

[a] Average vehicle delay in seconds.

Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 16
TRIP GENERATION ESTIMATES FOR THE VANS CORPORATE HEADQUARTERS PROJECT

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
Vans Project									
Corporate Headquarters	TSF	178.893	252	20	272	25	227	252	1,428
Trip Generation Rates									
Corporate Headquarters (714)	TSF	--	1.41	0.11	1.52	0.14	1.27	1.41	7.98

Abbreviations: ADT – Average DailyTrips; IB – Inbound Trips OB – Outbound Trips; TSF – Thousand Square Feet
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 17
TRIP GENERATION ESTIMATES FOR THE STEELWAVE PROJECT

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
Steelwave Project									
Existing Development									
Industrial Park	TSF	172	115	26	141	31	115	146	1,175
Proposed Steelwave Development Plan									
Office (Existing Buildings)	TSF	172	236	33	269	43	213	256	1,897
Hotel	Room	128	40	28	68	40	37	77	1,046
Quality Restaurant	TSF	7.72	3	3	6	39	19	58	694
High Turnover Restaurant	TSF	5.58	33	27	60	33	22	55	709
Retail	TSF	2.00	1	1	2	4	5	9	107
Trip Generation Summary									
Total (Before Trip Reduction)			313	92	405	159	296	455	4,453
10% Internal Capture Trip Reduction			-20	-20	-40	-23	-23	-46	-445
Total (After Trip Reduction)			293	72	365	136	273	409	4,008
Difference (Proposed Steelwave Development Plan Versus Existing Development)									
Net Trip Generation Increase			178	46	224	105	158	263	2,833
Trip Generation Rates									
Industrial Park (130)	TSF	--	0.67	0.15	0.82	0.18	0.67	0.85	6.83
Office (710)	TSF	--	1.37	0.19	1.56	0.25	1.24	1.49	11.03
Hotel (310)	Room	--	0.31	0.22	0.53	0.31	0.29	0.60	8.17
Quality Restaurant (931)	TSF	--	0.41	0.40	0.81	5.02	2.47	7.49	89.95
High Turnover Restaurant (932)	TSF	--	5.95	4.86	10.81	5.91	3.94	9.85	127.15
Retail (820)	TSF	--	0.73	0.45	1.18	2.23	2.41	4.64	53.28

Abbreviations: ADT – Average DailyTrips; IB – Inbound Trips OB – Outbound Trips; TSF – Thousand Square Feet
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 18
OPENING DAY (2018) INTERSECTION LOS SUMMARY WITH THE VANS AND STEELWAVE PROJECTS (ICU METHODOLOGY)

Intersection	No-Project				With 345,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
1. Harbor & MacArthur	0.77	C	0.87	D	0.80	C	0.87	D
2. Harbor & Scenic/Lake Center	0.68	B	0.59	A	0.69	B	0.60	A
3. Harbor & Sunflower	0.68	B	0.71	C	0.69	B	0.72	C
4. Harbor & South Coast	0.55	A	0.76	C	0.55	A	0.77	C
5. Hyland & South Coast/I-405 NB On	0.28	A	0.61	B	0.28	A	0.64	B
6. Harbor & I-405 NB Ramps	0.67	B	0.80	C	0.69	B	0.82	D
7. Harbor & I-405 SB Ramps	0.48	A	0.65	B	0.50	A	0.66	B
8. Harbor & Gisler	0.60	A	0.73	C	0.60	A	0.73	C
9. Harbor & Baker	0.51	A	0.63	B	0.52	A	0.64	B
10. Susan & Sunflower	0.32	A	0.75	C	0.38	A	0.75	C
11. Susan & South Coast	0.30	A	0.56	A	0.31	A	0.59	A
12. Fairview & MacArthur	0.69	B	0.79	C	0.69	B	0.79	C
13. Fairview & Sunflower	0.57	A	0.67	B	0.57	A	0.69	B
14. Fairview & South Coast	0.69	B	0.87	D	0.70	B	0.87	D
15. Fairview & I-405 NB Ramps	0.54	A	0.66	B	0.54	A	0.66	B
16. Fairview & I-405 SB Ramps	0.59	A	0.52	A	0.59	A	0.52	A
17. Fairview & Paularino	0.47	A	0.47	A	0.47	A	0.47	A
18. Fairview & Baker	0.66	B	0.62	B	0.66	B	0.62	B

Abbreviations: ICU – intersection capacityutilization; LOS – level of service; NB – northbound SB – southbound
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 19
OPENING DAY (2018) INTERSECTION LOS SUMMARY WITH THE VANS AND STEELWAVE PROJECTS (HCM METHODOLOGY)

Intersection	No-Project				With 345,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS
5. Hyland & South Coast/I-405 NB On	1.3	A	1.2	A	1.3	A	1.2	A
6. Harbor & I-405 NB Ramps	16.5	B	21.3	C	17.7	B	22.0	C
7. Harbor & I-405 SB Ramps	11.2	B	15.1	B	12.2	B	15.4	B
15. Fairview & I-405 NB Ramps	19.4	B	31.1	C	19.5	B	31.2	C
16. Fairview & I-405 SB Ramps	20.2	C	18.5	B	20.3	C	18.5	B

Abbreviations: HCM – Highway Capacity Manual; LOS – level of service NB – northbound; SB – southbound
[a] Average vehicle delay in seconds.
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

Interim Traffic Conditions

Table 20 summarizes interim year 2022 AM and PM peak hour intersection capacity utilization (ICU) values and levels of service without and with the proposed project, and Table 21 summarizes the corresponding year 2022 AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the HCM signalized intersection LOS methodology.

As the LOS summary tables indicate, each of the intersections analyzed is forecast to operate at an acceptable LOS "D" or better under interim year 2022 conditions with full development of the project. Therefore, full buildout of the proposed project would not significantly impact any of the study area intersections based on interim 2022 conditions.

TABLE 20
INTERIM YEAR (2022) INTERSECTION LOS SUMMARY
WITH THE VANS AND STEELWAVE PROJECTS (ICU METHODOLOGY)

	No-Project				With 655,000 SF Full Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
1. Harbor & MacArthur	0.77	C	0.87	D	0.80	C	0.87	D
2. Harbor & Scenic/Lake Center	0.68	B	0.59	A	0.69	B	0.60	A
3. Harbor & Sunflower	0.68	B	0.71	C	0.69	B	0.72	C
4. Harbor & South Coast	0.55	A	0.76	C	0.55	A	0.77	C
5. Hyland & South Coast/I-405 NB On	0.28	A	0.61	B	0.28	A	0.64	B
6. Harbor & I-405 NB Ramps	0.67	B	0.80	C	0.69	B	0.82	D
7. Harbor & I-405 SB Ramps	0.48	A	0.65	B	0.50	A	0.66	B
8. Harbor & Gisler	0.60	A	0.73	C	0.60	A	0.73	C
9. Harbor & Baker	0.51	A	0.63	B	0.52	A	0.64	B
10. Susan & Sunflower	0.32	A	0.75	C	0.38	A	0.75	C
11. Susan & South Coast	0.30	A	0.56	A	0.31	A	0.59	A
12. Fairview & MacArthur	0.69	B	0.79	C	0.69	B	0.79	C
13. Fairview & Sunflower	0.57	A	0.67	B	0.57	A	0.69	B
14. Fairview & South Coast	0.69	B	0.87	D	0.70	B	0.87	D
15. Fairview & I-405 NB Ramps	0.54	A	0.66	B	0.54	A	0.66	B
16. Fairview & I-405 SB Ramps	0.59	A	0.52	A	0.59	A	0.52	A
17. Fairview & Paularino	0.47	A	0.47	A	0.47	A	0.47	A
18. Fairview & Baker	0.66	B	0.62	B	0.66	B	0.62	B

Abbreviations: ICU – intersection capacityutilization; LOS – level of service; NB – northbound SB – southbound

Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 21
INTERIM YEAR (2022) INTERSECTION LOS SUMMARY
WITH THE VANS AND STEELWAVE PROJECTS (HCM METHODOLOGY)

Intersection	No-Project				With 655,000 SF Full Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS
5. Hyland & South Coast/I-405 NB On	1.3	A	1.2	A	1.2	A	1.1	A
6. Harbor & I-405 NB Ramps	17.3	B	23.0	C	19.3	B	23.8	C
7. Harbor & I-405 SB Ramps	11.8	B	16.0	B	13.6	B	16.7	B
15. Fairview & I-405 NB Ramps	20.3	C	33.4	C	20.6	C	34.0	C
16. Fairview & I-405 SB Ramps	20.9	C	18.9	B	20.9	C	18.9	B

Abbreviations: HCM – Highway Capacity Manual; LOS – level of service NB – northbound; SB – southbound
[a] Average vehicle delay in seconds.
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

Long-Range Traffic Conditions

Table 22 summarizes year 2035 long-range AM and PM peak hour intersection capacity utilization (ICU) values and levels of service for the intersections in the study area based on no-project conditions (i.e., no development of the proposed project) and conditions with full development of the proposed project (655,000 sf of office use). Table 23 summarizes 2035 no-project and with-project AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the Highway Capacity Manual (HCM) signalized intersection level of service (LOS) methodology (HCM intersection LOS calculation worksheets are provided in Appendix B of the TIA).

As the LOS summary tables indicate, each of the intersections analyzed is forecast to operate at an acceptable LOS “D” or better under 2035 conditions with full development of the project with the exception of the Harbor Boulevard/MacArthur Boulevard intersection in the City of Santa Ana, which is forecast to operate at LOS “E” during the PM peak hour. However, the proposed project does not significantly impact that intersection because the PM peak hour ICU is the same (0.93) under 2035 no-project and with-project conditions. Therefore, full buildout of the proposed project would not significantly impact any of the study area intersections based on 2035 long-range conditions.

The recently adopted Costa Mesa General Plan identifies non-committed long-range improvements that are planned at four of the Costa Mesa intersections in the study area. Those improvements, which are listed in Table 24, are included in the 2035 long-range intersection LOS results discussed above. The proposed project’s fair share contribution towards the implementation of Costa Mesa General Plan roadway improvements both within and beyond the study area will be satisfied through the project’s payment of Costa Mesa Traffic Impact Fees.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The analysis presented in the TIA is consistent with the requirements and procedures outlined in the current Orange County Congestion Management Program (CMP). The CMP requires that a traffic impact analysis be conducted for any project

generating 2,400 or more daily trips or 1,600 or more daily trips for projects that directly access the CMP Highway System (HS). As noted previously, the proposed project is forecasted to generate approximately 1,997 daily trip-ends and thus does not meet the criteria requiring a CMP traffic impact analysis. Therefore, impacts would be less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

No Impact. The project would not involve any modifications to the local circulation system and all on-site circulation would be subject to review by the City of Costa Mesa. No impact would occur.

e) Result in inadequate emergency access?

No Impact. The project site is located along Sunflower Avenue, and is not in the vicinity of an established emergency response or evacuation plan. Construction activity would be confined to the project site and would not interfere with vehicle movement or emergency access along this roadway. Impacts related to the addition of project-related traffic would be less than significant; therefore, the project would not interfere with the movement of emergency vehicles along local roadways. No impact related to inadequate emergency access would occur, and no mitigation is required.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The proposed project would be located near various alternative transportation modes and routes, including transit stops and pedestrian facilities. According to the GP FEIR, there are existing Class II bikeways located along Sunflower Avenue and South Coast Drive in the project vicinity as well as a proposed Class I bikeway immediately east of the project site. Existing transit service in the project area is provided by the OCTA and there are multiple OCTA stops within ¼ mile of the project site that provide access to Routes 211, 216, 464, and 794. Routes 211 and 216 are Intracounty Express routes and route 794 is an Intercounty Express route, all of which operate during weekday rush hour only. Route 464 is classified by the OCTA as a Stationlink because it provides service to the Santa Ana Metrolink Station. (OCTA 2015). No impacts to alternative transportation are anticipated, and no mitigation is required.

TABLE 22
LONG-RANGE (2035) INTERSECTION LOS SUMMARY
(ICU METHODOLOGY)

Intersection	No-Project				With 655,000 SF Full Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
1. Harbor & MacArthur	.85	D	.93	E	.86	D	.93	E
2. Harbor & Scenic/Lake Center	.61	B	.66	B	.64	B	.69	B
3. Harbor & Sunflower	.60	A	.71	C	.61	B	.72	C
4. Harbor & South Coast	.56	A	.80	C	.56	A	.84	D
5. Hyland & South Coast/I-405 NB On	.26	A	.52	A	.26	A	.56	A
6. Harbor & I-405 NB Ramps	.79	C	.89	D	.81	D	.89	D
7. Harbor & I-405 SB Ramps	.57	A	.71	C	.62	B	.73	C
8. Harbor & Gisler	.58	A	.77	C	.58	A	.78	C
9. Harbor & Baker	.54	A	.78	C	.55	A	.79	C
10. Susan & Sunflower	.43	A	.62	B	.49	A	.64	B
11. Susan & South Coast	.46	A	.68	B	.46	A	.68	B
12. Fairview & MacArthur	.74	C	.83	D	.74	C	.83	D
13. Fairview & Sunflower	.71	C	.66	B	.73	C	.70	B
14. Fairview & South Coast	.68	B	.77	C	.69	B	.79	C
15. Fairview & I-405 NB Ramps	.66	B	.74	C	.68	B	.75	C
16. Fairview & I-405 SB Ramps	.65	B	.70	B	.65	B	.70	B
17. Fairview & Paularino	.58	A	.56	A	.58	A	.57	A
18. Fairview & Baker	.77	C	.81	D	.77	C	.81	D

Abbreviations: ICU – intersection capacityutilization; LOS – level of service; NB – northbound SB – southbound

Denotes a peak hour deficiency.

Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 23
LONG-RANGE (2035) INTERSECT ION LOS SUMMARY
(HCM METHODOLOGY)

Intersection	No-Project				With 655,000 SF Full Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS	Delay[a]	LOS
5. Hyland & South Coast/I-405 NB On	1.3	A	1.2	A	1.3	A	1.2	A
6. Harbor & I-405 NB Ramps	15.6	B	21.4	C	17.7	B	22.1	C
7. Harbor & I-405 SB Ramps	20.7	C	19.2	B	22.5	C	20.1	C
15. Fairview & I-405 NB Ramps	40.3	D	39.5	D	41.5	D	40.1	D
16. Fairview & I-405 SB Ramps	22.0	C	26.0	C	22.1	C	25.4	C

Abbreviations: HCM – Highway Capacity Manual; LOS – level of service NB – northbound; SB – southbound

[a] Average vehicle delay in seconds.

Source: Stantec, *Tribune Property Traffic Analysis,* March 2017

TABLE 24
NON-COMMITTED GENERAL PLAN IMPROVEMENTS IN THE STUDY AREA

Intersection	Non-Committed General Plan Improvement
3. Harbor & Sunflower	Add eastbound and westbound right-turn lanes.
4. Harbor & South Coast	Widen the eastbound approach to provide one left-turn lane, one through lane and two right-turn lanes.
5. Hyland & South Coast/I-405 NB On-Ramp	Add a second westbound through lane.
8. Harbor & Gisler	Add a southbound right-turn lane and a third eastbound left-turn lane.
Source: Stantec, *Tribune Property Traffic Analysis,* March 2017	

5.17 UTILITIES AND SERVICE SYSTEMS

Impact Analysis

Would the Project:

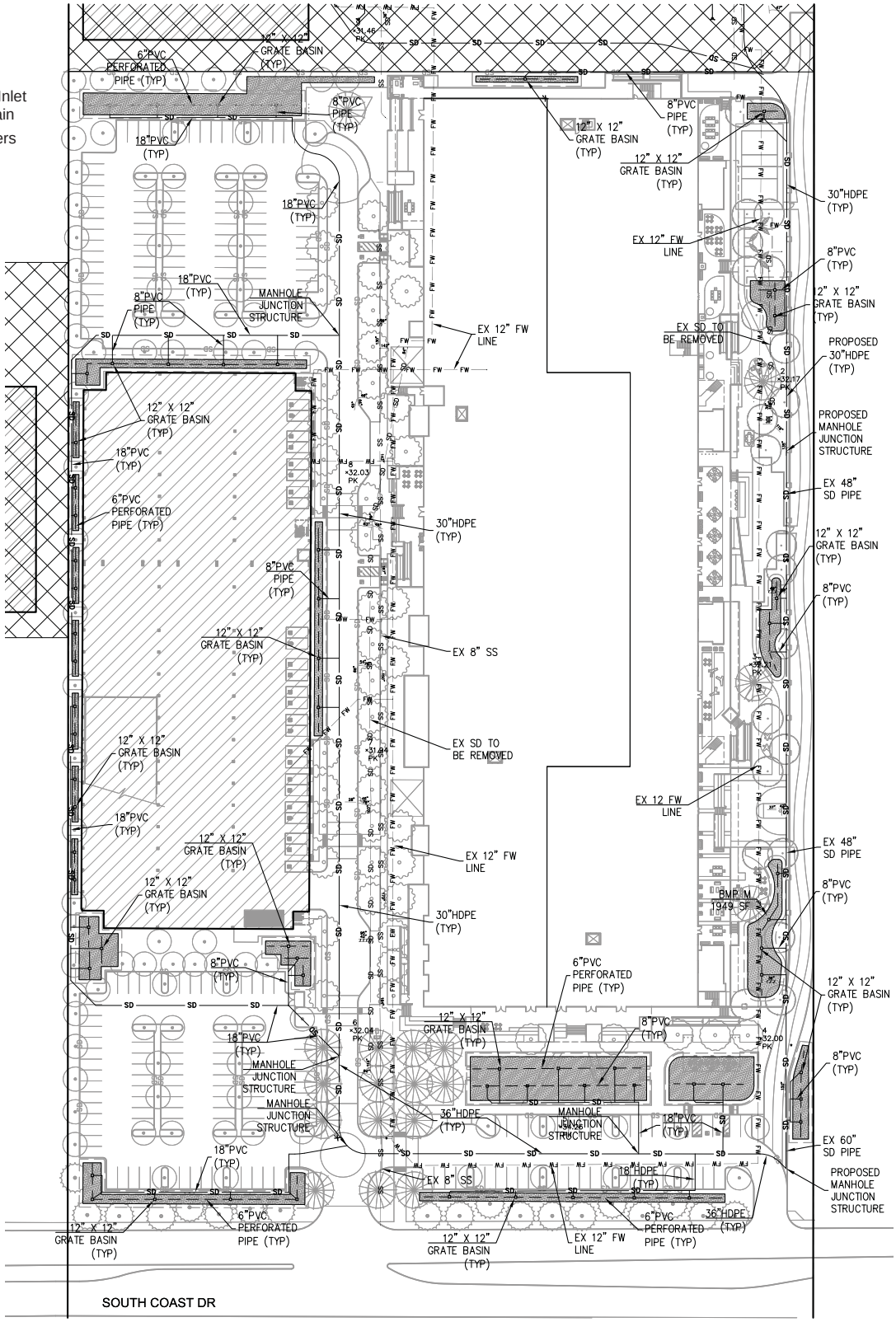
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The Costa Mesa Sanitary District (CMSD), an independent special district, provides sewer service to the City of Costa Mesa, including the project site. As the CMSD owns sewer lines that are tributary to Orange County Sanitation District (OCSD) treatment plants, the CMSD complies with the wastewater discharge requirements (WDR) issued by the State Water Resources Control Board (SWRCB) for OCSD facilities (CMSD 2015). The WDR ensures that adequate levels of treatment are provided to wastewater flows emanating from all land uses in the OCSD and CMSD service areas. The wastewater from the proposed project would not require treatment beyond that provided to existing commercial uses in the City and would not exceed established treatment requirements in the WDR. No impact would occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The project site is currently served by water and wastewater treatment facilities. The CMSD Sewer System Management Plan (SSMP) is designed to serve a population of approximately 116,700 (CMSD 2015). The proposed project is consistent with what was analyzed in the GP FEIR and these projections would be the basis for future planning purposes for Mesa Water District and the CMSD; expansion of existing facilities would be part of these future planning processes. Additionally, the project Applicant would be responsible for all necessary on-site infrastructure improvements and connections as illustrated in Exhibit 5, Conceptual Wet Utilities Plan.

Due to potential sewer flows greater than levels anticipated in the CMSD Sewer Master Plan, the CMSD requested that a sewer capacity study be conducted for the proposed project. The *Sewer Capacity Study for The Press* performed by Tait & Associates and included as Appendix D notes that, with the addition of the proposed project, the projected peak wet weather flow would be above half full; however, this would be within the range of acceptable gravity flow operation and there would be no surcharging (Tait & Associates 2016). Therefore, impacts related to water and wastewater treatment facilities would be less than significant.



Source: TAIT 2016

Conceptual Wet Utilities Plan

Exhibit 5

LA Times Building Reuse Project

BonTerra PSOMAS

(9/7/2016 CJS) R:\Projects\COS_ CMX\3COS010200\Graphics\Ex5_wet_utils_20160907.pdf

D:\Projects\Costa\0102\Graphics\Ex_wet_utils_20160907.ai

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. Storm drain facilities currently serve the project site and are maintained by the County of Orange. Similar to existing conditions, following completion of construction activities, the proposed project site would consist primarily of impervious surfaces and would include limited landscaped areas (which would serve as pervious areas). Therefore, implementation of the proposed project would not substantially alter the amount or rate of runoff and existing storm drain facilities would adequately accommodate drainage from the project site. Additionally, the proposed project is consistent with what was analyzed in the GP FEIR and these projections would be the basis for future planning purposes for County storm drain facilities; expansion of existing facilities would be part of these future planning processes. The project Applicant would be responsible for all necessary on-site infrastructure improvements and connections. Therefore, impacts related to storm drains would be less than significant.

d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. The proposed project site is currently served by Mesa Water District (Mesa). According to the *L.A. Times Building Reuse Project Water Supply Assessment* (WSA), prepared for the proposed project by Psomas (April 2017), and included as Appendix E, the project at buildout would require approximately 126 acre-feet per year (AFY) of potable water. As of 2015, the project site required approximately 15 AFY due to ongoing irrigation activities and ancillary water use for maintenance and upkeep of the existing building; therefore, development of the project would increase demand by approximately 111 AFY. This increase in demand would represent approximately 0.6 percent of the total demand estimated for Mesa in the year 2040.

Mesa's water supply is derived primarily from groundwater produced from the Orange County Groundwater Basin, which accounts for 94 percent of the overall water supply and 100 percent of the potable water supply. This is supplemented by recycled water purchased from the Orange County Water District, which accounts for approximately 6 percent of Mesa's water supply. Additionally, Mesa has imported water connections for back-up supply and maintains emergency supply connections with adjacent water agencies. According to the WSA, Mesa is projected to have sufficient water supplies to meet all normal, single-dry year, and multiple-dry year demands, including the demand related to the proposed project, through year 2040. Therefore, the proposed project could be adequately served through connection to existing infrastructure and based on Mesa's available water supply (Mesa Water District 2016). Anticipated impacts would be less than significant and no mitigation would be required.

e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. As discussed previously in the response to threshold "b", above, the proposed project is consistent with what was analyzed in the GP FEIR and these projections would be the basis for future planning purposes for the CMSD; expansion of existing facilities would be part of these future planning processes. The project Applicant would also be responsible for all necessary on-site infrastructure improvements and connections. Additionally, based on the determination in the sewer capacity study that gravity flow operation would be within an acceptable range with implementation of the project, the CMSD issued a letter, included in

Appendix D, addressing their ability to serve the project's sewer system needs (CMSD 2016). Impacts related to wastewater treatment capacity would be less than significant.

f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Less Than Significant Impact. Solid waste generated from the project site would most likely be disposed of at the Frank R. Bowerman Landfill, which is part of the Orange County landfill system operated by OC Waste & Recycling. The landfill is permitted to receive a maximum of 11,500 tons per day (tpd). The Frank R. Bowerman Landfill is approximately 725 acres with 530 acres permitted for refuse disposal. The landfill opened in 1990 and is scheduled to close in approximately 2053 (OC Waste 2015). According to the GP FEIR Section 4.17, Utilities and Service Systems, the Frank R. Bowerman Landfill has a remaining capacity of more than 55 percent. Because the proposed project is consistent with what was analyzed in the GP FEIR and would, therefore, be assumed for future planning purposes, impacts related to available capacity of the landfill system would be adequately accommodated and would be less than significant.

g) Comply with Federal, State, and local statutes and regulations related to solid waste?

No Impact. State, County, and local agencies with regulatory authority related to solid waste include the California Department of Resources Recycling and Recovery (CalRecycle), OC Waste & Recycling (County of Orange), and the City of Costa Mesa. Regulations specifically applicable to the proposed project include the California Integrated Waste Management Act of 1989 (AB 939) and Section 4.408 of the CALGreen Code. The proposed project would comply with all applicable regulations set forth by AB 939 and Section 4.408 of the CALGreen Code, in addition to all applicable standards within the Costa Mesa Municipal Code and General Plan Policies CON-2.J through CON-2.L; therefore, no conflict with statues and regulations related to solid waste would occur and no mitigation is required.

5.18 MANDATORY FINDINGS OF SIGNIFICANCE

IMPACT ANALYSIS

Does the Project:

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant With Mitigation. The proposed project would be located in an urban, developed area. As noted in Section 5.4, Biological Resources, the project site does not contain any significant or sensitive biological resources; therefore, project development would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plan or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 5.5, Cultural Resources, although no known historical, archaeological or paleontological resources exist on the project site, there is the potential to unearth or disturb an unknown resource during project construction. Therefore, MMs **CULT-1** and **CULT-2** are recommended to reduce potential

impacts related to the elimination of important examples of the major periods of California history or prehistory to less than significant levels.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental efforts of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)?

Less Than Significant Impact with Mitigation. The impact analysis contained in this IS addresses impacts on a project-level and, where appropriate, a cumulative-level. Specifically, the traffic/circulation analysis in Section 5.16 accounted for the proposed Steelwave and Vans projects as part of the analysis. As discussed throughout this document, the project would have the potential to impact the environment; however, specific MMs are listed that if implemented would reduce these impacts, including cumulative impacts, to less than significant levels.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant With Mitigation. As described previously in Section 3.0, Project Description, the proposed project would include the reuse of an existing building and construction of additional buildings consistent with the Commercial Center land use designation. Implementation would not displace or otherwise significantly impact existing residences. All identified impacts, with the exception of impacts related to cultural resources which requires implementation of MMs **CULT-1** and **CULT-2**, would be less than significant; therefore, the project would not cause substantial adverse effects on human beings.

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APPENDIX A

CALEEMOD MODEL DATA

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	295.00	1000sqft	6.77	295,000.00	0
General Office Building	215.00	1000sqft	1.00	215,000.00	0
General Office Building	145.00	1000sqft	0.75	145,000.00	0
Other Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Other Asphalt Surfaces	35.00	1000sqft	0.80	35,000.00	0
Parking Lot	226.00	Space	2.03	120,000.00	0
Unenclosed Parking with Elevator	759.00	Space	6.83	303,600.00	0
Unenclosed Parking with Elevator	860.00	Space	5.25	344,000.00	0
Unenclosed Parking with Elevator	580.00	Space	5.22	232,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	527.1	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2022 SCE CO2 IF

Land Use - Per data needs

Construction Phase - .

Off-road Equipment - 2 forklifts, 1 crane, 2 aerial lifts (to replace scissor lifts)

Off-road Equipment - exc to replace Brokk, 1 loader, 1 forklift

Off-road Equipment - 1 grader, 1 scraper, 1 (plate) compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 exc, 1 loader

Off-road Equipment - 1 crane, 2 forklifts, 2 aerial lifts

Off-road Equipment - 1 exc, 1 TLB

Off-road Equipment - 1 grader, 1 scraper, 1 plate compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 loader, 1 excavator

Off-road Equipment - 2 forlifts, 1 crane, 2 aerial lifts

Off-road Equipment - 1 exc, 1 TLB

Off-road Equipment - 1 grader, 1 scraper, 1 plate compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 exc, 1 loader

Trips and VMT - manual calcs to fix trips

Demolition - manual calcs based off data needs

Grading - balanced on site

Vehicle Trips - traffic report

Area Coating - Painting done on separate- manual calcs

Energy Use - .

Water And Wastewater - manual calcs from data needs

Solid Waste - defaults

Sequestration - planting 356

Construction Off-road Equipment Mitigation -

Energy Mitigation - compliance

Water Mitigation -

Waste Mitigation - compliance

Operational Off-Road Equipment - assumption is that it's tested once week for 1 hour.

Area Mitigation - x

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2213550	0
tblConstructionPhase	NumDays	440.00	261.00
tblConstructionPhase	NumDays	440.00	208.00
tblConstructionPhase	NumDays	440.00	261.00
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tblConstructionPhase	NumDays	30.00	41.00
tblConstructionPhase	NumDays	30.00	41.00
tblConstructionPhase	NumDays	35.00	21.00
tblConstructionPhase	NumDays	35.00	21.00
tblConstructionPhase	NumDays	35.00	22.00
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tblConstructionPhase	PhaseEndDate	7/1/2019	5/31/2019
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tblConstructionPhase	PhaseStartDate	2/27/2021	1/1/2021
tblConstructionPhase	PhaseStartDate	3/1/2017	1/1/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	6/1/2018
tblGrading	AcresOfGrading	67.50	112.50
tblGrading	AcresOfGrading	67.50	112.50
tblGrading	AcresOfGrading	67.50	112.50
tblLandUse	LandUseSquareFeet	90,400.00	120,000.00
tblLandUse	LotAcreage	3.33	0.75
tblLandUse	LotAcreage	4.94	1.00
tblLandUse	LotAcreage	7.74	5.25
tblOffRoadEquipment	HorsePower	97.00	122.00
tblOffRoadEquipment	LoadFactor	0.37	0.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	52.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	527.1
tblProjectCharacteristics	OperationalYear	2014	2022
tblSequestration	NumberOfNewTrees	0.00	356.00
tblTripsAndVMT	VendorTripNumber	261.00	62.00
tblTripsAndVMT	VendorTripNumber	261.00	66.00
tblTripsAndVMT	VendorTripNumber	261.00	92.00
tblTripsAndVMT	WorkerTripNumber	618.00	151.00
tblTripsAndVMT	WorkerTripNumber	618.00	161.00
tblTripsAndVMT	WorkerTripNumber	618.00	224.00
tblVehicleTrips	WD_TR	11.01	11.03
tblWater	IndoorWaterUseRate	90,199,877.11	39,785,000.00
tblWater	OutdoorWaterUseRate	55,283,795.65	3,711,320.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.5269	44.2674	37.9554	0.0688	4.9528	1.9587	6.9115	0.9048	1.8028	2.7075			6,492.6765	1.1136	0.0000	6,516.0611
2018	4.3949	40.6512	43.4852	0.0951	8.6968	1.6944	10.1342	1.7413	1.5597	3.0638			8,750.9451	1.1406	0.0000	8,774.8983
2019	2.1787	16.4869	25.2605	0.0599	3.0789	0.5891	3.6680	0.8278	0.5421	1.3699			5,162.6979	0.4670	0.0000	5,172.5044
2021	3.1081	28.2319	29.7325	0.0667	4.8161	1.1856	6.0017	0.8680	1.0916	1.9596			5,862.1423	1.0928	0.0000	5,885.0915
2022	1.0241	5.1882	6.4956	0.0103	0.0894	0.2830	0.3725	0.0237	0.2604	0.2841			968.2612	0.2931	0.0000	974.4165
Total	**15.2326**	**134.8255**	**142.9291**	**0.3008**	**21.6341**	**5.7109**	**27.0879**	**4.3656**	**5.2566**	**9.3850**			**27,236.7230**	**4.1071**	**0.0000**	**27,322.9718**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.5269	44.2674	37.9554	0.0688	3.4947	1.9587	5.4533	0.7473	1.8028	2.5501			6,492.6765	1.1136	0.0000	6,516.0611
2018	4.3949	40.6512	43.4852	0.0951	5.8940	1.6944	7.3314	1.3170	1.5597	2.6394			8,750.9451	1.1406	0.0000	8,774.8983
2019	2.1787	16.4869	25.2605	0.0599	3.0789	0.5891	3.6680	0.8278	0.5421	1.3699			5,162.6979	0.4670	0.0000	5,172.5044
2021	3.1081	28.2319	29.7325	0.0667	3.3579	1.1856	4.5435	0.7106	1.0916	1.8022			5,862.1423	1.0928	0.0000	5,885.0915
2022	1.0241	5.1882	6.4956	0.0103	0.0894	0.2830	0.3725	0.0237	0.2604	0.2841			968.2612	0.2931	0.0000	974.4165
Total	**15.2326**	**134.8255**	**142.9291**	**0.3008**	**15.9148**	**5.7109**	**21.3687**	**3.6263**	**5.2566**	**8.6457**			**27,236.7230**	**4.1071**	**0.0000**	**27,322.9718**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**26.44**	**0.00**	**21.11**	**16.93**	**0.00**	**7.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Energy	0.1856	1.6872	1.4173	0.0101		0.1282	0.1282		0.1282	0.1282			2,024.6414	0.0388	0.0371	2,036.9631
Mobile	18.1207	37.3617	185.7722	0.6624	49.1941	0.6737	49.8678	13.1280	0.6221	13.7501			49,322.7006	1.7173		49,358.7634
Offroad	0.0413	0.3660	0.4595	8.2000e-004		0.0184	0.0184		0.0184	0.0184			77.8793	3.7000e-003		77.9570
Total	**55.1641**	**39.4179**	**187.9726**	**0.6734**	**49.1941**	**0.8214**	**50.0155**	**13.1280**	**0.7699**	**13.8979**			**51,425.9140**	**1.7616**	**0.0371**	**51,474.4145**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Energy	0.1352	1.2292	1.0325	7.3700e-003		0.0934	0.0934		0.0934	0.0934			1,474.9861	0.0283	0.0270	1,483.9626
Mobile	18.1207	37.3617	185.7722	0.6624	49.1941	0.6737	49.8678	13.1280	0.6221	13.7501			49,322.7006	1.7173		49,358.7634
Offroad	0.0413	0.3660	0.4595	8.2000e-004		0.0184	0.0184		0.0184	0.0184			77.8793	3.7000e-003		77.9570
Total	**55.1137**	**38.9599**	**187.5879**	**0.6706**	**49.1941**	**0.7866**	**49.9807**	**13.1280**	**0.7351**	**13.8631**			**50,876.2587**	**1.7511**	**0.0270**	**50,921.4141**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.17**	**2.09**	**0.45**	**0.53**	**0.00**	**6.47**	**0.11**	**0.00**	**6.91**	**0.38**	**0.00**	**0.00**	**1.22**	**0.81**	**27.16**	**1.23**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	P1 Demo	Demolition	1/1/2017	2/28/2017	5	42	
2	P1 Site Prep	Site Preparation	1/1/2017	1/31/2017	5	22	
3	P1 Grading	Grading	3/1/2017	5/2/2017	5	45	
4	P1 Building Improvements	Building Construction	3/15/2017	12/29/2017	5	208	
5	P1 Paving	Paving	10/1/2017	10/31/2017	5	22	
6	P2 Site Prep	Site Preparation	6/1/2018	6/29/2018	5	21	
7	P2 Building Construction	Building Construction	6/1/2018	5/31/2019	5	261	
8	P2 Demo	Demolition	6/15/2018	8/10/2018	5	41	
9	P2 Grading	Grading	8/11/2018	10/12/2018	5	45	
10	P2 Paving	Paving	12/1/2018	12/31/2018	5	21	
11	P3 Demo	Demolition	1/1/2021	2/26/2021	5	41	
12	P3 Site Prep	Site Preparation	1/1/2021	1/29/2021	5	21	
13	P3 Building Construction	Building Construction	1/1/2021	12/31/2021	5	261	
14	P3 Grading	Grading	2/27/2021	4/30/2021	5	45	
15	P3 Paving	Paving	1/1/2022	1/31/2022	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P1 Demo	Excavators	1	8.00	162	0.38
P1 Demo	Forklifts	1	8.00	89	0.20
P1 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P1 Demo	Tractors/Loaders/Backhoes	1	8.00	122	0.44
P1 Site Prep	Excavators	1	8.00	162	0.38
P1 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P1 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1 Grading	Excavators	0	8.00	162	0.38
P1 Grading	Graders	1	8.00	174	0.41
P1 Grading	Plate Compactors	1	8.00	8	0.43
P1 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P1 Grading	Scrapers	1	8.00	361	0.48
P1 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1 Building Improvements	Aerial Lifts	2	8.00	62	0.31
P1 Building Improvements	Cranes	1	7.00	226	0.29
P1 Building Improvements	Forklifts	2	8.00	89	0.20
P1 Building Improvements	Generator Sets	0	8.00	84	0.74
P1 Building Improvements	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1 Building Improvements	Welders	0	8.00	46	0.45
P1 Paving	Pavers	0	8.00	125	0.42
P1 Paving	Paving Equipment	1	8.00	130	0.36
P1 Paving	Rollers	2	8.00	80	0.38
P2 Site Prep	Excavators	1	8.00	162	0.38
P2 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P2 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37

P2 Building Construction	Aerial Lifts	2	8.00	62	0.31
P2 Building Construction	Cranes	1	7.00	226	0.29
P2 Building Construction	Forklifts	2	8.00	89	0.20
P2 Building Construction	Generator Sets	0	8.00	84	0.74
P2 Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Building Construction	Welders	0	8.00	46	0.45
P2 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Demo	Excavators	1	8.00	162	0.38
P2 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P2 Demo	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Grading	Excavators	0	8.00	162	0.38
P2 Grading	Graders	1	8.00	174	0.41
P2 Grading	Plate Compactors	1	8.00	8	0.43
P2 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P2 Grading	Scrapers	1	8.00	361	0.48
P2 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Paving	Pavers	0	8.00	125	0.42
P2 Paving	Paving Equipment	1	8.00	130	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P3 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P3 Demo	Excavators	1	8.00	162	0.38
P3 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P3 Demo	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Site Prep	Excavators	1	8.00	162	0.38
P3 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P3 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Building Construction	Aerial Lifts	2	8.00	62	0.31
P3 Building Construction	Cranes	1	7.00	226	0.29

P3 Building Construction	Forklifts	2	8.00	89	0.20
P3 Building Construction	Generator Sets	0	8.00	84	0.74
P3 Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P3 Building Construction	Welders	0	8.00	46	0.45
P3 Grading	Excavators	0	8.00	162	0.38
P3 Grading	Graders	1	8.00	174	0.41
P3 Grading	Plate Compactors	1	8.00	8	0.43
P3 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P3 Grading	Scrapers	1	8.00	361	0.48
P3 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P3 Paving	Pavers	0	8.00	125	0.42
P3 Paving	Paving Equipment	1	8.00	130	0.36
P3 Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
P1 Demo	3	8.00	0.00	682.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Improvements	5	161.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction	5	224.00	92.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Demo	2	5.00	0.00	965.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Demo	2	5.00	0.00	93.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction	5	151.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 P1 Demo - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5120	0.0000	3.5120	0.5318	0.0000	0.5318			0.0000			0.0000
Off-Road	0.9080	9.5155	7.6994	0.0114		0.5351	0.5351		0.4923	0.4923			1,165.1293	0.3570		1,172.6261
Total	**0.9080**	**9.5155**	**7.6994**	**0.0114**	**3.5120**	**0.5351**	**4.0471**	**0.5318**	**0.4923**	**1.0240**			**1,165.1293**	**0.3570**		**1,172.6261**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2980	4.2441	3.5813	0.0119	0.2829	0.0617	0.3446	0.0775	0.0568	0.1343			1,181.1074	8.5100e-003		1,181.2860
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0266	0.0358	0.3762	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			82.6376	3.9600e-003		82.7208
Total	**0.3246**	**4.2799**	**3.9575**	**0.0129**	**0.3723**	**0.0623**	**0.4347**	**0.1012**	**0.0573**	**0.1585**			**1,263.7450**	**0.0125**		**1,264.0069**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5804	0.0000	1.5804	0.2393	0.0000	0.2393			0.0000			0.0000
Off-Road	0.9080	9.5155	7.6994	0.0114		0.5351	0.5351		0.4923	0.4923			1,165.1292	0.3570		1,172.6261
Total	**0.9080**	**9.5155**	**7.6994**	**0.0114**	**1.5804**	**0.5351**	**2.1155**	**0.2393**	**0.4923**	**0.7316**			**1,165.1292**	**0.3570**		**1,172.6261**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2980	4.2441	3.5813	0.0119	0.2829	0.0617	0.3446	0.0775	0.0568	0.1343			1,181.1074	8.5100e-003		1,181.2860
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0266	0.0358	0.3762	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			82.6376	3.9600e-003		82.7208
Total	**0.3246**	**4.2799**	**3.9575**	**0.0129**	**0.3723**	**0.0623**	**0.4347**	**0.1012**	**0.0573**	**0.1585**			**1,263.7450**	**0.0125**		**1,264.0069**

3.3 P1 Site Prep - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6790	7.0607	5.8149	8.4000e-003		0.4266	0.4266		0.3924	0.3924			859.5267	0.2634		865.0572
Total	**0.6790**	**7.0607**	**5.8149**	**8.4000e-003**	**0.0000**	**0.4266**	**0.4266**	**0.0000**	**0.3924**	**0.3924**			**859.5267**	**0.2634**		**865.0572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0166	0.0224	0.2351	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			51.6485	2.4800e-003		51.7005
Total	**0.0166**	**0.0224**	**0.2351**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**51.6485**	**2.4800e-003**		**51.7005**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6790	7.0607	5.8149	8.4000e-003		0.4266	0.4266		0.3924	0.3924			859.5267	0.2634		865.0572
Total	**0.6790**	**7.0607**	**5.8149**	**8.4000e-003**	**0.0000**	**0.4266**	**0.4266**	**0.0000**	**0.3924**	**0.3924**			**859.5267**	**0.2634**		**865.0572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0166	0.0224	0.2351	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			51.6485	2.4800e-003		51.7005
Total	**0.0166**	**0.0224**	**0.2351**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**51.6485**	**2.4800e-003**		**51.7005**

3.4 P1 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	2.2918	26.2109	15.2469	0.0216		1.2062	1.2062		1.1105	1.1105			2,195.4335	0.6657		2,209.4130
Total	**2.2918**	**26.2109**	**15.2469**	**0.0216**	**2.6513**	**1.2062**	**3.8574**	**0.2863**	**1.1105**	**1.3967**			**2,195.4335**	**0.6657**		**2,209.4130**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0266	0.0358	0.3762	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			82.6376	3.9600e-003		82.7208
Total	**0.0266**	**0.0358**	**0.3762**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**82.6376**	**3.9600e-003**		**82.7208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1931	0.0000	1.1931	0.1288	0.0000	0.1288			0.0000			0.0000
Off-Road	2.2918	26.2109	15.2469	0.0216		1.2062	1.2062		1.1105	1.1105			2,195.4335	0.6657		2,209.4130
Total	**2.2918**	**26.2109**	**15.2469**	**0.0216**	**1.1931**	**1.2062**	**2.3992**	**0.1288**	**1.1105**	**1.2393**			**2,195.4335**	**0.6657**		**2,209.4130**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0266	0.0358	0.3762	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			82.6376	3.9600e-003		82.7208
Total	**0.0266**	**0.0358**	**0.3762**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**82.6376**	**3.9600e-003**		**82.7208**

3.5 P1 Building Improvements - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0856	11.9867	7.0688	0.0113		0.6580	0.6580		0.6054	0.6054			1,155.4520	0.3540		1,162.8866
Total	**1.0856**	**11.9867**	**7.0688**	**0.0113**		**0.6580**	**0.6580**		**0.6054**	**0.6054**			**1,155.4520**	**0.3540**		**1,162.8866**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.5884	5.3134	7.6918	0.0142	0.4126	0.0816	0.4941	0.1175	0.0750	0.1925			1,396.0711	0.0102		1,396.2843
Worker	0.5346	0.7206	7.5716	0.0207	1.7996	0.0123	1.8119	0.4773	0.0114	0.4886			1,663.0823	0.0797		1,664.7563
Total	**1.1229**	**6.0341**	**15.2634**	**0.0348**	**2.2122**	**0.0939**	**2.3060**	**0.5948**	**0.0864**	**0.6811**			**3,059.1534**	**0.0899**		**3,061.0406**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0856	11.9867	7.0688	0.0113		0.6580	0.6580		0.6054	0.6054			1,155.4520	0.3540		1,162.8866
Total	**1.0856**	**11.9867**	**7.0688**	**0.0113**		**0.6580**	**0.6580**		**0.6054**	**0.6054**			**1,155.4520**	**0.3540**		**1,162.8866**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.5884	5.3134	7.6918	0.0142	0.4126	0.0816	0.4941	0.1175	0.0750	0.1925			1,396.0711	0.0102		1,396.2843
Worker	0.5346	0.7206	7.5716	0.0207	1.7996	0.0123	1.8119	0.4773	0.0114	0.4886			1,663.0823	0.0797		1,664.7563
Total	**1.1229**	**6.0341**	**15.2634**	**0.0348**	**2.2122**	**0.0939**	**2.3060**	**0.5948**	**0.0864**	**0.6811**			**3,059.1534**	**0.0899**		**3,061.0406**

3.6 P1 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9045	9.0189	6.5184	9.2500e-003		0.5811	0.5811		0.5346	0.5346			946.6791	0.2901		952.7703
Paving	0.4740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3785**	**9.0189**	**6.5184**	**9.2500e-003**		**0.5811**	**0.5811**		**0.5346**	**0.5346**			**946.6791**	**0.2901**		**952.7703**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0266	0.0358	0.3762	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			82.6376	3.9600e-003		82.7208
Total	**0.0266**	**0.0358**	**0.3762**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**82.6376**	**3.9600e-003**		**82.7208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9045	9.0189	6.5184	9.2500e-003		0.5811	0.5811		0.5346	0.5346			946.6791	0.2901		952.7703
Paving	0.4740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3785**	**9.0189**	**6.5184**	**9.2500e-003**		**0.5811**	**0.5811**		**0.5346**	**0.5346**			**946.6791**	**0.2901**		**952.7703**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0266	0.0358	0.3762	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			82.6376	3.9600e-003		82.7208
Total	**0.0266**	**0.0358**	**0.3762**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**82.6376**	**3.9600e-003**		**82.7208**

3.7 P2 Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**0.0000**	**0.3403**	**0.3403**	**0.0000**	**0.3130**	**0.3130**			**845.5151**	**0.2632**		**851.0427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0151	0.0204	0.2147	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			49.7113	2.3100e-003		49.7598
Total	**0.0151**	**0.0204**	**0.2147**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**49.7113**	**2.3100e-003**		**49.7598**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**0.0000**	**0.3403**	**0.3403**	**0.0000**	**0.3130**	**0.3130**			**845.5151**	**0.2632**		**851.0427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0151	0.0204	0.2147	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			49.7113	2.3100e-003		49.7598
Total	**0.0151**	**0.0204**	**0.2147**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**49.7113**	**2.3100e-003**		**49.7598**

3.8 P2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9275	10.3871	6.7283	0.0113		0.5427	0.5427		0.4993	0.4993			1,137.1268	0.3540		1,144.5609
Total	**0.9275**	**10.3871**	**6.7283**	**0.0113**		**0.5427**	**0.5427**		**0.4993**	**0.4993**			**1,137.1268**	**0.3540**		**1,144.5609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.7649	6.7957	10.2591	0.0197	0.5750	0.1071	0.6822	0.1638	0.0985	0.2623			1,912.9614	0.0141		1,913.2573
Worker	0.6779	0.9148	9.6174	0.0288	2.5038	0.0169	2.5207	0.6640	0.0157	0.6797			2,227.0653	0.1035		2,229.2389
Total	**1.4427**	**7.7105**	**19.8765**	**0.0485**	**3.0788**	**0.1240**	**3.2028**	**0.8278**	**0.1142**	**0.9420**			**4,140.0267**	**0.1176**		**4,142.4962**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9275	10.3871	6.7283	0.0113		0.5427	0.5427		0.4993	0.4993			1,137.1268	0.3540		1,144.5609
Total	**0.9275**	**10.3871**	**6.7283**	**0.0113**		**0.5427**	**0.5427**		**0.4993**	**0.4993**			**1,137.1268**	**0.3540**		**1,144.5609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.7649	6.7957	10.2591	0.0197	0.5750	0.1071	0.6822	0.1638	0.0985	0.2623			1,912.9614	0.0141		1,913.2573
Worker	0.6779	0.9148	9.6174	0.0288	2.5038	0.0169	2.5207	0.6640	0.0157	0.6797			2,227.0653	0.1035		2,229.2389
Total	**1.4427**	**7.7105**	**19.8765**	**0.0485**	**3.0788**	**0.1240**	**3.2028**	**0.8278**	**0.1142**	**0.9420**			**4,140.0267**	**0.1176**		**4,142.4962**

3.8 P2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8315	9.3390	6.5022	0.0113		0.4722	0.4722		0.4344	0.4344			1,118.8217	0.3540		1,126.2553
Total	**0.8315**	**9.3390**	**6.5022**	**0.0113**		**0.4722**	**0.4722**		**0.4344**	**0.4344**			**1,118.8217**	**0.3540**		**1,126.2553**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.7136	6.3001	9.8035	0.0197	0.5751	0.0999	0.6750	0.1638	0.0919	0.2557			1,886.3850	0.0142		1,886.6830
Worker	0.6336	0.8477	8.9547	0.0289	2.5038	0.0171	2.5208	0.6640	0.0158	0.6798			2,157.4913	0.0988		2,159.5661
Total	**1.3471**	**7.1478**	**18.7582**	**0.0486**	**3.0789**	**0.1169**	**3.1958**	**0.8278**	**0.1077**	**0.9355**			**4,043.8762**	**0.1130**		**4,046.2491**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8315	9.3390	6.5022	0.0113		0.4722	0.4722		0.4344	0.4344			1,118.8217	0.3540		1,126.2553
Total	**0.8315**	**9.3390**	**6.5022**	**0.0113**		**0.4722**	**0.4722**		**0.4344**	**0.4344**			**1,118.8217**	**0.3540**		**1,126.2553**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.7136	6.3001	9.8035	0.0197	0.5751	0.0999	0.6750	0.1638	0.0919	0.2557			1,886.3850	0.0142		1,886.6830
Worker	0.6336	0.8477	8.9547	0.0289	2.5038	0.0171	2.5208	0.6640	0.0158	0.6798			2,157.4913	0.0988		2,159.5661
Total	**1.3471**	**7.1478**	**18.7582**	**0.0486**	**3.0789**	**0.1169**	**3.1958**	**0.8278**	**0.1077**	**0.9355**			**4,043.8762**	**0.1130**		**4,046.2491**

3.9 P2 Demo - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0961	0.0000	5.0961	0.7716	0.0000	0.7716			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**5.0961**	**0.3403**	**5.4363**	**0.7716**	**0.3130**	**1.0846**			**845.5151**	**0.2632**		**851.0427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4169	5.7097	5.0604	0.0172	0.4101	0.0894	0.4995	0.1123	0.0822	0.1945			1,683.3390	0.0125		1,683.6015
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0151	0.0204	0.2147	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			49.7113	2.3100e-003		49.7598
Total	**0.4321**	**5.7301**	**5.2751**	**0.0179**	**0.4660**	**0.0898**	**0.5558**	**0.1271**	**0.0826**	**0.2097**			**1,733.0503**	**0.0148**		**1,733.3613**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2932	0.0000	2.2932	0.3472	0.0000	0.3472			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**2.2932**	**0.3403**	**2.6335**	**0.3472**	**0.3130**	**0.6603**			**845.5151**	**0.2632**		**851.0427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4169	5.7097	5.0604	0.0172	0.4101	0.0894	0.4995	0.1123	0.0822	0.1945			1,683.3390	0.0125		1,683.6015
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0151	0.0204	0.2147	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			49.7113	2.3100e-003		49.7598
Total	**0.4321**	**5.7301**	**5.2751**	**0.0179**	**0.4660**	**0.0898**	**0.5558**	**0.1271**	**0.0826**	**0.2097**			**1,733.0503**	**0.0148**		**1,733.3613**

3.10 P2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	2.0004	22.5210	13.5211	0.0216		1.0271	1.0271		0.9457	0.9457			2,160.1601	0.6653		2,174.1321
Total	**2.0004**	**22.5210**	**13.5211**	**0.0216**	**2.6513**	**1.0271**	**3.6783**	**0.2863**	**0.9457**	**1.2320**			**2,160.1601**	**0.6653**		**2,174.1321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0242	0.0327	0.3435	1.0300e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			79.5381	3.7000e-003		79.6157
Total	**0.0242**	**0.0327**	**0.3435**	**1.0300e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**79.5381**	**3.7000e-003**		**79.6157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1931	0.0000	1.1931	0.1288	0.0000	0.1288			0.0000			0.0000
Off-Road	2.0004	22.5210	13.5211	0.0216		1.0271	1.0271		0.9457	0.9457			2,160.1601	0.6653		2,174.1321
Total	**2.0004**	**22.5210**	**13.5211**	**0.0216**	**1.1931**	**1.0271**	**2.2201**	**0.1288**	**0.9457**	**1.0745**			**2,160.1601**	**0.6653**		**2,174.1321**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0242	0.0327	0.3435	1.0300e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			79.5381	3.7000e-003		79.6157
Total	**0.0242**	**0.0327**	**0.3435**	**1.0300e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**79.5381**	**3.7000e-003**		**79.6157**

3.11 P2 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7500	7.6051	6.3686	9.2600e-003		0.4714	0.4714		0.4337	0.4337			931.6057	0.2900		937.6961
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2465**	**7.6051**	**6.3686**	**9.2600e-003**		**0.4714**	**0.4714**		**0.4337**	**0.4337**			**931.6057**	**0.2900**		**937.6961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0242	0.0327	0.3435	1.0300e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			79.5381	3.7000e-003		79.6157
Total	**0.0242**	**0.0327**	**0.3435**	**1.0300e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**79.5381**	**3.7000e-003**		**79.6157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7500	7.6051	6.3686	9.2600e-003		0.4714	0.4714		0.4337	0.4337			931.6057	0.2900		937.6961
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2465**	**7.6051**	**6.3686**	**9.2600e-003**		**0.4714**	**0.4714**		**0.4337**	**0.4337**			**931.6057**	**0.2900**		**937.6961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0242	0.0327	0.3435	1.0300e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			79.5381	3.7000e-003		79.6157
Total	**0.0242**	**0.0327**	**0.3435**	**1.0300e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**79.5381**	**3.7000e-003**		**79.6157**

3.12 P3 Demo - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4917	0.0000	0.4917	0.0744	0.0000	0.0744			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.4917**	**0.2189**	**0.7105**	**0.0744**	**0.2014**	**0.2758**			**813.7551**	**0.2632**		**819.2820**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0367	0.4043	0.4561	1.6600e-003	0.0395	8.3000e-003	0.0478	0.0108	7.6300e-003	0.0185			156.1753	1.2600e-003		156.2017
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0127	0.0166	0.1768	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			45.4674	2.0200e-003		45.5097
Total	**0.0494**	**0.4209**	**0.6329**	**2.3100e-003**	**0.0954**	**8.6900e-003**	**0.1041**	**0.0257**	**7.9900e-003**	**0.0336**			**201.6427**	**3.2800e-003**		**201.7114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2212	0.0000	0.2212	0.0335	0.0000	0.0335			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.2212**	**0.2189**	**0.4401**	**0.0335**	**0.2014**	**0.2349**			**813.7551**	**0.2632**		**819.2820**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0367	0.4043	0.4561	1.6600e-003	0.0395	8.3000e-003	0.0478	0.0108	7.6300e-003	0.0185			156.1753	1.2600e-003		156.2017
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0127	0.0166	0.1768	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			45.4674	2.0200e-003		45.5097
Total	**0.0494**	**0.4209**	**0.6329**	**2.3100e-003**	**0.0954**	**8.6900e-003**	**0.1041**	**0.0257**	**7.9900e-003**	**0.0336**			**201.6427**	**3.2800e-003**		**201.7114**

3.13 P3 Site Prep - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.0000**	**0.2189**	**0.2189**	**0.0000**	**0.2014**	**0.2014**			**813.7551**	**0.2632**		**819.2820**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0127	0.0166	0.1768	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			45.4674	2.0200e-003		45.5097
Total	**0.0127**	**0.0166**	**0.1768**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**			**45.4674**	**2.0200e-003**		**45.5097**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.0000**	**0.2189**	**0.2189**	**0.0000**	**0.2014**	**0.2014**			**813.7551**	**0.2632**		**819.2820**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0127	0.0166	0.1768	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			45.4674	2.0200e-003		45.5097
Total	**0.0127**	**0.0166**	**0.1768**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**			**45.4674**	**2.0200e-003**		**45.5097**

3.14 P3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6859	7.6917	6.1865	0.0113		0.3585	0.3585		0.3298	0.3298			1,094.4531	0.3540		1,101.8864
Total	**0.6859**	**7.6917**	**6.1865**	**0.0113**		**0.3585**	**0.3585**		**0.3298**	**0.3298**			**1,094.4531**	**0.3540**		**1,101.8864**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.4274	3.1443	6.1668	0.0133	0.3876	0.0558	0.4434	0.1104	0.0514	0.1618			1,241.3389	9.4600e-003		1,241.5374
Worker	0.3843	0.5011	5.3398	0.0195	1.6878	0.0117	1.6995	0.4476	0.0108	0.4584			1,373.1145	0.0609		1,374.3928
Total	**0.8117**	**3.6454**	**11.5066**	**0.0328**	**2.0754**	**0.0675**	**2.1429**	**0.5580**	**0.0622**	**0.6202**			**2,614.4534**	**0.0703**		**2,615.9303**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6859	7.6917	6.1865	0.0113		0.3585	0.3585		0.3298	0.3298			1,094.4531	0.3540		1,101.8864
Total	**0.6859**	**7.6917**	**6.1865**	**0.0113**		**0.3585**	**0.3585**		**0.3298**	**0.3298**			**1,094.4531**	**0.3540**		**1,101.8864**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.4274	3.1443	6.1668	0.0133	0.3876	0.0558	0.4434	0.1104	0.0514	0.1618			1,241.3389	9.4600e-003		1,241.5374
Worker	0.3843	0.5011	5.3398	0.0195	1.6878	0.0117	1.6995	0.4476	0.0108	0.4584			1,373.1145	0.0609		1,374.3928
Total	**0.8117**	**3.6454**	**11.5066**	**0.0328**	**2.0754**	**0.0675**	**2.1429**	**0.5580**	**0.0622**	**0.6202**			**2,614.4534**	**0.0703**		**2,615.9303**

3.15 P3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	1.5902	16.8682	11.5786	0.0216		0.7590	0.7590		0.6991	0.6991			2,080.4881	0.6653		2,094.4594
Total	**1.5902**	**16.8682**	**11.5786**	**0.0216**	**2.6513**	**0.7590**	**3.4103**	**0.2863**	**0.6991**	**0.9854**			**2,080.4881**	**0.6653**		**2,094.4594**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0204	0.0266	0.2829	1.0300e-003	0.0894	6.2000e-004	0.0900	0.0237	5.7000e-004	0.0243			72.7478	3.2300e-003		72.8155
Total	**0.0204**	**0.0266**	**0.2829**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**			**72.7478**	**3.2300e-003**		**72.8155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1931	0.0000	1.1931	0.1288	0.0000	0.1288			0.0000			0.0000
Off-Road	1.5902	16.8682	11.5786	0.0216		0.7590	0.7590		0.6991	0.6991			2,080.4881	0.6653		2,094.4594
Total	**1.5902**	**16.8682**	**11.5786**	**0.0216**	**1.1931**	**0.7590**	**1.9521**	**0.1288**	**0.6991**	**0.8279**			**2,080.4881**	**0.6653**		**2,094.4594**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0204	0.0266	0.2829	1.0300e-003	0.0894	6.2000e-004	0.0900	0.0237	5.7000e-004	0.0243			72.7478	3.2300e-003		72.8155
Total	**0.0204**	**0.0266**	**0.2829**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**			**72.7478**	**3.2300e-003**		**72.8155**

3.16 P3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5081	5.1631	6.2281	9.2600e-003		0.2824	0.2824		0.2598	0.2598			896.6992	0.2900		902.7895
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0047**	**5.1631**	**6.2281**	**9.2600e-003**		**0.2824**	**0.2824**		**0.2598**	**0.2598**			**896.6992**	**0.2900**		**902.7895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0194	0.0250	0.2675	1.0300e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243			71.5620	3.1000e-003		71.6271
Total	**0.0194**	**0.0250**	**0.2675**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**			**71.5620**	**3.1000e-003**		**71.6271**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5081	5.1631	6.2281	9.2600e-003		0.2824	0.2824		0.2598	0.2598			896.6992	0.2900		902.7895
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0047**	**5.1631**	**6.2281**	**9.2600e-003**		**0.2824**	**0.2824**		**0.2598**	**0.2598**			**896.6992**	**0.2900**		**902.7895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0194	0.0250	0.2675	1.0300e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243			71.5620	3.1000e-003		71.6271
Total	**0.0194**	**0.0250**	**0.2675**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**			**71.5620**	**3.1000e-003**		**71.6271**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.1207	37.3617	185.7722	0.6624	49.1941	0.6737	49.8678	13.1280	0.6221	13.7501			49,322.7006	1.7173		49,358.7634
Unmitigated	18.1207	37.3617	185.7722	0.6624	49.1941	0.6737	49.8678	13.1280	0.6221	13.7501			49,322.7006	1.7173		49,358.7634

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,253.85	699.15	289.10	7,942,052	7,942,052
General Office Building	2,371.45	509.55	210.70	5,788,275	5,788,275
General Office Building	1,599.35	343.65	142.10	3,903,720	3,903,720
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	7,224.65	1,552.35	641.90	17,634,047	17,634,047

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.505043	0.056653	0.194832	0.151784	0.042126	0.005989	0.016072	0.016505	0.001461	0.002178	0.004464	0.000494	0.002401

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1352	1.2292	1.0325	7.3700e-003		0.0934	0.0934		0.0934	0.0934			1,474.9861	0.0283	0.0270	1,483.9626
NaturalGas Unmitigated	0.1856	1.6872	1.4173	0.0101		0.1282	0.1282		0.1282	0.1282			2,024.6414	0.0388	0.0371	2,036.9631

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	3809.73	0.0411	0.3735	0.3137	2.2400e-003		0.0284	0.0284		0.0284	0.0284			448.2031	8.5900e-003	8.2200e-003	450.9308
General Office Building	5648.9	0.0609	0.5538	0.4652	3.3200e-003		0.0421	0.0421		0.0421	0.0421			664.5770	0.0127	0.0122	668.6215
General Office Building	7750.82	0.0836	0.7599	0.6383	4.5600e-003		0.0578	0.0578		0.0578	0.0578			911.8614	0.0175	0.0167	917.4108
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.1856**	**1.6872**	**1.4172**	**0.0101**		**0.1282**	**0.1282**		**0.1282**	**0.1282**			**2,024.6414**	**0.0388**	**0.0371**	**2,036.9631**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	2.77545	0.0299	0.2721	0.2286	1.6300e-003		0.0207	0.0207		0.0207	0.0207			326.5236	6.2600e-003	5.9900e-003	328.5108
General Office Building	4.11532	0.0444	0.4035	0.3389	2.4200e-003		0.0307	0.0307		0.0307	0.0307			484.1558	9.2800e-003	8.8800e-003	487.1022
General Office Building	5.64661	0.0609	0.5536	0.4650	3.3200e-003		0.0421	0.0421		0.0421	0.0421			664.3067	0.0127	0.0122	668.3496
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.1352**	**1.2292**	**1.0325**	**7.3700e-003**		**0.0934**	**0.0934**		**0.0934**	**0.0934**			**1,474.9861**	**0.0283**	**0.0271**	**1,483.9626**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Unmitigated	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	34.4441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0301	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Total	**36.8166**	**2.9600e-003**	**0.3237**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**			**0.6927**	**1.8300e-003**		**0.7310**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	34.4441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0301	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Total	**36.8166**	**2.9600e-003**	**0.3237**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**			**0.6927**	**1.8300e-003**		**0.7310**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	52	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Generator Sets	0.0413	0.3660	0.4595	8.2000e-004		0.0184	0.0184		0.0184	0.0184			77.8793	3.7000e-003		77.9570
Total	**0.0413**	**0.3660**	**0.4595**	**8.2000e-004**		**0.0184**	**0.0184**		**0.0184**	**0.0184**			**77.8793**	**3.7000e-003**		**77.9570**

10.0 Vegetation

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	295.00	1000sqft	6.77	295,000.00	0
General Office Building	215.00	1000sqft	1.00	215,000.00	0
General Office Building	145.00	1000sqft	0.75	145,000.00	0
Other Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Other Asphalt Surfaces	35.00	1000sqft	0.80	35,000.00	0
Parking Lot	226.00	Space	2.03	120,000.00	0
Unenclosed Parking with Elevator	759.00	Space	6.83	303,600.00	0
Unenclosed Parking with Elevator	860.00	Space	5.25	344,000.00	0
Unenclosed Parking with Elevator	580.00	Space	5.22	232,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	527.1	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2022 SCE CO2 IF

Land Use - Per data needs

Construction Phase - .

Off-road Equipment - 2 forklifts, 1 crane, 2 aerial lifts (to replace scissor lifts)

Off-road Equipment - exc to replace Brokk, 1 loader, 1 forklift

Off-road Equipment - 1 grader, 1 scraper, 1 (plate) compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 exc, 1 loader

Off-road Equipment - 1 crane, 2 forklifts, 2 aerial lifts

Off-road Equipment - 1 exc, 1 TLB

Off-road Equipment - 1 grader, 1 scraper, 1 plate compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 loader, 1 excavator

Off-road Equipment - 2 forlifts, 1 crane, 2 aerial lifts

Off-road Equipment - 1 exc, 1 TLB

Off-road Equipment - 1 grader, 1 scraper, 1 plate compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 exc, 1 loader

Trips and VMT - manual calcs to fix trips

Demolition - manual calcs based off data needs

Grading - balanced on site

Vehicle Trips - traffic report

Area Coating - Painting done on separate- manual calcs

Energy Use - .

Water And Wastewater - manual calcs from data needs

Solid Waste - defaults

Sequestration - planting 356

Construction Off-road Equipment Mitigation -

Energy Mitigation - compliance

Water Mitigation -

Waste Mitigation - compliance

Operational Off-Road Equipment - assumption is that it's tested once week for 1 hour.

Area Mitigation - x

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2213550	0
tblConstructionPhase	NumDays	440.00	261.00
tblConstructionPhase	NumDays	440.00	208.00
tblConstructionPhase	NumDays	440.00	261.00
tblConstructionPhase	NumDays	30.00	42.00
tblConstructionPhase	NumDays	30.00	41.00
tblConstructionPhase	NumDays	30.00	41.00
tblConstructionPhase	NumDays	35.00	21.00
tblConstructionPhase	NumDays	35.00	21.00
tblConstructionPhase	NumDays	35.00	22.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	PhaseEndDate	1/31/2022	12/31/2021
tblConstructionPhase	PhaseEndDate	2/16/2018	12/29/2017
tblConstructionPhase	PhaseEndDate	7/1/2019	5/31/2019
tblConstructionPhase	PhaseEndDate	2/26/2019	2/26/2021
tblConstructionPhase	PhaseEndDate	7/29/2019	8/10/2018
tblConstructionPhase	PhaseEndDate	3/4/2022	4/30/2021
tblConstructionPhase	PhaseEndDate	4/4/2017	5/2/2017
tblConstructionPhase	PhaseEndDate	11/12/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	5/31/2021	1/31/2022
tblConstructionPhase	PhaseEndDate	1/30/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	3/29/2021	1/29/2021
tblConstructionPhase	PhaseEndDate	3/30/2017	1/31/2017
tblConstructionPhase	PhaseEndDate	11/29/2017	6/29/2018
tblConstructionPhase	PhaseStartDate	1/30/2021	1/1/2021
tblConstructionPhase	PhaseStartDate	5/3/2017	3/15/2017

tblConstructionPhase	PhaseStartDate	6/30/2018	6/1/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	1/1/2021
tblConstructionPhase	PhaseStartDate	6/1/2019	6/15/2018
tblConstructionPhase	PhaseStartDate	1/1/2022	2/27/2021
tblConstructionPhase	PhaseStartDate	2/1/2017	3/1/2017
tblConstructionPhase	PhaseStartDate	10/13/2018	12/1/2018
tblConstructionPhase	PhaseStartDate	5/1/2021	1/1/2022
tblConstructionPhase	PhaseStartDate	12/30/2017	10/1/2017
tblConstructionPhase	PhaseStartDate	2/27/2021	1/1/2021
tblConstructionPhase	PhaseStartDate	3/1/2017	1/1/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	6/1/2018
tblGrading	AcresOfGrading	67.50	112.50
tblGrading	AcresOfGrading	67.50	112.50
tblGrading	AcresOfGrading	67.50	112.50
tblLandUse	LandUseSquareFeet	90,400.00	120,000.00
tblLandUse	LotAcreage	3.33	0.75
tblLandUse	LotAcreage	4.94	1.00
tblLandUse	LotAcreage	7.74	5.25
tblOffRoadEquipment	HorsePower	97.00	122.00
tblOffRoadEquipment	LoadFactor	0.37	0.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	52.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	527.1
tblProjectCharacteristics	OperationalYear	2014	2022
tblSequestration	NumberOfNewTrees	0.00	356.00
tblTripsAndVMT	VendorTripNumber	261.00	62.00
tblTripsAndVMT	VendorTripNumber	261.00	66.00
tblTripsAndVMT	VendorTripNumber	261.00	92.00
tblTripsAndVMT	WorkerTripNumber	618.00	151.00
tblTripsAndVMT	WorkerTripNumber	618.00	161.00
tblTripsAndVMT	WorkerTripNumber	618.00	224.00
tblVehicleTrips	WD_TR	11.01	11.03
tblWater	IndoorWaterUseRate	90,199,877.11	39,785,000.00
tblWater	OutdoorWaterUseRate	55,283,795.65	3,711,320.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.4436	44.0795	37.1247	0.0701	4.9528	1.9579	6.9107	0.9048	1.8020	2.7068			6,602.1905	1.1132	0.0000	6,625.5685
2018	4.2918	40.4159	41.6082	0.0970	8.6968	1.6934	10.1330	1.7413	1.5588	3.0626			8,901.5183	1.1402	0.0000	8,925.4621
2019	2.0876	16.2745	24.0450	0.0617	3.0789	0.5882	3.6671	0.8278	0.5412	1.3690			5,299.8094	0.4665	0.0000	5,309.6064
2021	3.0551	28.1186	28.8598	0.0680	4.8161	1.1852	6.0013	0.8680	1.0912	1.9592			5,954.0055	1.0925	0.0000	5,976.9479
2022	1.0232	5.1859	6.5159	0.0104	0.0894	0.2830	0.3725	0.0237	0.2604	0.2841			972.2849	0.2931	0.0000	978.4403
Total	**14.9012**	**134.0743**	**138.1536**	**0.3071**	**21.6341**	**5.7076**	**27.0844**	**4.3656**	**5.2536**	**9.3818**			**27,729.8086**	**4.1055**	**0.0000**	**27,816.0252**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.4436	44.0795	37.1247	0.0701	3.4947	1.9579	5.4525	0.7473	1.8020	2.5493			6,602.1905	1.1132	0.0000	6,625.5685
2018	4.2918	40.4159	41.6082	0.0970	5.8940	1.6934	7.3301	1.3170	1.5588	2.6383			8,901.5183	1.1402	0.0000	8,925.4621
2019	2.0876	16.2745	24.0450	0.0617	3.0789	0.5882	3.6671	0.8278	0.5412	1.3690			5,299.8094	0.4665	0.0000	5,309.6064
2021	3.0551	28.1186	28.8598	0.0680	3.3579	1.1852	4.5431	0.7106	1.0912	1.8018			5,954.0055	1.0925	0.0000	5,976.9479
2022	1.0232	5.1859	6.5159	0.0104	0.0894	0.2830	0.3725	0.0237	0.2604	0.2841			972.2849	0.2931	0.0000	978.4403
Total	**14.9012**	**134.0743**	**138.1536**	**0.3071**	**15.9148**	**5.7076**	**21.3652**	**3.6263**	**5.2536**	**8.6425**			**27,729.8086**	**4.1055**	**0.0000**	**27,816.0252**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**26.44**	**0.00**	**21.12**	**16.93**	**0.00**	**7.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Energy	0.1856	1.6872	1.4173	0.0101		0.1282	0.1282		0.1282	0.1282			2,024.6414	0.0388	0.0371	2,036.9631
Mobile	17.2220	35.3502	187.3898	0.6936	49.1941	0.6719	49.8660	13.1280	0.6205	13.7485			51,529.0483	1.7159		51,565.0819
Offroad	0.0413	0.3660	0.4595	8.2000e-004		0.0184	0.0184		0.0184	0.0184			77.8793	3.7000e-003		77.9570
Total	**54.2654**	**37.4064**	**189.5902**	**0.7046**	**49.1941**	**0.8196**	**50.0137**	**13.1280**	**0.7683**	**13.8962**			**53,632.2617**	**1.7602**	**0.0371**	**53,680.7330**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Energy	0.1352	1.2292	1.0325	7.3700e-003		0.0934	0.0934		0.0934	0.0934			1,474.9861	0.0283	0.0270	1,483.9626
Mobile	17.2220	35.3502	187.3898	0.6936	49.1941	0.6719	49.8660	13.1280	0.6205	13.7485			51,529.0483	1.7159		51,565.0819
Offroad	0.0413	0.3660	0.4595	8.2000e-004		0.0184	0.0184		0.0184	0.0184			77.8793	3.7000e-003		77.9570
Total	**54.2151**	**36.9484**	**189.2054**	**0.7019**	**49.1941**	**0.7848**	**49.9789**	**13.1280**	**0.7334**	**13.8614**			**53,082.6064**	**1.7497**	**0.0270**	**53,127.7325**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.17**	**2.20**	**0.45**	**0.51**	**0.00**	**6.49**	**0.11**	**0.00**	**6.92**	**0.38**	**0.00**	**0.00**	**1.17**	**0.81**	**27.16**	**1.18**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	P1 Demo	Demolition	1/1/2017	2/28/2017	5	42	
2	P1 Site Prep	Site Preparation	1/1/2017	1/31/2017	5	22	
3	P1 Grading	Grading	3/1/2017	5/2/2017	5	45	
4	P1 Building Improvements	Building Construction	3/15/2017	12/29/2017	5	208	
5	P1 Paving	Paving	10/1/2017	10/31/2017	5	22	
6	P2 Site Prep	Site Preparation	6/1/2018	6/29/2018	5	21	
7	P2 Building Construction	Building Construction	6/1/2018	5/31/2019	5	261	
8	P2 Demo	Demolition	6/15/2018	8/10/2018	5	41	
9	P2 Grading	Grading	8/11/2018	10/12/2018	5	45	
10	P2 Paving	Paving	12/1/2018	12/31/2018	5	21	
11	P3 Demo	Demolition	1/1/2021	2/26/2021	5	41	
12	P3 Site Prep	Site Preparation	1/1/2021	1/29/2021	5	21	
13	P3 Building Construction	Building Construction	1/1/2021	12/31/2021	5	261	
14	P3 Grading	Grading	2/27/2021	4/30/2021	5	45	
15	P3 Paving	Paving	1/1/2022	1/31/2022	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P1 Demo	Excavators	1	8.00	162	0.38
P1 Demo	Forklifts	1	8.00	89	0.20
P1 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P1 Demo	Tractors/Loaders/Backhoes	1	8.00	122	0.44
P1 Site Prep	Excavators	1	8.00	162	0.38
P1 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P1 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1 Grading	Excavators	0	8.00	162	0.38
P1 Grading	Graders	1	8.00	174	0.41
P1 Grading	Plate Compactors	1	8.00	8	0.43
P1 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P1 Grading	Scrapers	1	8.00	361	0.48
P1 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1 Building Improvements	Aerial Lifts	2	8.00	62	0.31
P1 Building Improvements	Cranes	1	7.00	226	0.29
P1 Building Improvements	Forklifts	2	8.00	89	0.20
P1 Building Improvements	Generator Sets	0	8.00	84	0.74
P1 Building Improvements	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1 Building Improvements	Welders	0	8.00	46	0.45
P1 Paving	Pavers	0	8.00	125	0.42
P1 Paving	Paving Equipment	1	8.00	130	0.36
P1 Paving	Rollers	2	8.00	80	0.38
P2 Site Prep	Excavators	1	8.00	162	0.38
P2 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P2 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Building Construction	Aerial Lifts	2	8.00	62	0.31

P2 Building Construction	Cranes	1	7.00	226	0.29
P2 Building Construction	Forklifts	2	8.00	89	0.20
P2 Building Construction	Generator Sets	0	8.00	84	0.74
P2 Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Building Construction	Welders	0	8.00	46	0.45
P2 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Demo	Excavators	1	8.00	162	0.38
P2 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P2 Demo	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Grading	Excavators	0	8.00	162	0.38
P2 Grading	Graders	1	8.00	174	0.41
P2 Grading	Plate Compactors	1	8.00	8	0.43
P2 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P2 Grading	Scrapers	1	8.00	361	0.48
P2 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Paving	Pavers	0	8.00	125	0.42
P2 Paving	Paving Equipment	1	8.00	130	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P3 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P3 Demo	Excavators	1	8.00	162	0.38
P3 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P3 Demo	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Site Prep	Excavators	1	8.00	162	0.38
P3 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P3 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Building Construction	Aerial Lifts	2	8.00	62	0.31
P3 Building Construction	Cranes	1	7.00	226	0.29
P3 Building Construction	Forklifts	2	8.00	89	0.20
P3 Building Construction	Generator Sets	0	8.00	84	0.74

P3 Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P3 Building Construction	Welders	0	8.00	46	0.45
P3 Grading	Excavators	0	8.00	162	0.38
P3 Grading	Graders	1	8.00	174	0.41
P3 Grading	Plate Compactors	1	8.00	8	0.43
P3 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P3 Grading	Scrapers	1	8.00	361	0.48
P3 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P3 Paving	Pavers	0	8.00	125	0.42
P3 Paving	Paving Equipment	1	8.00	130	0.36
P3 Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
P1 Demo	3	8.00	0.00	682.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Improvements	5	161.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction	5	224.00	92.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Demo	2	5.00	0.00	965.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Demo	2	5.00	0.00	93.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction	5	151.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 P1 Demo - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5120	0.0000	3.5120	0.5318	0.0000	0.5318			0.0000			0.0000
Off-Road	0.9080	9.5155	7.6994	0.0114		0.5351	0.5351		0.4923	0.4923			1,165.1293	0.3570		1,172.6261
Total	**0.9080**	**9.5155**	**7.6994**	**0.0114**	**3.5120**	**0.5351**	**4.0471**	**0.5318**	**0.4923**	**1.0240**			**1,165.1293**	**0.3570**		**1,172.6261**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2799	4.1038	3.1011	0.0119	0.2829	0.0616	0.3445	0.0775	0.0567	0.1341			1,183.9320	8.3900e-003		1,184.1082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0253	0.0326	0.4006	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			87.2583	3.9600e-003		87.3415
Total	**0.3052**	**4.1363**	**3.5017**	**0.0130**	**0.3723**	**0.0622**	**0.4345**	**0.1012**	**0.0572**	**0.1584**			**1,271.1903**	**0.0124**		**1,271.4497**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5804	0.0000	1.5804	0.2393	0.0000	0.2393			0.0000			0.0000
Off-Road	0.9080	9.5155	7.6994	0.0114		0.5351	0.5351		0.4923	0.4923			1,165.1292	0.3570		1,172.6261
Total	**0.9080**	**9.5155**	**7.6994**	**0.0114**	**1.5804**	**0.5351**	**2.1155**	**0.2393**	**0.4923**	**0.7316**			**1,165.1292**	**0.3570**		**1,172.6261**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2799	4.1038	3.1011	0.0119	0.2829	0.0616	0.3445	0.0775	0.0567	0.1341			1,183.9320	8.3900e-003		1,184.1082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0253	0.0326	0.4006	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			87.2583	3.9600e-003		87.3415
Total	**0.3052**	**4.1363**	**3.5017**	**0.0130**	**0.3723**	**0.0622**	**0.4345**	**0.1012**	**0.0572**	**0.1584**			**1,271.1903**	**0.0124**		**1,271.4497**

3.3 P1 Site Prep - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6790	7.0607	5.8149	8.4000e-003		0.4266	0.4266		0.3924	0.3924			859.5267	0.2634		865.0572
Total	**0.6790**	**7.0607**	**5.8149**	**8.4000e-003**	**0.0000**	**0.4266**	**0.4266**	**0.0000**	**0.3924**	**0.3924**			**859.5267**	**0.2634**		**865.0572**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0158	0.0204	0.2504	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			54.5365	2.4800e-003		54.5884
Total	**0.0158**	**0.0204**	**0.2504**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**54.5365**	**2.4800e-003**		**54.5884**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6790	7.0607	5.8149	8.4000e-003		0.4266	0.4266		0.3924	0.3924			859.5267	0.2634		865.0572
Total	**0.6790**	**7.0607**	**5.8149**	**8.4000e-003**	**0.0000**	**0.4266**	**0.4266**	**0.0000**	**0.3924**	**0.3924**			**859.5267**	**0.2634**		**865.0572**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0158	0.0204	0.2504	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			54.5365	2.4800e-003		54.5884
Total	**0.0158**	**0.0204**	**0.2504**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**54.5365**	**2.4800e-003**		**54.5884**

3.4 P1 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	2.2918	26.2109	15.2469	0.0216		1.2062	1.2062		1.1105	1.1105			2,195.4335	0.6657		2,209.4130
Total	**2.2918**	**26.2109**	**15.2469**	**0.0216**	**2.6513**	**1.2062**	**3.8574**	**0.2863**	**1.1105**	**1.3967**			**2,195.4335**	**0.6657**		**2,209.4130**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0253	0.0326	0.4006	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			87.2583	3.9600e-003		87.3415
Total	**0.0253**	**0.0326**	**0.4006**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**87.2583**	**3.9600e-003**		**87.3415**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1931	0.0000	1.1931	0.1288	0.0000	0.1288			0.0000			0.0000
Off-Road	2.2918	26.2109	15.2469	0.0216		1.2062	1.2062		1.1105	1.1105			2,195.4335	0.6657		2,209.4130
Total	**2.2918**	**26.2109**	**15.2469**	**0.0216**	**1.1931**	**1.2062**	**2.3992**	**0.1288**	**1.1105**	**1.2393**			**2,195.4335**	**0.6657**		**2,209.4130**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0253	0.0326	0.4006	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			87.2583	3.9600e-003		87.3415
Total	**0.0253**	**0.0326**	**0.4006**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**87.2583**	**3.9600e-003**		**87.3415**

3.5 P1 Building Improvements - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0856	11.9867	7.0688	0.0113		0.6580	0.6580		0.6054	0.6054			1,155.4520	0.3540		1,162.8866
Total	**1.0856**	**11.9867**	**7.0688**	**0.0113**		**0.6580**	**0.6580**		**0.6054**	**0.6054**			**1,155.4520**	**0.3540**		**1,162.8866**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.5324	5.1941	6.3464	0.0143	0.4126	0.0808	0.4933	0.1175	0.0743	0.1918			1,407.9728	9.8400e-003		1,408.1794
Worker	0.5085	0.6553	8.0620	0.0218	1.7996	0.0123	1.8119	0.4773	0.0114	0.4886			1,756.0739	0.0797		1,757.7479
Total	**1.0410**	**5.8494**	**14.4084**	**0.0361**	**2.2122**	**0.0931**	**2.3052**	**0.5948**	**0.0856**	**0.6804**			**3,164.0467**	**0.0896**		**3,165.9274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0856	11.9867	7.0688	0.0113		0.6580	0.6580		0.6054	0.6054			1,155.4520	0.3540		1,162.8866
Total	**1.0856**	**11.9867**	**7.0688**	**0.0113**		**0.6580**	**0.6580**		**0.6054**	**0.6054**			**1,155.4520**	**0.3540**		**1,162.8866**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.5324	5.1941	6.3464	0.0143	0.4126	0.0808	0.4933	0.1175	0.0743	0.1918			1,407.9728	9.8400e-003		1,408.1794
Worker	0.5085	0.6553	8.0620	0.0218	1.7996	0.0123	1.8119	0.4773	0.0114	0.4886			1,756.0739	0.0797		1,757.7479
Total	**1.0410**	**5.8494**	**14.4084**	**0.0361**	**2.2122**	**0.0931**	**2.3052**	**0.5948**	**0.0856**	**0.6804**			**3,164.0467**	**0.0896**		**3,165.9274**

3.6 P1 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9045	9.0189	6.5184	9.2500e-003		0.5811	0.5811		0.5346	0.5346			946.6791	0.2901		952.7703
Paving	0.4740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3785**	**9.0189**	**6.5184**	**9.2500e-003**		**0.5811**	**0.5811**		**0.5346**	**0.5346**			**946.6791**	**0.2901**		**952.7703**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0253	0.0326	0.4006	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			87.2583	3.9600e-003		87.3415
Total	**0.0253**	**0.0326**	**0.4006**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**87.2583**	**3.9600e-003**		**87.3415**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9045	9.0189	6.5184	9.2500e-003		0.5811	0.5811		0.5346	0.5346			946.6791	0.2901		952.7703
Paving	0.4740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3785**	**9.0189**	**6.5184**	**9.2500e-003**		**0.5811**	**0.5811**		**0.5346**	**0.5346**			**946.6791**	**0.2901**		**952.7703**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0253	0.0326	0.4006	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243			87.2583	3.9600e-003		87.3415
Total	**0.0253**	**0.0326**	**0.4006**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**87.2583**	**3.9600e-003**		**87.3415**

3.7 P2 Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**0.0000**	**0.3403**	**0.3403**	**0.0000**	**0.3130**	**0.3130**			**845.5151**	**0.2632**		**851.0427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0144	0.0186	0.2293	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			52.4933	2.3100e-003		52.5418
Total	**0.0144**	**0.0186**	**0.2293**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**52.4933**	**2.3100e-003**		**52.5418**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**0.0000**	**0.3403**	**0.3403**	**0.0000**	**0.3130**	**0.3130**			**845.5151**	**0.2632**		**851.0427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0144	0.0186	0.2293	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			52.4933	2.3100e-003		52.5418
Total	**0.0144**	**0.0186**	**0.2293**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**			**52.4933**	**2.3100e-003**		**52.5418**

3.8 P2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9275	10.3871	6.7283	0.0113		0.5427	0.5427		0.4993	0.4993			1,137.1268	0.3540		1,144.5609
Total	**0.9275**	**10.3871**	**6.7283**	**0.0113**		**0.5427**	**0.5427**		**0.4993**	**0.4993**			**1,137.1268**	**0.3540**		**1,144.5609**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.6950	6.6463	8.3979	0.0199	0.5750	0.1061	0.6811	0.1638	0.0976	0.2613			1,929.3080	0.0136		1,929.5946
Worker	0.6458	0.8319	10.2725	0.0304	2.5038	0.0169	2.5207	0.6640	0.0157	0.6797			2,351.6994	0.1035		2,353.8730
Total	**1.3408**	**7.4782**	**18.6703**	**0.0502**	**3.0788**	**0.1230**	**3.2018**	**0.8278**	**0.1132**	**0.9410**			**4,281.0075**	**0.1171**		**4,283.4676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9275	10.3871	6.7283	0.0113		0.5427	0.5427		0.4993	0.4993			1,137.1268	0.3540		1,144.5609
Total	**0.9275**	**10.3871**	**6.7283**	**0.0113**		**0.5427**	**0.5427**		**0.4993**	**0.4993**			**1,137.1268**	**0.3540**		**1,144.5609**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.6950	6.6463	8.3979	0.0199	0.5750	0.1061	0.6811	0.1638	0.0976	0.2613			1,929.3080	0.0136		1,929.5946
Worker	0.6458	0.8319	10.2725	0.0304	2.5038	0.0169	2.5207	0.6640	0.0157	0.6797			2,351.6994	0.1035		2,353.8730
Total	**1.3408**	**7.4782**	**18.6703**	**0.0502**	**3.0788**	**0.1230**	**3.2018**	**0.8278**	**0.1132**	**0.9410**			**4,281.0075**	**0.1171**		**4,283.4676**

3.8 P2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8315	9.3390	6.5022	0.0113		0.4722	0.4722		0.4344	0.4344			1,118.8217	0.3540		1,126.2553
Total	**0.8315**	**9.3390**	**6.5022**	**0.0113**		**0.4722**	**0.4722**		**0.4344**	**0.4344**			**1,118.8217**	**0.3540**		**1,126.2553**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.6518	6.1644	7.9527	0.0199	0.5751	0.0990	0.6740	0.1638	0.0910	0.2548			1,902.4870	0.0137		1,902.7755
Worker	0.6043	0.7710	9.5901	0.0305	2.5038	0.0171	2.5208	0.6640	0.0158	0.6798			2,278.5008	0.0988		2,280.5757
Total	**1.2561**	**6.9354**	**17.5428**	**0.0504**	**3.0789**	**0.1160**	**3.1949**	**0.8278**	**0.1068**	**0.9346**			**4,180.9877**	**0.1125**		**4,183.3511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8315	9.3390	6.5022	0.0113		0.4722	0.4722		0.4344	0.4344			1,118.8217	0.3540		1,126.2553
Total	**0.8315**	**9.3390**	**6.5022**	**0.0113**		**0.4722**	**0.4722**		**0.4344**	**0.4344**			**1,118.8217**	**0.3540**		**1,126.2553**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.6518	6.1644	7.9527	0.0199	0.5751	0.0990	0.6740	0.1638	0.0910	0.2548			1,902.4870	0.0137		1,902.7755
Worker	0.6043	0.7710	9.5901	0.0305	2.5038	0.0171	2.5208	0.6640	0.0158	0.6798			2,278.5008	0.0988		2,280.5757
Total	**1.2561**	**6.9354**	**17.5428**	**0.0504**	**3.0789**	**0.1160**	**3.1949**	**0.8278**	**0.1068**	**0.9346**			**4,180.9877**	**0.1125**		**4,183.3511**

3.9 P2 Demo - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0961	0.0000	5.0961	0.7716	0.0000	0.7716			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**5.0961**	**0.3403**	**5.4363**	**0.7716**	**0.3130**	**1.0846**			**845.5151**	**0.2632**		**851.0427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3935	5.5212	4.3603	0.0173	0.4101	0.0892	0.4993	0.1123	0.0821	0.1944			1,687.3673	0.0123		1,687.6261
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0144	0.0186	0.2293	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			52.4933	2.3100e-003		52.5418
Total	**0.4079**	**5.5397**	**4.5896**	**0.0180**	**0.4660**	**0.0896**	**0.5556**	**0.1271**	**0.0824**	**0.2095**			**1,739.8606**	**0.0146**		**1,740.1680**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2932	0.0000	2.2932	0.3472	0.0000	0.3472			0.0000			0.0000
Off-Road	0.5626	5.8040	5.6953	8.4000e-003		0.3403	0.3403		0.3130	0.3130			845.5151	0.2632		851.0427
Total	**0.5626**	**5.8040**	**5.6953**	**8.4000e-003**	**2.2932**	**0.3403**	**2.6335**	**0.3472**	**0.3130**	**0.6603**			**845.5151**	**0.2632**		**851.0427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3935	5.5212	4.3603	0.0173	0.4101	0.0892	0.4993	0.1123	0.0821	0.1944			1,687.3673	0.0123		1,687.6261
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0144	0.0186	0.2293	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152			52.4933	2.3100e-003		52.5418
Total	**0.4079**	**5.5397**	**4.5896**	**0.0180**	**0.4660**	**0.0896**	**0.5556**	**0.1271**	**0.0824**	**0.2095**			**1,739.8606**	**0.0146**		**1,740.1680**

3.10 P2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	2.0004	22.5210	13.5211	0.0216		1.0271	1.0271		0.9457	0.9457			2,160.1601	0.6653		2,174.1321
Total	**2.0004**	**22.5210**	**13.5211**	**0.0216**	**2.6513**	**1.0271**	**3.6783**	**0.2863**	**0.9457**	**1.2320**			**2,160.1601**	**0.6653**		**2,174.1321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0231	0.0297	0.3669	1.0900e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			83.9893	3.7000e-003		84.0669
Total	**0.0231**	**0.0297**	**0.3669**	**1.0900e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**83.9893**	**3.7000e-003**		**84.0669**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1931	0.0000	1.1931	0.1288	0.0000	0.1288			0.0000			0.0000
Off-Road	2.0004	22.5210	13.5211	0.0216		1.0271	1.0271		0.9457	0.9457			2,160.1601	0.6653		2,174.1321
Total	**2.0004**	**22.5210**	**13.5211**	**0.0216**	**1.1931**	**1.0271**	**2.2201**	**0.1288**	**0.9457**	**1.0745**			**2,160.1601**	**0.6653**		**2,174.1321**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0231	0.0297	0.3669	1.0900e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			83.9893	3.7000e-003		84.0669
Total	**0.0231**	**0.0297**	**0.3669**	**1.0900e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**83.9893**	**3.7000e-003**		**84.0669**

3.11 P2 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7500	7.6051	6.3686	9.2600e-003		0.4714	0.4714		0.4337	0.4337			931.6057	0.2900		937.6961
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2465**	**7.6051**	**6.3686**	**9.2600e-003**		**0.4714**	**0.4714**		**0.4337**	**0.4337**			**931.6057**	**0.2900**		**937.6961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0231	0.0297	0.3669	1.0900e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			83.9893	3.7000e-003		84.0669
Total	**0.0231**	**0.0297**	**0.3669**	**1.0900e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**83.9893**	**3.7000e-003**		**84.0669**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7500	7.6051	6.3686	9.2600e-003		0.4714	0.4714		0.4337	0.4337			931.6057	0.2900		937.6961
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2465**	**7.6051**	**6.3686**	**9.2600e-003**		**0.4714**	**0.4714**		**0.4337**	**0.4337**			**931.6057**	**0.2900**		**937.6961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0231	0.0297	0.3669	1.0900e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243			83.9893	3.7000e-003		84.0669
Total	**0.0231**	**0.0297**	**0.3669**	**1.0900e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**			**83.9893**	**3.7000e-003**		**84.0669**

3.12 P3 Demo - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4917	0.0000	0.4917	0.0744	0.0000	0.0744			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.4917**	**0.2189**	**0.7105**	**0.0744**	**0.2014**	**0.2758**			**813.7551**	**0.2632**		**819.2820**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0351	0.3911	0.3882	1.6600e-003	0.0395	8.2800e-003	0.0478	0.0108	7.6200e-003	0.0184			156.5488	1.2400e-003		156.5748
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0121	0.0151	0.1899	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			48.0216	2.0200e-003		48.0640
Total	**0.0473**	**0.4062**	**0.5781**	**2.3400e-003**	**0.0954**	**8.6700e-003**	**0.1041**	**0.0257**	**7.9800e-003**	**0.0336**			**204.5704**	**3.2600e-003**		**204.6388**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2212	0.0000	0.2212	0.0335	0.0000	0.0335			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.2212**	**0.2189**	**0.4401**	**0.0335**	**0.2014**	**0.2349**			**813.7551**	**0.2632**		**819.2820**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0351	0.3911	0.3882	1.6600e-003	0.0395	8.2800e-003	0.0478	0.0108	7.6200e-003	0.0184			156.5488	1.2400e-003		156.5748
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0121	0.0151	0.1899	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			48.0216	2.0200e-003		48.0640
Total	**0.0473**	**0.4062**	**0.5781**	**2.3400e-003**	**0.0954**	**8.6700e-003**	**0.1041**	**0.0257**	**7.9800e-003**	**0.0336**			**204.5704**	**3.2600e-003**		**204.6388**

3.13 P3 Site Prep - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.0000**	**0.2189**	**0.2189**	**0.0000**	**0.2014**	**0.2014**			**813.7551**	**0.2632**		**819.2820**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0121	0.0151	0.1899	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			48.0216	2.0200e-003		48.0640
Total	**0.0121**	**0.0151**	**0.1899**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**			**48.0216**	**2.0200e-003**		**48.0640**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4223	4.1037	5.6149	8.4100e-003		0.2189	0.2189		0.2014	0.2014			813.7551	0.2632		819.2820
Total	**0.4223**	**4.1037**	**5.6149**	**8.4100e-003**	**0.0000**	**0.2189**	**0.2189**	**0.0000**	**0.2014**	**0.2014**			**813.7551**	**0.2632**		**819.2820**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0121	0.0151	0.1899	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152			48.0216	2.0200e-003		48.0640
Total	**0.0121**	**0.0151**	**0.1899**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**			**48.0216**	**2.0200e-003**		**48.0640**

3.14 P3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6859	7.6917	6.1865	0.0113		0.3585	0.3585		0.3298	0.3298			1,094.4531	0.3540		1,101.8864
Total	**0.6859**	**7.6917**	**6.1865**	**0.0113**		**0.3585**	**0.3585**		**0.3298**	**0.3298**			**1,094.4531**	**0.3540**		**1,101.8864**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.3929	3.0785	4.9392	0.0134	0.3876	0.0554	0.4430	0.1104	0.0510	0.1614			1,251.9767	9.1300e-003		1,252.1683
Worker	0.3667	0.4560	5.7363	0.0206	1.6878	0.0117	1.6995	0.4476	0.0108	0.4584			1,450.2531	0.0609		1,451.5315
Total	**0.7596**	**3.5345**	**10.6755**	**0.0340**	**2.0754**	**0.0670**	**2.1425**	**0.5580**	**0.0618**	**0.6198**			**2,702.2298**	**0.0700**		**2,703.6998**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6859	7.6917	6.1865	0.0113		0.3585	0.3585		0.3298	0.3298			1,094.4531	0.3540		1,101.8864
Total	**0.6859**	**7.6917**	**6.1865**	**0.0113**		**0.3585**	**0.3585**		**0.3298**	**0.3298**			**1,094.4531**	**0.3540**		**1,101.8864**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.3929	3.0785	4.9392	0.0134	0.3876	0.0554	0.4430	0.1104	0.0510	0.1614			1,251.9767	9.1300e-003		1,252.1683
Worker	0.3667	0.4560	5.7363	0.0206	1.6878	0.0117	1.6995	0.4476	0.0108	0.4584			1,450.2531	0.0609		1,451.5315
Total	**0.7596**	**3.5345**	**10.6755**	**0.0340**	**2.0754**	**0.0670**	**2.1425**	**0.5580**	**0.0618**	**0.6198**			**2,702.2298**	**0.0700**		**2,703.6998**

3.15 P3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	1.5902	16.8682	11.5786	0.0216		0.7590	0.7590		0.6991	0.6991			2,080.4881	0.6653		2,094.4594
Total	**1.5902**	**16.8682**	**11.5786**	**0.0216**	**2.6513**	**0.7590**	**3.4103**	**0.2863**	**0.6991**	**0.9854**			**2,080.4881**	**0.6653**		**2,094.4594**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0194	0.0242	0.3039	1.0900e-003	0.0894	6.2000e-004	0.0900	0.0237	5.7000e-004	0.0243			76.8346	3.2300e-003		76.9023
Total	**0.0194**	**0.0242**	**0.3039**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**			**76.8346**	**3.2300e-003**		**76.9023**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1931	0.0000	1.1931	0.1288	0.0000	0.1288			0.0000			0.0000
Off-Road	1.5902	16.8682	11.5786	0.0216		0.7590	0.7590		0.6991	0.6991			2,080.4881	0.6653		2,094.4594
Total	**1.5902**	**16.8682**	**11.5786**	**0.0216**	**1.1931**	**0.7590**	**1.9521**	**0.1288**	**0.6991**	**0.8279**			**2,080.4881**	**0.6653**		**2,094.4594**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0194	0.0242	0.3039	1.0900e-003	0.0894	6.2000e-004	0.0900	0.0237	5.7000e-004	0.0243			76.8346	3.2300e-003		76.9023
Total	**0.0194**	**0.0242**	**0.3039**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**			**76.8346**	**3.2300e-003**		**76.9023**

3.16 P3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5081	5.1631	6.2281	9.2600e-003		0.2824	0.2824		0.2598	0.2598			896.6992	0.2900		902.7895
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0047**	**5.1631**	**6.2281**	**9.2600e-003**		**0.2824**	**0.2824**		**0.2598**	**0.2598**			**896.6992**	**0.2900**		**902.7895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0185	0.0228	0.2878	1.0900e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243			75.5857	3.1000e-003		75.6508
Total	**0.0185**	**0.0228**	**0.2878**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**			**75.5857**	**3.1000e-003**		**75.6508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5081	5.1631	6.2281	9.2600e-003		0.2824	0.2824		0.2598	0.2598			896.6992	0.2900		902.7895
Paving	0.4966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0047**	**5.1631**	**6.2281**	**9.2600e-003**		**0.2824**	**0.2824**		**0.2598**	**0.2598**			**896.6992**	**0.2900**		**902.7895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0185	0.0228	0.2878	1.0900e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243			75.5857	3.1000e-003		75.6508
Total	**0.0185**	**0.0228**	**0.2878**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**			**75.5857**	**3.1000e-003**		**75.6508**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.2220	35.3502	187.3898	0.6936	49.1941	0.6719	49.8660	13.1280	0.6205	13.7485			51,529.0483	1.7159		51,565.0819
Unmitigated	17.2220	35.3502	187.3898	0.6936	49.1941	0.6719	49.8660	13.1280	0.6205	13.7485			51,529.0483	1.7159		51,565.0819

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,253.85	699.15	289.10	7,942,052	7,942,052
General Office Building	2,371.45	509.55	210.70	5,788,275	5,788,275
General Office Building	1,599.35	343.65	142.10	3,903,720	3,903,720
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	7,224.65	1,552.35	641.90	17,634,047	17,634,047

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.505043	0.056653	0.194832	0.151784	0.042126	0.005989	0.016072	0.016505	0.001461	0.002178	0.004464	0.000494	0.002401

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1352	1.2292	1.0325	7.3700e-003		0.0934	0.0934		0.0934	0.0934			1,474.9861	0.0283	0.0270	1,483.9626
NaturalGas Unmitigated	0.1856	1.6872	1.4173	0.0101		0.1282	0.1282		0.1282	0.1282			2,024.6414	0.0388	0.0371	2,036.9631

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	3809.73	0.0411	0.3735	0.3137	2.2400e-003		0.0284	0.0284		0.0284	0.0284			448.2031	8.5900e-003	8.2200e-003	450.9308
General Office Building	5648.9	0.0609	0.5538	0.4652	3.3200e-003		0.0421	0.0421		0.0421	0.0421			664.5770	0.0127	0.0122	668.6215
General Office Building	7750.82	0.0836	0.7599	0.6383	4.5600e-003		0.0578	0.0578		0.0578	0.0578			911.8614	0.0175	0.0167	917.4108
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.1856**	**1.6872**	**1.4172**	**0.0101**		**0.1282**	**0.1282**		**0.1282**	**0.1282**			**2,024.6414**	**0.0388**	**0.0371**	**2,036.9631**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	2.77545	0.0299	0.2721	0.2286	1.6300e-003		0.0207	0.0207		0.0207	0.0207			326.5236	6.2600e-003	5.9900e-003	328.5108
General Office Building	4.11532	0.0444	0.4035	0.3389	2.4200e-003		0.0307	0.0307		0.0307	0.0307			484.1558	9.2800e-003	8.8800e-003	487.1022
General Office Building	5.64661	0.0609	0.5536	0.4650	3.3200e-003		0.0421	0.0421		0.0421	0.0421			664.3067	0.0127	0.0122	668.3496
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.1352**	**1.2292**	**1.0325**	**7.3700e-003**		**0.0934**	**0.0934**		**0.0934**	**0.0934**			**1,474.9861**	**0.0283**	**0.0271**	**1,483.9626**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Unmitigated	36.8166	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	34.4441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0301	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Total	**36.8166**	**2.9600e-003**	**0.3237**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**			**0.6927**	**1.8300e-003**		**0.7310**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	34.4441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0301	2.9600e-003	0.3237	2.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003			0.6927	1.8300e-003		0.7310
Total	**36.8166**	**2.9600e-003**	**0.3237**	**2.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**			**0.6927**	**1.8300e-003**		**0.7310**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	52	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Generator Sets	0.0413	0.3660	0.4595	8.2000e-004		0.0184	0.0184		0.0184	0.0184			77.8793	3.7000e-003		77.9570
Total	**0.0413**	**0.3660**	**0.4595**	**8.2000e-004**		**0.0184**	**0.0184**		**0.0184**	**0.0184**			**77.8793**	**3.7000e-003**		**77.9570**

10.0 Vegetation

Arch coating

E=EFxFxA	where			
E=	Emissions lb			
EF=	Emission factor	lb/sq ft		
EF=	Cvoc/454x3.785/180	or VOC x	4.63167E-05	
F=	Factor for interior and exterior apportionment of surface area			
	interior=	0.75		
	exterior=	0.25		
A=	Painting surface area, sq, ft			
	residential, A=		2.7	times plan bldg area
	nonresidential, A=		2	times plan bldg area

Calculate area to be painted

Phase 1

	bldg square feet (sf)						
Non res							
Phase 1	295000						
							User data entry
				0.75	0.25		
total	295000	2	590000	442500	~~147500~~		
percent exterior paint	80				118000		Results to CalEEMod

If CalEEMod is not used
or for manual calc below
The results above are FxA

VOC - g/l		interior	exterior		
	residential	50	100		
	non-residential	100	100		Check applicable AQMD/APQD rules
Emissions - pounds					
	residential	0	0		
	non-residential	2050	547		
	Total			2596	
Building period	3/15-12/29/2017				
Painting period	10/1-12/29/2017				
	total painting days			66	
Emission rate - pounds/day				39.3	Add to CalEEMod results if Arch coating contributes to maximum day

					P1 Bldg	1.09	
						1.12	
					P1 Paving	1.38	
						0.03	
					Total	**43.0**	

Phase 2

	bldg square feet (sf)						
Non res							
Phase 2	215000						
							User data entry
				0.75	0.25		
total	215000	2	430000	322500	~~107500~~		
percent exterior paint	100				107500		Results to CalEEMod

If CalEEMod is not used
or for manual calc below
The results above are FxA

VOC - g/l		interior	exterior		
	residential	50	100		
	non-residential	100	100		Check applicable AQMD/APQD rules
Emissions - pounds					
	residential	0	0		
	non-residential	1494	498		
	Total			1992	
Building period	6/1/2018-5/31/2019				
Painting period	3/1-5/31/2019				
	total painting days			66	
Emission rate - pounds/day				30.2	Add to CalEEMod results if Arch coating contributes to maximum day
			P2 Bldg	0.83	
				1.35	
			Total	**32.4**	

Phase 3

	bldg square feet (sf)						
Non res							
Phase 3	145000						
							User data entry
				0.75	0.25		
total	145000	2	290000	217500	~~72500~~		
percent exterior paint	100				72500		Results to CalEEMod

If CalEEMod is not used
or for manual calc below
The results above are FxA

VOC - g/l		interior	exterior		
	residential	50	100		
	non-residential	100	100		Check applicable AQMD/APQD rules
Emissions - pounds					
	residential	0	0		
	non-residential	1007	336		
	Total			1343	
Building period	1/1-12/31/2021				
Painting period	10/15-12/31/2021				
	total painting days			55	
Emission rate - pounds/day				24.4	Add to CalEEMod results if Arch coating contributes to maximum day
			P3 Bldg	0.69	
				0.81	
			Total	**25.9**	

MND		sf		Adjust		sf
1.98E-05	lb/sf/day	295	General Office Building	2.04E-05	lb/sf/day	295
3,165,000	sf	215	General Office Building	655,000	sf	215
62.67	lb/day	145	General Office Building	13.36	lb/day	145
365	days/year	50	Other Asphalt Surfaces	365	days/year	
22873	lb/yr	35	Other Asphalt Surfaces	4877	lb/yr	
2000	lb/ton	226	Parking Lot	2000	lb/ton	
11.44	ton/yr	759	Unenclosed Parking with Elevator	2.44	ton/yr	
		860	Unenclosed Parking with Elevator			
		580	Unenclosed Parking with Elevator			
		3,165				655
	delta			49.31	lb/day	
				9.00	ton/yr	

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	295.00	1000sqft	6.77	295,000.00	0
General Office Building	215.00	1000sqft	1.00	215,000.00	0
General Office Building	145.00	1000sqft	0.75	145,000.00	0
Other Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Other Asphalt Surfaces	35.00	1000sqft	0.80	35,000.00	0
Parking Lot	226.00	Space	2.03	120,000.00	0
Unenclosed Parking with Elevator	759.00	Space	6.83	303,600.00	0
Unenclosed Parking with Elevator	860.00	Space	5.25	344,000.00	0
Unenclosed Parking with Elevator	580.00	Space	5.22	232,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	527.1	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2022 SCE CO2 IF

Land Use - Per data needs

Construction Phase - .

Off-road Equipment - 2 forklifts, 1 crane, 2 aerial lifts (to replace scissor lifts)

Off-road Equipment - exc to replace Brokk, 1 loader, 1 forklift

Off-road Equipment - 1 grader, 1 scraper, 1 (plate) compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 exc, 1 loader

Off-road Equipment - 1 crane, 2 forklifts, 2 aerial lifts

Off-road Equipment - 1 exc, 1 TLB

Off-road Equipment - 1 grader, 1 scraper, 1 plate compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 loader, 1 excavator

Off-road Equipment - 2 forlifts, 1 crane, 2 aerial lifts

Off-road Equipment - 1 exc, 1 TLB

Off-road Equipment - 1 grader, 1 scraper, 1 plate compactor

Off-road Equipment - 1 paving equip, 2 rollers

Off-road Equipment - 1 exc, 1 loader

Trips and VMT - manual calcs to fix trips

Demolition - manual calcs based off data needs

Grading - balanced on site

Vehicle Trips - traffic report

Area Coating - Painting done on separate- manual calcs

Energy Use - .

Water And Wastewater - manual calcs from data needs

Solid Waste - defaults

Sequestration - planting 356

Construction Off-road Equipment Mitigation -

Energy Mitigation - compliance

Water Mitigation -

Waste Mitigation - compliance

Operational Off-Road Equipment - assumption is that it's tested once week for 1 hour.

Area Mitigation - x

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	2213550	0
tblConstructionPhase	NumDays	440.00	261.00
tblConstructionPhase	NumDays	440.00	208.00
tblConstructionPhase	NumDays	440.00	261.00
tblConstructionPhase	NumDays	30.00	42.00
tblConstructionPhase	NumDays	30.00	41.00
tblConstructionPhase	NumDays	30.00	41.00
tblConstructionPhase	NumDays	35.00	21.00
tblConstructionPhase	NumDays	35.00	21.00
tblConstructionPhase	NumDays	35.00	22.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	PhaseEndDate	1/31/2022	12/31/2021
tblConstructionPhase	PhaseEndDate	2/16/2018	12/29/2017
tblConstructionPhase	PhaseEndDate	7/1/2019	5/31/2019
tblConstructionPhase	PhaseEndDate	2/26/2019	2/26/2021
tblConstructionPhase	PhaseEndDate	7/29/2019	8/10/2018
tblConstructionPhase	PhaseEndDate	3/4/2022	4/30/2021
tblConstructionPhase	PhaseEndDate	4/4/2017	5/2/2017
tblConstructionPhase	PhaseEndDate	11/12/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	5/31/2021	1/31/2022
tblConstructionPhase	PhaseEndDate	1/30/2018	10/31/2017
tblConstructionPhase	PhaseEndDate	3/29/2021	1/29/2021
tblConstructionPhase	PhaseEndDate	3/30/2017	1/31/2017
tblConstructionPhase	PhaseEndDate	11/29/2017	6/29/2018
tblConstructionPhase	PhaseStartDate	1/30/2021	1/1/2021

tblConstructionPhase	PhaseStartDate	5/3/2017	3/15/2017
tblConstructionPhase	PhaseStartDate	6/30/2018	6/1/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	1/1/2021
tblConstructionPhase	PhaseStartDate	6/1/2019	6/15/2018
tblConstructionPhase	PhaseStartDate	1/1/2022	2/27/2021
tblConstructionPhase	PhaseStartDate	2/1/2017	3/1/2017
tblConstructionPhase	PhaseStartDate	10/13/2018	12/1/2018
tblConstructionPhase	PhaseStartDate	5/1/2021	1/1/2022
tblConstructionPhase	PhaseStartDate	12/30/2017	10/1/2017
tblConstructionPhase	PhaseStartDate	2/27/2021	1/1/2021
tblConstructionPhase	PhaseStartDate	3/1/2017	1/1/2017
tblConstructionPhase	PhaseStartDate	11/1/2017	6/1/2018
tblGrading	AcresOfGrading	67.50	112.50
tblGrading	AcresOfGrading	67.50	112.50
tblGrading	AcresOfGrading	67.50	112.50
tblLandUse	LandUseSquareFeet	90,400.00	120,000.00
tblLandUse	LotAcreage	3.33	0.75
tblLandUse	LotAcreage	4.94	1.00
tblLandUse	LotAcreage	7.74	5.25
tblOffRoadEquipment	HorsePower	97.00	122.00
tblOffRoadEquipment	LoadFactor	0.37	0.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	52.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	527.1
tblProjectCharacteristics	OperationalYear	2014	2022
tblSequestration	NumberOfNewTrees	0.00	356.00
tblTripsAndVMT	VendorTripNumber	261.00	62.00
tblTripsAndVMT	VendorTripNumber	261.00	66.00
tblTripsAndVMT	VendorTripNumber	261.00	92.00
tblTripsAndVMT	WorkerTripNumber	618.00	151.00
tblTripsAndVMT	WorkerTripNumber	618.00	161.00
tblTripsAndVMT	WorkerTripNumber	618.00	224.00
tblVehicleTrips	WD_TR	11.01	11.03
tblWater	IndoorWaterUseRate	90,199,877.11	39,785,000.00
tblWater	OutdoorWaterUseRate	55,283,795.65	3,711,320.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3248	2.9464	3.0425	6.0700e-003	0.3707	0.1289	0.4997	0.0815	0.1186	0.2002			512.8890	0.0682	0.0000	514.3203
2018	0.2599	2.2748	2.6700	5.8300e-003	0.4069	0.0911	0.4980	0.0877	0.0838	0.1715			478.7389	0.0567	0.0000	479.9285
2019	0.1152	0.9065	1.3629	3.3000e-003	0.1649	0.0321	0.1970	0.0444	0.0295	0.0739			257.3267	0.0231	0.0000	257.8113
2021	0.2408	2.0055	2.7403	6.6200e-003	0.3404	0.0796	0.4200	0.0808	0.0733	0.1541			513.3463	0.0713	0.0000	514.8444
2022	0.0107	0.0545	0.0683	1.1000e-004	9.2000e-004	2.9700e-003	3.8900e-003	2.4000e-004	2.7300e-003	2.9800e-003			9.2335	2.7900e-003	0.0000	9.2921
Total	**0.9514**	**8.1876**	**9.8840**	**0.0219**	**1.2838**	**0.3347**	**1.6185**	**0.2947**	**0.3080**	**0.6027**			**1,771.5344**	**0.2220**	**0.0000**	**1,776.1965**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3248	2.9464	3.0425	6.0700e-003	0.2974	0.1289	0.4263	0.0718	0.1186	0.1905			512.8888	0.0682	0.0000	514.3201
2018	0.2599	2.2748	2.6700	5.8300e-003	0.3167	0.0911	0.4078	0.0754	0.0838	0.1593			478.7387	0.0567	0.0000	479.9283
2019	0.1152	0.9065	1.3629	3.3000e-003	0.1649	0.0321	0.1970	0.0444	0.0295	0.0739			257.3266	0.0231	0.0000	257.8112
2021	0.2408	2.0055	2.7403	6.6200e-003	0.3020	0.0796	0.3816	0.0765	0.0733	0.1497			513.3461	0.0713	0.0000	514.8442
2022	0.0107	0.0545	0.0683	1.1000e-004	9.2000e-004	2.9700e-003	3.8900e-003	2.4000e-004	2.7300e-003	2.9800e-003			9.2334	2.7900e-003	0.0000	9.2921
Total	**0.9514**	**8.1876**	**9.8840**	**0.0219**	**1.0818**	**0.3347**	**1.4165**	**0.2684**	**0.3080**	**0.5764**			**1,771.5337**	**0.2220**	**0.0000**	**1,776.1958**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**15.73**	**0.00**	**12.48**	**8.93**	**0.00**	**4.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.7173	3.7000e-004	0.0405	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004			0.0786	2.1000e-004	0.0000	0.0829
Energy	0.0339	0.3079	0.2587	1.8500e-003		0.0234	0.0234		0.0234	0.0234			3,399.6410	0.1750	0.0410	3,416.0352
Mobile	2.3601	5.2522	25.7633	0.0924	6.6639	0.0926	6.7566	1.7809	0.0856	1.8665			6,238.8026	0.2145	0.0000	6,243.3065
Offroad	1.0700e-003	9.5200e-003	0.0120	2.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004			1.8369	9.0000e-005	0.0000	1.8388
Waste						0.0000	0.0000		0.0000	0.0000			95.8077	5.6621	0.0000	214.7112
Water						0.0000	0.0000		0.0000	0.0000			146.3378	1.3038	0.0321	183.6777
Total	**9.1123**	**5.5700**	**26.0743**	**0.0943**	**6.6639**	**0.1167**	**6.7806**	**1.7809**	**0.1096**	**1.8905**			**9,882.5045**	**7.3556**	**0.0732**	**10,059.6522**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.7173	3.7000e-004	0.0405	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004			0.0786	2.1000e-004	0.0000	0.0829
Energy	0.0247	0.2243	0.1884	1.3500e-003		0.0171	0.0171		0.0171	0.0171			3,039.9275	0.1585	0.0363	3,054.5092
Mobile	2.3601	5.2522	25.7633	0.0924	6.6639	0.0926	6.7566	1.7809	0.0856	1.8665			6,238.8026	0.2145	0.0000	6,243.3065
Offroad	1.0700e-003	9.5200e-003	0.0120	2.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004			1.8369	9.0000e-005	0.0000	1.8388
Waste						0.0000	0.0000		0.0000	0.0000			47.9038	2.8310	0.0000	107.3556
Water						0.0000	0.0000		0.0000	0.0000			118.4405	1.0429	0.0257	148.3028
Total	**9.1032**	**5.4864**	**26.0041**	**0.0938**	**6.6639**	**0.1103**	**6.7743**	**1.7809**	**0.1032**	**1.8841**			**9,446.9899**	**4.2472**	**0.0620**	**9,555.3956**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.11**	**1.67**	**0.32**	**0.55**	**0.00**	**5.85**	**0.10**	**0.00**	**6.23**	**0.36**	**0.00**	**0.00**	**4.43**	**42.26**	**15.28**	**5.03**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	252.0480
Total	**252.0480**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	P1 Demo	Demolition	1/1/2017	2/28/2017	5	42	
2	P1 Site Prep	Site Preparation	1/1/2017	1/31/2017	5	22	
3	P1 Grading	Grading	3/1/2017	5/2/2017	5	45	
4	P1 Building Improvements	Building Construction	3/15/2017	12/29/2017	5	208	
5	P1 Paving	Paving	10/1/2017	10/31/2017	5	22	
6	P2 Site Prep	Site Preparation	6/1/2018	6/29/2018	5	21	
7	P2 Building Construction	Building Construction	6/1/2018	5/31/2019	5	261	
8	P2 Demo	Demolition	6/15/2018	8/10/2018	5	41	
9	P2 Grading	Grading	8/11/2018	10/12/2018	5	45	
10	P2 Paving	Paving	12/1/2018	12/31/2018	5	21	
11	P3 Demo	Demolition	1/1/2021	2/26/2021	5	41	
12	P3 Site Prep	Site Preparation	1/1/2021	1/29/2021	5	21	
13	P3 Building Construction	Building Construction	1/1/2021	12/31/2021	5	261	
14	P3 Grading	Grading	2/27/2021	4/30/2021	5	45	
15	P3 Paving	Paving	1/1/2022	1/31/2022	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P1 Demo	Excavators	1	8.00	162	0.38
P1 Demo	Forklifts	1	8.00	89	0.20
P1 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P1 Demo	Tractors/Loaders/Backhoes	1	8.00	122	0.44
P1 Site Prep	Excavators	1	8.00	162	0.38
P1 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P1 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1 Grading	Excavators	0	8.00	162	0.38
P1 Grading	Graders	1	8.00	174	0.41
P1 Grading	Plate Compactors	1	8.00	8	0.43
P1 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P1 Grading	Scrapers	1	8.00	361	0.48
P1 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P1 Building Improvements	Aerial Lifts	2	8.00	62	0.31
P1 Building Improvements	Cranes	1	7.00	226	0.29
P1 Building Improvements	Forklifts	2	8.00	89	0.20
P1 Building Improvements	Generator Sets	0	8.00	84	0.74
P1 Building Improvements	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P1 Building Improvements	Welders	0	8.00	46	0.45
P1 Paving	Pavers	0	8.00	125	0.42
P1 Paving	Paving Equipment	1	8.00	130	0.36
P1 Paving	Rollers	2	8.00	80	0.38
P2 Site Prep	Excavators	1	8.00	162	0.38
P2 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P2 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37

P2 Building Construction	Aerial Lifts	2	8.00	62	0.31
P2 Building Construction	Cranes	1	7.00	226	0.29
P2 Building Construction	Forklifts	2	8.00	89	0.20
P2 Building Construction	Generator Sets	0	8.00	84	0.74
P2 Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P2 Building Construction	Welders	0	8.00	46	0.45
P2 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P2 Demo	Excavators	1	8.00	162	0.38
P2 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P2 Demo	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Grading	Excavators	0	8.00	162	0.38
P2 Grading	Graders	1	8.00	174	0.41
P2 Grading	Plate Compactors	1	8.00	8	0.43
P2 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P2 Grading	Scrapers	1	8.00	361	0.48
P2 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P2 Paving	Pavers	0	8.00	125	0.42
P2 Paving	Paving Equipment	1	8.00	130	0.36
P2 Paving	Rollers	2	8.00	80	0.38
P3 Demo	Concrete/Industrial Saws	0	8.00	81	0.73
P3 Demo	Excavators	1	8.00	162	0.38
P3 Demo	Rubber Tired Dozers	0	8.00	255	0.40
P3 Demo	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Site Prep	Excavators	1	8.00	162	0.38
P3 Site Prep	Rubber Tired Dozers	0	8.00	255	0.40
P3 Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Building Construction	Aerial Lifts	2	8.00	62	0.31
P3 Building Construction	Cranes	1	7.00	226	0.29

P3 Building Construction	Forklifts	2	8.00	89	0.20
P3 Building Construction	Generator Sets	0	8.00	84	0.74
P3 Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
P3 Building Construction	Welders	0	8.00	46	0.45
P3 Grading	Excavators	0	8.00	162	0.38
P3 Grading	Graders	1	8.00	174	0.41
P3 Grading	Plate Compactors	1	8.00	8	0.43
P3 Grading	Rubber Tired Dozers	0	8.00	255	0.40
P3 Grading	Scrapers	1	8.00	361	0.48
P3 Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
P3 Paving	Pavers	0	8.00	125	0.42
P3 Paving	Paving Equipment	1	8.00	130	0.36
P3 Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
P1 Demo	3	8.00	0.00	682.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Improvements	5	161.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P1 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction	5	224.00	92.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Demo	2	5.00	0.00	965.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P2 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Demo	2	5.00	0.00	93.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Site Prep	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction	5	151.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
P3 Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 P1 Demo - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0738	0.0000	0.0738	0.0112	0.0000	0.0112			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1998	0.1617	2.4000e-004		0.0112	0.0112		0.0103	0.0103			22.1967	6.8000e-003	0.0000	22.3396
Total	**0.0191**	**0.1998**	**0.1617**	**2.4000e-004**	**0.0738**	**0.0112**	**0.0850**	**0.0112**	**0.0103**	**0.0215**			**22.1967**	**6.8000e-003**	**0.0000**	**22.3396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.1300e-003	0.0907	0.0729	2.5000e-004	5.8500e-003	1.2900e-003	7.1400e-003	1.6000e-003	1.1900e-003	2.7900e-003			22.5323	1.6000e-004	0.0000	22.5357
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.7000e-004	8.0700e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004			1.5981	8.0000e-005	0.0000	1.5996
Total	**6.6500e-003**	**0.0915**	**0.0810**	**2.7000e-004**	**7.6900e-003**	**1.3000e-003**	**9.0000e-003**	**2.0900e-003**	**1.2000e-003**	**3.2900e-003**			**24.1304**	**2.4000e-004**	**0.0000**	**24.1354**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0332	0.0000	0.0332	5.0200e-003	0.0000	5.0200e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.1998	0.1617	2.4000e-004		0.0112	0.0112		0.0103	0.0103			22.1967	6.8000e-003	0.0000	22.3395
Total	**0.0191**	**0.1998**	**0.1617**	**2.4000e-004**	**0.0332**	**0.0112**	**0.0444**	**5.0200e-003**	**0.0103**	**0.0154**			**22.1967**	**6.8000e-003**	**0.0000**	**22.3395**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.1300e-003	0.0907	0.0729	2.5000e-004	5.8500e-003	1.2900e-003	7.1400e-003	1.6000e-003	1.1900e-003	2.7900e-003			22.5323	1.6000e-004	0.0000	22.5357
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.7000e-004	8.0700e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8600e-003	4.9000e-004	1.0000e-005	5.0000e-004			1.5981	8.0000e-005	0.0000	1.5996
Total	**6.6500e-003**	**0.0915**	**0.0810**	**2.7000e-004**	**7.6900e-003**	**1.3000e-003**	**9.0000e-003**	**2.0900e-003**	**1.2000e-003**	**3.2900e-003**			**24.1304**	**2.4000e-004**	**0.0000**	**24.1354**

3.3 P1 Site Prep - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	7.4700e-003	0.0777	0.0640	9.0000e-005		4.6900e-003	4.6900e-003		4.3200e-003	4.3200e-003			8.5772	2.6300e-003	0.0000	8.6324
Total	**7.4700e-003**	**0.0777**	**0.0640**	**9.0000e-005**	**0.0000**	**4.6900e-003**	**4.6900e-003**	**0.0000**	**4.3200e-003**	**4.3200e-003**			**8.5772**	**2.6300e-003**	**0.0000**	**8.6324**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004			0.5232	2.0000e-005	0.0000	0.5237
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**			**0.5232**	**2.0000e-005**	**0.0000**	**0.5237**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	7.4700e-003	0.0777	0.0640	9.0000e-005		4.6900e-003	4.6900e-003		4.3200e-003	4.3200e-003			8.5772	2.6300e-003	0.0000	8.6324
Total	**7.4700e-003**	**0.0777**	**0.0640**	**9.0000e-005**	**0.0000**	**4.6900e-003**	**4.6900e-003**	**0.0000**	**4.3200e-003**	**4.3200e-003**			**8.5772**	**2.6300e-003**	**0.0000**	**8.6324**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004			0.5232	2.0000e-005	0.0000	0.5237
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**			**0.5232**	**2.0000e-005**	**0.0000**	**0.5237**

3.4 P1 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0597	0.0000	0.0597	6.4400e-003	0.0000	6.4400e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0516	0.5898	0.3431	4.9000e-004		0.0271	0.0271		0.0250	0.0250			44.8124	0.0136	0.0000	45.0978
Total	**0.0516**	**0.5898**	**0.3431**	**4.9000e-004**	**0.0597**	**0.0271**	**0.0868**	**6.4400e-003**	**0.0250**	**0.0314**			**44.8124**	**0.0136**	**0.0000**	**45.0978**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.3000e-004	8.6500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004			1.7122	8.0000e-005	0.0000	1.7139
Total	**5.6000e-004**	**8.3000e-004**	**8.6500e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**			**1.7122**	**8.0000e-005**	**0.0000**	**1.7139**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0268	0.0000	0.0268	2.9000e-003	0.0000	2.9000e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0516	0.5897	0.3431	4.9000e-004		0.0271	0.0271		0.0250	0.0250			44.8124	0.0136	0.0000	45.0977
Total	**0.0516**	**0.5897**	**0.3431**	**4.9000e-004**	**0.0268**	**0.0271**	**0.0540**	**2.9000e-003**	**0.0250**	**0.0279**			**44.8124**	**0.0136**	**0.0000**	**45.0977**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.3000e-004	8.6500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004			1.7122	8.0000e-005	0.0000	1.7139
Total	**5.6000e-004**	**8.3000e-004**	**8.6500e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**			**1.7122**	**8.0000e-005**	**0.0000**	**1.7139**

3.5 P1 Building Improvements - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1129	1.2466	0.7352	1.1700e-003		0.0684	0.0684		0.0630	0.0630			109.0137	0.0334	0.0000	109.7151
Total	**0.1129**	**1.2466**	**0.7352**	**1.1700e-003**		**0.0684**	**0.0684**		**0.0630**	**0.0630**			**109.0137**	**0.0334**	**0.0000**	**109.7151**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0590	0.5634	0.7662	1.4800e-003	0.0423	8.4400e-003	0.0507	0.0121	7.7600e-003	0.0198			132.3667	9.4000e-004	0.0000	132.3865
Worker	0.0520	0.0770	0.8043	2.1800e-003	0.1838	1.2800e-003	0.1851	0.0488	1.1800e-003	0.0500			159.2725	7.5200e-003	0.0000	159.4304
Total	**0.1110**	**0.6404**	**1.5704**	**3.6600e-003**	**0.2261**	**9.7200e-003**	**0.2358**	**0.0609**	**8.9400e-003**	**0.0698**			**291.6391**	**8.4600e-003**	**0.0000**	**291.8168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1129	1.2466	0.7352	1.1700e-003		0.0684	0.0684		0.0630	0.0630			109.0136	0.0334	0.0000	109.7150
Total	**0.1129**	**1.2466**	**0.7352**	**1.1700e-003**		**0.0684**	**0.0684**		**0.0630**	**0.0630**			**109.0136**	**0.0334**	**0.0000**	**109.7150**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0590	0.5634	0.7662	1.4800e-003	0.0423	8.4400e-003	0.0507	0.0121	7.7600e-003	0.0198			132.3667	9.4000e-004	0.0000	132.3865
Worker	0.0520	0.0770	0.8043	2.1800e-003	0.1838	1.2800e-003	0.1851	0.0488	1.1800e-003	0.0500			159.2725	7.5200e-003	0.0000	159.4304
Total	**0.1110**	**0.6404**	**1.5704**	**3.6600e-003**	**0.2261**	**9.7200e-003**	**0.2358**	**0.0609**	**8.9400e-003**	**0.0698**			**291.6391**	**8.4600e-003**	**0.0000**	**291.8168**

3.6 P1 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9500e-003	0.0992	0.0717	1.0000e-004		6.3900e-003	6.3900e-003		5.8800e-003	5.8800e-003			9.4469	2.8900e-003	0.0000	9.5077
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0152**	**0.0992**	**0.0717**	**1.0000e-004**		**6.3900e-003**	**6.3900e-003**		**5.8800e-003**	**5.8800e-003**			**9.4469**	**2.8900e-003**	**0.0000**	**9.5077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	4.0000e-004	4.2300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004			0.8371	4.0000e-005	0.0000	0.8379
Total	**2.7000e-004**	**4.0000e-004**	**4.2300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**			**0.8371**	**4.0000e-005**	**0.0000**	**0.8379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9500e-003	0.0992	0.0717	1.0000e-004		6.3900e-003	6.3900e-003		5.8800e-003	5.8800e-003			9.4469	2.8900e-003	0.0000	9.5077
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0152**	**0.0992**	**0.0717**	**1.0000e-004**		**6.3900e-003**	**6.3900e-003**		**5.8800e-003**	**5.8800e-003**			**9.4469**	**2.8900e-003**	**0.0000**	**9.5077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	4.0000e-004	4.2300e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004			0.8371	4.0000e-005	0.0000	0.8379
Total	**2.7000e-004**	**4.0000e-004**	**4.2300e-003**	**1.0000e-005**	**9.7000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.6000e-004**			**0.8371**	**4.0000e-005**	**0.0000**	**0.8379**

3.7 P2 Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	5.9100e-003	0.0609	0.0598	9.0000e-005		3.5700e-003	3.5700e-003		3.2900e-003	3.2900e-003			8.0539	2.5100e-003	0.0000	8.1066
Total	**5.9100e-003**	**0.0609**	**0.0598**	**9.0000e-005**	**0.0000**	**3.5700e-003**	**3.5700e-003**	**0.0000**	**3.2900e-003**	**3.2900e-003**			**8.0539**	**2.5100e-003**	**0.0000**	**8.1066**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.3000e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004			0.4807	2.0000e-005	0.0000	0.4811
Total	**1.5000e-004**	**2.2000e-004**	**2.3000e-003**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**5.8000e-004**	**1.5000e-004**	**0.0000**	**1.6000e-004**			**0.4807**	**2.0000e-005**	**0.0000**	**0.4811**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	5.9100e-003	0.0609	0.0598	9.0000e-005		3.5700e-003	3.5700e-003		3.2900e-003	3.2900e-003			8.0539	2.5100e-003	0.0000	8.1066
Total	**5.9100e-003**	**0.0609**	**0.0598**	**9.0000e-005**	**0.0000**	**3.5700e-003**	**3.5700e-003**	**0.0000**	**3.2900e-003**	**3.2900e-003**			**8.0539**	**2.5100e-003**	**0.0000**	**8.1066**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.3000e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004			0.4807	2.0000e-005	0.0000	0.4811
Total	**1.5000e-004**	**2.2000e-004**	**2.3000e-003**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**5.8000e-004**	**1.5000e-004**	**0.0000**	**1.6000e-004**			**0.4807**	**2.0000e-005**	**0.0000**	**0.4811**

3.8 P2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0705	0.7894	0.5114	8.6000e-004		0.0413	0.0413		0.0380	0.0380			78.4004	0.0244	0.0000	78.9129
Total	**0.0705**	**0.7894**	**0.5114**	**8.6000e-004**		**0.0413**	**0.0413**		**0.0380**	**0.0380**			**78.4004**	**0.0244**	**0.0000**	**78.9129**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0562	0.5266	0.7451	1.5000e-003	0.0431	8.0900e-003	0.0511	0.0123	7.4400e-003	0.0197			132.5448	9.5000e-004	0.0000	132.5648
Worker	0.0481	0.0714	0.7471	2.2200e-003	0.1869	1.2800e-003	0.1882	0.0496	1.1900e-003	0.0508			155.8640	7.1400e-003	0.0000	156.0138
Total	**0.1043**	**0.5980**	**1.4922**	**3.7200e-003**	**0.2299**	**9.3700e-003**	**0.2393**	**0.0619**	**8.6300e-003**	**0.0706**			**288.4088**	**8.0900e-003**	**0.0000**	**288.5786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0705	0.7894	0.5114	8.6000e-004		0.0413	0.0413		0.0380	0.0380			78.4003	0.0244	0.0000	78.9128
Total	**0.0705**	**0.7894**	**0.5114**	**8.6000e-004**		**0.0413**	**0.0413**		**0.0380**	**0.0380**			**78.4003**	**0.0244**	**0.0000**	**78.9128**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0562	0.5266	0.7451	1.5000e-003	0.0431	8.0900e-003	0.0511	0.0123	7.4400e-003	0.0197			132.5448	9.5000e-004	0.0000	132.5648
Worker	0.0481	0.0714	0.7471	2.2200e-003	0.1869	1.2800e-003	0.1882	0.0496	1.1900e-003	0.0508			155.8640	7.1400e-003	0.0000	156.0138
Total	**0.1043**	**0.5980**	**1.4922**	**3.7200e-003**	**0.2299**	**9.3700e-003**	**0.2393**	**0.0619**	**8.6300e-003**	**0.0706**			**288.4088**	**8.0900e-003**	**0.0000**	**288.5786**

3.8 P2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0453	0.5090	0.3544	6.2000e-004		0.0257	0.0257		0.0237	0.0237			55.3163	0.0175	0.0000	55.6838
Total	**0.0453**	**0.5090**	**0.3544**	**6.2000e-004**		**0.0257**	**0.0257**		**0.0237**	**0.0237**			**55.3163**	**0.0175**	**0.0000**	**55.6838**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0376	0.3501	0.5094	1.0800e-003	0.0309	5.4100e-003	0.0363	8.8100e-003	4.9800e-003	0.0138			93.7276	6.9000e-004	0.0000	93.7420
Worker	0.0322	0.0475	0.4991	1.6000e-003	0.1340	9.3000e-004	0.1350	0.0356	8.6000e-004	0.0365			108.2828	4.8900e-003	0.0000	108.3854
Total	**0.0699**	**0.3975**	**1.0086**	**2.6800e-003**	**0.1649**	**6.3400e-003**	**0.1712**	**0.0444**	**5.8400e-003**	**0.0502**			**202.0104**	**5.5800e-003**	**0.0000**	**202.1274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0453	0.5090	0.3544	6.2000e-004		0.0257	0.0257		0.0237	0.0237			55.3162	0.0175	0.0000	55.6838
Total	**0.0453**	**0.5090**	**0.3544**	**6.2000e-004**		**0.0257**	**0.0257**		**0.0237**	**0.0237**			**55.3162**	**0.0175**	**0.0000**	**55.6838**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0376	0.3501	0.5094	1.0800e-003	0.0309	5.4100e-003	0.0363	8.8100e-003	4.9800e-003	0.0138			93.7276	6.9000e-004	0.0000	93.7420
Worker	0.0322	0.0475	0.4991	1.6000e-003	0.1340	9.3000e-004	0.1350	0.0356	8.6000e-004	0.0365			108.2828	4.8900e-003	0.0000	108.3854
Total	**0.0699**	**0.3975**	**1.0086**	**2.6800e-003**	**0.1649**	**6.3400e-003**	**0.1712**	**0.0444**	**5.8400e-003**	**0.0502**			**202.0104**	**5.5800e-003**	**0.0000**	**202.1274**

3.9 P2 Demo - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1045	0.0000	0.1045	0.0158	0.0000	0.0158			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1190	0.1168	1.7000e-004		6.9800e-003	6.9800e-003		6.4200e-003	6.4200e-003			15.7243	4.9000e-003	0.0000	15.8271
Total	**0.0115**	**0.1190**	**0.1168**	**1.7000e-004**	**0.1045**	**6.9800e-003**	**0.1115**	**0.0158**	**6.4200e-003**	**0.0222**			**15.7243**	**4.9000e-003**	**0.0000**	**15.8271**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3800e-003	0.1191	0.1004	3.5000e-004	8.2800e-003	1.8300e-003	0.0101	2.2700e-003	1.6800e-003	3.9500e-003			31.3490	2.3000e-004	0.0000	31.3538
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.3000e-004	4.5000e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004			0.9384	4.0000e-005	0.0000	0.9394
Total	**8.6700e-003**	**0.1195**	**0.1049**	**3.6000e-004**	**9.4100e-003**	**1.8400e-003**	**0.0112**	**2.5700e-003**	**1.6900e-003**	**4.2600e-003**			**32.2874**	**2.7000e-004**	**0.0000**	**32.2932**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0470	0.0000	0.0470	7.1200e-003	0.0000	7.1200e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1190	0.1168	1.7000e-004		6.9800e-003	6.9800e-003		6.4200e-003	6.4200e-003			15.7243	4.9000e-003	0.0000	15.8271
Total	**0.0115**	**0.1190**	**0.1168**	**1.7000e-004**	**0.0470**	**6.9800e-003**	**0.0540**	**7.1200e-003**	**6.4200e-003**	**0.0135**			**15.7243**	**4.9000e-003**	**0.0000**	**15.8271**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3800e-003	0.1191	0.1004	3.5000e-004	8.2800e-003	1.8300e-003	0.0101	2.2700e-003	1.6800e-003	3.9500e-003			31.3490	2.3000e-004	0.0000	31.3538
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.3000e-004	4.5000e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004			0.9384	4.0000e-005	0.0000	0.9394
Total	**8.6700e-003**	**0.1195**	**0.1049**	**3.6000e-004**	**9.4100e-003**	**1.8400e-003**	**0.0112**	**2.5700e-003**	**1.6900e-003**	**4.2600e-003**			**32.2874**	**2.7000e-004**	**0.0000**	**32.2932**

3.10 P2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0597	0.0000	0.0597	6.4400e-003	0.0000	6.4400e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0450	0.5067	0.3042	4.9000e-004		0.0231	0.0231		0.0213	0.0213			44.0925	0.0136	0.0000	44.3776
Total	**0.0450**	**0.5067**	**0.3042**	**4.9000e-004**	**0.0597**	**0.0231**	**0.0828**	**6.4400e-003**	**0.0213**	**0.0277**			**44.0925**	**0.0136**	**0.0000**	**44.3776**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	7.5000e-004	7.9000e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004			1.6480	8.0000e-005	0.0000	1.6496
Total	**5.1000e-004**	**7.5000e-004**	**7.9000e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**			**1.6480**	**8.0000e-005**	**0.0000**	**1.6496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0268	0.0000	0.0268	2.9000e-003	0.0000	2.9000e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0450	0.5067	0.3042	4.9000e-004		0.0231	0.0231		0.0213	0.0213			44.0924	0.0136	0.0000	44.3776
Total	**0.0450**	**0.5067**	**0.3042**	**4.9000e-004**	**0.0268**	**0.0231**	**0.0500**	**2.9000e-003**	**0.0213**	**0.0242**			**44.0924**	**0.0136**	**0.0000**	**44.3776**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	7.5000e-004	7.9000e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004			1.6480	8.0000e-005	0.0000	1.6496
Total	**5.1000e-004**	**7.5000e-004**	**7.9000e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**			**1.6480**	**8.0000e-005**	**0.0000**	**1.6496**

3.11 P2 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8700e-003	0.0799	0.0669	1.0000e-004		4.9500e-003	4.9500e-003		4.5500e-003	4.5500e-003			8.8740	2.7600e-003	0.0000	8.9320
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0131**	**0.0799**	**0.0669**	**1.0000e-004**		**4.9500e-003**	**4.9500e-003**		**4.5500e-003**	**4.5500e-003**			**8.8740**	**2.7600e-003**	**0.0000**	**8.9320**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.5000e-004	3.6900e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004			0.7691	4.0000e-005	0.0000	0.7698
Total	**2.4000e-004**	**3.5000e-004**	**3.6900e-003**	**1.0000e-005**	**9.2000e-004**	**1.0000e-005**	**9.3000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**			**0.7691**	**4.0000e-005**	**0.0000**	**0.7698**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8700e-003	0.0799	0.0669	1.0000e-004		4.9500e-003	4.9500e-003		4.5500e-003	4.5500e-003			8.8739	2.7600e-003	0.0000	8.9320
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0131**	**0.0799**	**0.0669**	**1.0000e-004**		**4.9500e-003**	**4.9500e-003**		**4.5500e-003**	**4.5500e-003**			**8.8739**	**2.7600e-003**	**0.0000**	**8.9320**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.5000e-004	3.6900e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004			0.7691	4.0000e-005	0.0000	0.7698
Total	**2.4000e-004**	**3.5000e-004**	**3.6900e-003**	**1.0000e-005**	**9.2000e-004**	**1.0000e-005**	**9.3000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**			**0.7691**	**4.0000e-005**	**0.0000**	**0.7698**

3.12 P3 Demo - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0101	0.0000	0.0101	1.5300e-003	0.0000	1.5300e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	8.6600e-003	0.0841	0.1151	1.7000e-004		4.4900e-003	4.4900e-003		4.1300e-003	4.1300e-003			15.1336	4.8900e-003	0.0000	15.2364
Total	**8.6600e-003**	**0.0841**	**0.1151**	**1.7000e-004**	**0.0101**	**4.4900e-003**	**0.0146**	**1.5300e-003**	**4.1300e-003**	**5.6600e-003**			**15.1336**	**4.8900e-003**	**0.0000**	**15.2364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.4000e-004	8.4300e-003	9.0200e-003	3.0000e-005	8.0000e-004	1.7000e-004	9.7000e-004	2.2000e-004	1.6000e-004	3.8000e-004			2.9085	2.0000e-005	0.0000	2.9090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.5000e-004	3.7100e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004			0.8584	4.0000e-005	0.0000	0.8592
Total	**9.8000e-004**	**8.7800e-003**	**0.0127**	**4.0000e-005**	**1.9300e-003**	**1.8000e-004**	**2.1000e-003**	**5.2000e-004**	**1.7000e-004**	**6.9000e-004**			**3.7669**	**6.0000e-005**	**0.0000**	**3.7681**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.5400e-003	0.0000	4.5400e-003	6.9000e-004	0.0000	6.9000e-004			0.0000	0.0000	0.0000	0.0000
Off-Road	8.6600e-003	0.0841	0.1151	1.7000e-004		4.4900e-003	4.4900e-003		4.1300e-003	4.1300e-003			15.1336	4.8900e-003	0.0000	15.2364
Total	**8.6600e-003**	**0.0841**	**0.1151**	**1.7000e-004**	**4.5400e-003**	**4.4900e-003**	**9.0300e-003**	**6.9000e-004**	**4.1300e-003**	**4.8200e-003**			**15.1336**	**4.8900e-003**	**0.0000**	**15.2364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.4000e-004	8.4300e-003	9.0200e-003	3.0000e-005	8.0000e-004	1.7000e-004	9.7000e-004	2.2000e-004	1.6000e-004	3.8000e-004			2.9085	2.0000e-005	0.0000	2.9090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.5000e-004	3.7100e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004			0.8584	4.0000e-005	0.0000	0.8592
Total	**9.8000e-004**	**8.7800e-003**	**0.0127**	**4.0000e-005**	**1.9300e-003**	**1.8000e-004**	**2.1000e-003**	**5.2000e-004**	**1.7000e-004**	**6.9000e-004**			**3.7669**	**6.0000e-005**	**0.0000**	**3.7681**

3.13 P3 Site Prep - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	4.4300e-003	0.0431	0.0590	9.0000e-005		2.3000e-003	2.3000e-003		2.1100e-003	2.1100e-003			7.7514	2.5100e-003	0.0000	7.8040
Total	**4.4300e-003**	**0.0431**	**0.0590**	**9.0000e-005**	**0.0000**	**2.3000e-003**	**2.3000e-003**	**0.0000**	**2.1100e-003**	**2.1100e-003**			**7.7514**	**2.5100e-003**	**0.0000**	**7.8040**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.8000e-004	1.9000e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004			0.4397	2.0000e-005	0.0000	0.4401
Total	**1.2000e-004**	**1.8000e-004**	**1.9000e-003**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**5.8000e-004**	**1.5000e-004**	**0.0000**	**1.6000e-004**			**0.4397**	**2.0000e-005**	**0.0000**	**0.4401**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	4.4300e-003	0.0431	0.0590	9.0000e-005		2.3000e-003	2.3000e-003		2.1100e-003	2.1100e-003			7.7514	2.5100e-003	0.0000	7.8040
Total	**4.4300e-003**	**0.0431**	**0.0590**	**9.0000e-005**	**0.0000**	**2.3000e-003**	**2.3000e-003**	**0.0000**	**2.1100e-003**	**2.1100e-003**			**7.7514**	**2.5100e-003**	**0.0000**	**7.8040**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.8000e-004	1.9000e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004			0.4397	2.0000e-005	0.0000	0.4401
Total	**1.2000e-004**	**1.8000e-004**	**1.9000e-003**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**5.8000e-004**	**1.5000e-004**	**0.0000**	**1.6000e-004**			**0.4397**	**2.0000e-005**	**0.0000**	**0.4401**

3.14 P3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0895	1.0038	0.8073	1.4700e-003		0.0468	0.0468		0.0430	0.0430			129.5697	0.0419	0.0000	130.4497
Total	**0.0895**	**1.0038**	**0.8073**	**1.4700e-003**		**0.0468**	**0.0468**		**0.0430**	**0.0430**			**129.5697**	**0.0419**	**0.0000**	**130.4497**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0540	0.4182	0.7641	1.7400e-003	0.0498	7.2500e-003	0.0571	0.0142	6.6700e-003	0.0209			147.6896	1.1000e-003	0.0000	147.7126
Worker	0.0468	0.0672	0.7132	2.5800e-003	0.2163	1.5200e-003	0.2179	0.0575	1.4100e-003	0.0589			165.0220	7.2100e-003	0.0000	165.1733
Total	**0.1008**	**0.4854**	**1.4773**	**4.3200e-003**	**0.2662**	**8.7700e-003**	**0.2749**	**0.0717**	**8.0800e-003**	**0.0798**			**312.7115**	**8.3100e-003**	**0.0000**	**312.8859**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0895	1.0038	0.8073	1.4700e-003		0.0468	0.0468		0.0430	0.0430			129.5695	0.0419	0.0000	130.4495
Total	**0.0895**	**1.0038**	**0.8073**	**1.4700e-003**		**0.0468**	**0.0468**		**0.0430**	**0.0430**			**129.5695**	**0.0419**	**0.0000**	**130.4495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0540	0.4182	0.7641	1.7400e-003	0.0498	7.2500e-003	0.0571	0.0142	6.6700e-003	0.0209			147.6896	1.1000e-003	0.0000	147.7126
Worker	0.0468	0.0672	0.7132	2.5800e-003	0.2163	1.5200e-003	0.2179	0.0575	1.4100e-003	0.0589			165.0220	7.2100e-003	0.0000	165.1733
Total	**0.1008**	**0.4854**	**1.4773**	**4.3200e-003**	**0.2662**	**8.7700e-003**	**0.2749**	**0.0717**	**8.0800e-003**	**0.0798**			**312.7115**	**8.3100e-003**	**0.0000**	**312.8859**

3.15 P3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0597	0.0000	0.0597	6.4400e-003	0.0000	6.4400e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0358	0.3795	0.2605	4.9000e-004		0.0171	0.0171		0.0157	0.0157			42.4662	0.0136	0.0000	42.7514
Total	**0.0358**	**0.3795**	**0.2605**	**4.9000e-004**	**0.0597**	**0.0171**	**0.0767**	**6.4400e-003**	**0.0157**	**0.0222**			**42.4662**	**0.0136**	**0.0000**	**42.7514**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	6.1000e-004	6.5100e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004			1.5074	7.0000e-005	0.0000	1.5088
Total	**4.3000e-004**	**6.1000e-004**	**6.5100e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**			**1.5074**	**7.0000e-005**	**0.0000**	**1.5088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0268	0.0000	0.0268	2.9000e-003	0.0000	2.9000e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0358	0.3795	0.2605	4.9000e-004		0.0171	0.0171		0.0157	0.0157			42.4662	0.0136	0.0000	42.7513
Total	**0.0358**	**0.3795**	**0.2605**	**4.9000e-004**	**0.0268**	**0.0171**	**0.0439**	**2.9000e-003**	**0.0157**	**0.0186**			**42.4662**	**0.0136**	**0.0000**	**42.7513**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	6.1000e-004	6.5100e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004			1.5074	7.0000e-005	0.0000	1.5088
Total	**4.3000e-004**	**6.1000e-004**	**6.5100e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**			**1.5074**	**7.0000e-005**	**0.0000**	**1.5088**

3.16 P3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3400e-003	0.0542	0.0654	1.0000e-004		2.9700e-003	2.9700e-003		2.7300e-003	2.7300e-003			8.5415	2.7600e-003	0.0000	8.5995
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0106**	**0.0542**	**0.0654**	**1.0000e-004**		**2.9700e-003**	**2.9700e-003**		**2.7300e-003**	**2.7300e-003**			**8.5415**	**2.7600e-003**	**0.0000**	**8.5995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	2.7000e-004	2.8800e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004			0.6920	3.0000e-005	0.0000	0.6926
Total	**1.9000e-004**	**2.7000e-004**	**2.8800e-003**	**1.0000e-005**	**9.2000e-004**	**1.0000e-005**	**9.3000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**			**0.6920**	**3.0000e-005**	**0.0000**	**0.6926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3400e-003	0.0542	0.0654	1.0000e-004		2.9700e-003	2.9700e-003		2.7300e-003	2.7300e-003			8.5414	2.7600e-003	0.0000	8.5995
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.0106**	**0.0542**	**0.0654**	**1.0000e-004**		**2.9700e-003**	**2.9700e-003**		**2.7300e-003**	**2.7300e-003**			**8.5414**	**2.7600e-003**	**0.0000**	**8.5995**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	2.7000e-004	2.8800e-003	1.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.4000e-004	1.0000e-005	2.5000e-004			0.6920	3.0000e-005	0.0000	0.6926
Total	**1.9000e-004**	**2.7000e-004**	**2.8800e-003**	**1.0000e-005**	**9.2000e-004**	**1.0000e-005**	**9.3000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**			**0.6920**	**3.0000e-005**	**0.0000**	**0.6926**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.3601	5.2522	25.7633	0.0924	6.6639	0.0926	6.7566	1.7809	0.0856	1.8665			6,238.8026	0.2145	0.0000	6,243.3065
Unmitigated	2.3601	5.2522	25.7633	0.0924	6.6639	0.0926	6.7566	1.7809	0.0856	1.8665			6,238.8026	0.2145	0.0000	6,243.3065

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	3,253.85	699.15	289.10	7,942,052	7,942,052
General Office Building	2,371.45	509.55	210.70	5,788,275	5,788,275
General Office Building	1,599.35	343.65	142.10	3,903,720	3,903,720
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	7,224.65	1,552.35	641.90	17,634,047	17,634,047

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.505043	0.056653	0.194832	0.151784	0.042126	0.005989	0.016072	0.016505	0.001461	0.002178	0.004464	0.000494	0.002401

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000			2,795.7270	0.1538	0.0318	2,808.8225
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			3,064.4389	0.1686	0.0349	3,078.7931
NaturalGas Mitigated	0.0247	0.2243	0.1884	1.3500e-003		0.0171	0.0171		0.0171	0.0171			244.2005	4.6800e-003	4.4800e-003	245.6867
NaturalGas Unmitigated	0.0339	0.3079	0.2587	1.8500e-003		0.0234	0.0234		0.0234	0.0234			335.2021	6.4200e-003	6.1500e-003	337.2421

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	1.39055e+006	7.5000e-003	0.0682	0.0573	4.1000e-004		5.1800e-003	5.1800e-003		5.1800e-003	5.1800e-003			74.2050	1.4200e-003	1.3600e-003	74.6566
General Office Building	2.06185e+006	0.0111	0.1011	0.0849	6.1000e-004		7.6800e-003	7.6800e-003		7.6800e-003	7.6800e-003			110.0282	2.1100e-003	2.0200e-003	110.6978
General Office Building	2.82905e+006	0.0153	0.1387	0.1165	8.3000e-004		0.0105	0.0105		0.0105	0.0105			150.9689	2.8900e-003	2.7700e-003	151.8877
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total		**0.0339**	**0.3079**	**0.2587**	**1.8500e-003**		**0.0234**	**0.0234**		**0.0234**	**0.0234**			**335.2021**	**6.4200e-003**	**6.1500e-003**	**337.2421**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	2.06101e+006	0.0111	0.1010	0.0849	6.1000e-004		7.6800e-003	7.6800e-003		7.6800e-003	7.6800e-003			109.9834	2.1100e-003	2.0200e-003	110.6528
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
General Office Building	1.01304e+006	5.4600e-003	0.0497	0.0417	3.0000e-004		3.7700e-003	3.7700e-003		3.7700e-003	3.7700e-003			54.0597	1.0400e-003	9.9000e-004	54.3887
General Office Building	1.50209e+006	8.1000e-003	0.0736	0.0619	4.4000e-004		5.6000e-003	5.6000e-003		5.6000e-003	5.6000e-003			80.1574	1.5400e-003	1.4700e-003	80.6452
Total		**0.0247**	**0.2243**	**0.1884**	**1.3500e-003**		**0.0171**	**0.0171**		**0.0171**	**0.0171**			**244.2005**	**4.6900e-003**	**4.4800e-003**	**245.6867**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	2.2649e+006	541.5116	0.0298	6.1600e-003	544.0481
General Office Building	3.3583e+006	802.9310	0.0442	9.1400e-003	806.6921
General Office Building	4.6079e+006	1,101.6961	0.0606	0.0125	1,106.8566
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	105600	25.2478	1.3900e-003	2.9000e-004	25.3660
Unenclosed Parking with Elevator	654240	156.4213	8.6100e-003	1.7800e-003	157.1540
Unenclosed Parking with Elevator	856152	204.6961	0.0113	2.3300e-003	205.6550
Unenclosed Parking with Elevator	970080	231.9350	0.0128	2.6400e-003	233.0214
Total		**3,064.4389**	**0.1686**	**0.0349**	**3,078.7931**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	2.0161e+006	482.0258	0.0265	5.4900e-003	484.2837
General Office Building	2.98939e+006	714.7279	0.0393	8.1400e-003	718.0758
General Office Building	4.10172e+006	980.6731	0.0540	0.0112	985.2667
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	105600	25.2478	1.3900e-003	2.9000e-004	25.3660
Unenclosed Parking with Elevator	654240	156.4213	8.6100e-003	1.7800e-003	157.1540
Unenclosed Parking with Elevator	856152	204.6961	0.0113	2.3300e-003	205.6550
Unenclosed Parking with Elevator	970080	231.9350	0.0128	2.6400e-003	233.0214
Total		**2,795.7270**	**0.1538**	**0.0318**	**2,808.8225**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.7173	3.7000e-004	0.0405	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004			0.0786	2.1000e-004	0.0000	0.0829
Unmitigated	6.7173	3.7000e-004	0.0405	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004			0.0786	2.1000e-004	0.0000	0.0829

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4275					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	6.2860					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	3.7600e-003	3.7000e-004	0.0405	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004			0.0786	2.1000e-004	0.0000	0.0829
Total	**6.7173**	**3.7000e-004**	**0.0405**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**			**0.0786**	**2.1000e-004**	**0.0000**	**0.0829**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4275					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	6.2860					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	3.7600e-003	3.7000e-004	0.0405	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004			0.0786	2.1000e-004	0.0000	0.0829
Total	**6.7173**	**3.7000e-004**	**0.0405**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**			**0.0786**	**2.1000e-004**	**0.0000**	**0.0829**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	118.4405	1.0429	0.0257	148.3028
Unmitigated	146.3378	1.3038	0.0321	183.6777

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	39.785 / 3.71132	146.3378	1.3038	0.0321	183.6777
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**146.3378**	**1.3038**	**0.0321**	**183.6777**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	31.828 / 3.48493	118.4405	1.0429	0.0257	148.3028
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**118.4405**	**1.0429**	**0.0257**	**148.3028**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	47.9038	2.8310	0.0000	107.3556
Unmitigated	95.8077	5.6621	0.0000	214.7112

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	471.98	95.8077	5.6621	0.0000	214.7112
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**95.8077**	**5.6621**	**0.0000**	**214.7112**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	235.99	47.9038	2.8310	0.0000	107.3556
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**47.9038**	**2.8310**	**0.0000**	**107.3556**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	1.00	52	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Generator Sets	1.0700e-003	9.5200e-003	0.0120	2.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004			1.8369	9.0000e-005	0.0000	1.8388
Total	**1.0700e-003**	**9.5200e-003**	**0.0120**	**2.0000e-005**		**4.8000e-004**	**4.8000e-004**		**4.8000e-004**	**4.8000e-004**			**1.8369**	**9.0000e-005**	**0.0000**	**1.8388**

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	252.0480	0.0000	0.0000	252.0480

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	356	252.0480	0.0000	0.0000	252.0480
Total		**252.0480**	**0.0000**	**0.0000**	**252.0480**

APPENDIX B

PHASE I ENVIRONMENTAL SITE ASSESSMENT AND GROUNDWATER MONITORING AND REMEDIAL PROGRESS REPORT

CONFIDENTIAL

PHASE I ENVIRONMENTAL SITE ASSESSMENT

FORMER LOS ANGELES TIMES FACILITY
1375 SUNFLOWER AVENUE
COSTA MESA, CALIFORNIA

PREPARED FOR:
TRIBUNE MEDIA COMPANY

PREPARED BY:
RPS GAIATECH

JULY 2015

RPS GAIATECH PROJECT NO. 158195.611.00

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EXECUTIVE SUMMARY

Tribune Media Company retained GaiaTech Incorporated dba RPS GaiaTech to conduct a Phase I Environmental Site Assessment (ESA) of the Former Los Angeles Times Facility located at 1375 Sunflower Avenue in Costa Mesa, Orange County, California (the site). RPS GaiaTech conducted the Phase I ESA to identify Recognized Environmental Conditions (RECs), as defined by the ASTM International (ASTM) *Standard Practice for Environmental Site Assessments* – E 1527-13 (ASTM-13). RPS GaiaTech performed the Phase I ESA to constitute all appropriate inquiry consistent with good commercial and customary practice.

Information obtained through the Orange County Tax Assessor's Office and confirmed by site representatives indicated that the site is owned by CA - Orange County Plant, LLC.

The site has been primarily vacant since 2014, when the Los Angeles Times (LA Times) ceased operations at the site. A security guard monitors the site entrance and the site owner (CA - Orange County Plant, LLC) leases a portion of the parking lot to a local car dealership for overflow vehicle parking. In addition, the site owner allows a local charity to store dry goods within the office portion of the building. One 12,000-gallon diesel UST remains operational in connection with an emergency generator at the site. Otherwise, aside from janitorial products no materials are stored or used at the site.

The 21.12-acre site is developed with a 361,483-square-foot, two-story building divided between administrative offices, printing, warehousing and support areas. A guard shack is located to the northwest of the building, a former fueling canopy is located to the west and a storage building is located to the southwest. A helicopter landing pad and a groundwater remediation system, discussed further below, are also located to the west of the building. Two oil water separators (OWS) (one for the kitchen area and one for plate making/printing area), a 12,000-gallon diesel underground storage tank (UST) and a former ink aboveground storage tank (AST) secondary containment area (the ASTs have been removed) are located to the east of the building. A railroad spur is located along the eastern site boundary. The remaining exterior yard space consists of a concrete-paved parking and access areas. Landscaped areas are located to the north of the building and around the site perimeter.

The site consisted of undeveloped or agricultural land from at least 1896 until the late 1960s, when the original portion (northern) of the current building was constructed. The building was occupied by newspaper companies, primarily the LA Times, from that time until 2010 when printing operations ceased. Later, in 2014, administrative office operations ceased. The site has remained primarily vacant since that time with the exception of a charity that is allowed to use the office area of the building for storage (baby supplies) and a local car dealership that is allowed to park cars in the parking area. Historical site operations are discussed further below.

The site area was largely undeveloped or used for agricultural and rural residential development from at least 1896 until the 1950s when a rail spur was developed to the west. By the 1960s industrial development began to the north and northwest while residential development expanded

to the south and southwest. During the 1970s and 1980s commercial and light industrial development began and expanded to the north, northeast, northwest and west. By 1987 the former industrial facility to the north was razed and replaced with commercial structures. The site area was developed to its current relative configuration by 2003, after the constructive of an additional commercial facility (currently operated by Ikea) to the south. No historical site area operations with the potential for environmental impact to the site were identified.

Findings

Environmental and other conditions associated with the site are characterized as RECs, Controlled RECs (CRECs), Historical RECs (HRECs), de minimis conditions, noteworthy issues, or other issues as defined in Section 1.1 of this report. Any exceptions to, or deletions from, this practice are described in Section 1.2 and 1.3 of this report if not identified below.

This assessment revealed evidence of the following REC in connection with the site:

- **Current Leaking Underground Storage Tank (LUST) Incident:** A petroleum release from USTs in a fueling area on the central western portion of the site was discovered in the early 1990s that resulted in the removal of three 12,000-gallon gasoline USTs and the opening of a LUST case. This release is known as the Los Angeles Times – Northern Tank Release (NTR). Investigations and remediation in relation to the NTR is ongoing and soil and groundwater impact from the release has been determined to extend beyond the western site boundary to properties adjacent to the west and southwest of the site. The most recent analytical data available for the NTR (4th Quarter 2014 Groundwater Monitoring and Remedial Progress Report) identified maximum concentration of total petroleum hydrocarbons – gasoline range (TVPH) at 9,700 micrograms per liter (ug/L); benzene at 1,800 ug/L; toluene at 290 ug/L; ethylbenzene at 1,100 ug/L and other petroleum constituents at elevated concentrations in groundwater. Remediation including soil vapor extraction and quarterly groundwater sampling continues in relation to the NTR.

This assessment identified the following CREC in connection with the site:

- **Historical LUST Incidents:** Two additional petroleum LUST incidents have occurred at the site, one was identified in 1988 resulting in the excavation of soil (date unknown). This release received regulatory closure in September of 1990. Little additional information regarding this release was identified in available records reviewed. The other closed LUST incident was discovered in September of 1990 on the southern portion of the site in the area of three 12,000-gallon petroleum USTs and a dispenser island (separate USTs from the NTR release discussed above). These USTs were removed from the ground in November 1995 and this release is identified as the Los Angeles Times – South Tank Release (STR). Investigation and remediation in relation to this incident continued through the 2000s. The most recent analytical data for the STR identified residual impact to soil at a maximum concentration of 850 milligrams per kilogram (mg/kg) for TVPH; 0.900 mg/kg for benzene; 2.1 mg/kg for toluene; 66 mg/kg for

xylenes; and 18 mg/kg for ethylbenzene, among others. The most recent groundwater analytical data (2011) detected elevated concentrations of petroleum constituents including TPVH at a maximum concentration of 1,800 micrograms per liter (ug/L); benzene at 280 ug/L; toluene at 7.7 ug/L; xylenes at 52 ug/L; ethylbenzene at 62 ug/L, among others. In 2013, the OCHCA issued closure for the STR citing that the extent of the release had been delineated (impacts were limited to the site) and the potential for impact to human health appeared unlikely. Residual impact as a result of these releases likely remains at the site; however, these releases have been closed and the potential for further regulatory scrutiny appears low.

1.0 INTRODUCTION

1.1 Purpose

Tribune Media Company retained GaiaTech Incorporated dba RPS GaiaTech to conduct a Phase I Environmental Site Assessment (ESA) of the Former Los Angeles Times facility located at 1375 Sunflower Avenue in Costa Mesa, Orange County, California (the site). The Phase I ESA was conducted to identify Recognized Environmental Conditions (RECs), as defined by the ASTM International (ASTM) *Standard Practice for Environmental Site Assessments* – E 1527-13 (ASTM-13). RPS GaiaTech performed the Phase I ESA to constitute all appropriate inquiry consistent with good commercial and customary practice.

Based on the Environmental Professional's (EP) evaluation of available information, findings of this report are classified and defined as follows:

- REC: the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.
- Controlled REC (CREC): a REC that resulted from a past release that has been addressed to the satisfaction of the applicable regulatory authority, with contamination allowed to remain in place subject to the implementation of required controls;
- Historical REC (HREC): a past release that has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls;
- De minimis condition: a condition that could otherwise be considered a REC but in the EP's opinion does not appear to represent a threat to human health or the environment and/or would not likely be the subject of an enforcement action if brought to the attention of appropriate governmental agencies;
- Noteworthy issue: a contingent site risk that does not clearly fall within the ASTM definition of a REC, HREC, or de minimis condition and/or a risk that can have a material environmental or environmentally-driven impact on the business.
- Other issue: an environmental issue or condition (e.g. asbestos, radon, or mold) at a property that falls outside of the scope of the ASTM-13 practice.

1.2 Scope of Work

RPS GaiaTech performed the Phase I ESA site inspection on June 2, 2015. Ms. Loraine Drown, Property Manager for CA - Orange County Plant, LLC (site owner), provided information regarding the site and accompanied RPS GaiaTech during the site inspection.

Ms. Drown has been associated with the site since approximately 2013. Additional information regarding the site was provided by Mr. Carl Cade of Tribune Real Estate Holdings, representative of the site owner.

RPS GaiaTech conducted the Phase I ESA in overall accordance with industry standards, including the requirements of ASTM-13 and the federal AAI standard. The Phase I ESA included the following activities, subject to any limitations noted in this report:

1. Interviews with site owner(s), key site manager(s), and/or major occupant(s) and a review of site records with regard to current and former site operations that may have impacted the site.

2. A comprehensive site inspection to identify and evaluate potential sources of environmental impact, including but not limited to waste and chemical storage areas, underground storage tanks (USTs), aboveground storage tanks (ASTs), equipment containing polychlorinated biphenyls (PCBs), wastewater and storm water discharges, and air emissions. The inspection included observations for evidence of chemical spills, releases, or on-site waste disposal. A Site Location Map and a Site Layout and Area Map are included in Appendix A. Photographs of the site are included in Appendix B.

3. A review of historical information for potential on- or off-site sources of impact to the site. To the extent feasible under the conditions of the assessment, the historical information obtained included: verbal information and records from site and/or local agency representatives; previous reports; construction plans; building permits; property record cards; topographic maps; fire insurance maps; historical city directories; and aerial photographs. Copies of relevant historical documentation are included in Appendix C.

4. A visual survey of the properties in the vicinity of the site as observed from the site boundaries and public rights-of-way to evaluate the potential for impact to the site from these properties. A Site Layout and Area Map is included in Appendix A.

5. A review of tribal, state, and federal environmental database information, provided by Environmental Data Resources, Inc. (EDR) supplemented by agency interviews and record review, where appropriate. The database search was conducted using ASTM-designated search parameters; for parameters requiring a search of the site and adjacent properties only, the search radii were extended to ensure that ASTM-required search distances from the property boundary were met. Facilities listed in the database report as “unplottable” were reviewed to evaluate whether any are located in the immediate vicinity of the site, based on field observations. The database search report is included as Appendix D.

6. As determined necessary by the EP and beneficial in determining the environmental risk associated with nearby facilities, supplemental research (potentially including the review of agency files, interviews with agency representatives, or others familiar with surrounding properties) was conducted.

7. Review of public health records and records of institutional and engineering controls pertaining to the site, as available through state listings provided by EDR, recorded on the current deed, or readily available in land title records.

8. A review of vapor migration associated with on and off-site sources of known and/or potential environmental impact.

RPS GaiaTech also performed the following activity in addition to those activities that comprise the ASTM scope of work:

- A limited visual survey to identify typically suspect asbestos-containing materials (ACMs). No sampling was conducted.

2.0 SITE CHARACTERISTICS

2.1 Site Location

The site is located at 1375 Sunflower Avenue in Costa Mesa, Orange County, California. The site is located on the south side of Sunflower Avenue, approximately 570 feet east of the intersection of Sunflower Avenue and Harbor Boulevard.

2.2 Site Description

a) Site Ownership

Information obtained through the Orange County Tax Assessor's Office and confirmed by site representatives indicated that the site is owned by CA - Orange County Plant, LLC.

Information obtained through the Orange County Register of Deeds indicated that the most recent deed activity for the site consists of a Grant Deed issued to CA - Orange County Plant, LLC from Los Angeles Times Communications LLC, and recorded March 25, 2013. No Activity or Use Limitations (AULs) or environmental liens were attached to the deed reviewed.

No AULs were identified in the U.S. Engineering Controls, U.S. Institutional Controls or state AULs databases searched by EDR.

b) Current Use of the Site

The site has been primarily vacant since 2014, when the Los Angeles Times (LA Times) ceased operations at the site. A security guard monitors the site entrance and the site owner (CA - Orange County Plant, LLC) leases a portion of the parking lot to a local car dealership for overflow vehicle parking. In addition, the site owner allows a local charity to store dry goods within the office portion of the building. One 12,000-gallon diesel UST remains operational in connection with an emergency generator at the site. Otherwise, aside from janitorial products no materials are stored or used at the site.

c) Structures, Improvements and Other Features

The 21.12-acre site is developed with a 361,483-square-foot, two-story building divided between administrative offices, printing, warehousing and support areas. A guard shack is located to the northwest of the building, a former fueling canopy is located to the west and a storage building is located to the southwest. A helicopter landing pad and a groundwater remediation system, discussed further in Section 3.1, are also located to the west of the building. Two oil water separators (OWS) (one for the kitchen area and one for plate making/printing area), a 12,000-gallon diesel UST and a former AST secondary containment area are located to the east of the building. A railroad spur is located along

the eastern site boundary. The remaining exterior yard space consists of a concrete-paved parking and access areas.

Landscaped areas are located to the north of the building and around the site perimeter. No pits, mounds, or other obvious terrain anomalies were identified at the site. No areas of distressed vegetation were identified at the site.

The building is heated with natural gas-fired boilers and cooled with an electric chilling tower system. Water and sanitary sewer services are municipally provided. Several groundwater monitoring wells were identified at the site as discussed in Section 3.1. No current or historical potable wells or septic systems were identified at the site.

2.3 Environmental Setting

a) Topography and Drainage

The 7.5-minute topographic map of the area (*Newport Beach, California* quadrangle, 1965) indicated that the site is located at an approximate elevation of between 25 and 35 feet above mean sea level. The site is located in an area characterized by relatively flat terrain. Surface water drainage in the area is toward local drainage features such as ditches and channels. The site is graded relatively flat.

b) Soils, Geology, and Hydrogeology

According to information provided in the environmental database search report and the USDA's Web Soil Survey, the soils in the site area consist primarily of Bolsa silt loam. Bolsa silt loam is characterized as somewhat poorly drained with a very high available water capacity.

Based on subsurface investigations conducted at the site, discussed further in Section 3.4, the near-surface geology in the site area is comprised of fine grained clays and silts to a depth of 25 feet below ground surface (bgs) underlain by silt or clay to at least 35 feet bgs. Fill material was also identified near the surface in former UST storage areas. Site-specific information regarding bedrock was not available. Depth to groundwater information for the site area was not readily available; however, based on available subsurface information static water is present between 14 and 27 feet bgs at the site and flows to the south-southwest toward the Costa Mesa Greenville Banning Channel, located approximately 550 feet south of the site.

c) Water Resources

Potable water is supplied to the site and surrounding properties by the Mesa Water District (MWD). Information provided by the MWD indicated that drinking water is primarily received from eight groundwater wells. RPS GaiaTech conducted a search of California's online GeoTracker Groundwater Ambient Monitoring and Assessment

(GAMA) database for water wells in the area. Based on information provided in the EDR report and GAMA database one public water supply well (MWD well) is located approximately 0.39 mile north of the site. Several additional water wells were identified throughout the site area, many of these appeared to be related to environmental investigations (rather than water extraction wells); although, the use of each could not be confirmed. Finally, remediation records on file for the site indicated that at least 35 water supply wells are located within a 1.0-mile radius of the site area. The closest water supply well is located adjacent to the northeast of the site.

3.0 SITE HISTORY

3.1 Overview of Site History

The site consisted of undeveloped or agricultural land from at least 1896 until the late 1960s, when the original portion (northern) of the current building was constructed. The building was occupied by newspaper companies, primarily the LA Times, from that time until 2010 when printing operations ceased. Later, in 2014, administrative office operations ceased. The site has remained primarily vacant since that time with the exception of a charity that is allowed to use the office area of the building for storage (baby supplies) and a local car dealership that is allowed to park cars in the parking area. Historical site operations are discussed further below.

A petroleum release from USTs in a fueling area on the central western portion of the site was discovered in the early 1990s that resulted in the removal of three 12,000-gallon gasoline USTs and the opening of a LUST case. This release is known as the Los Angeles Times – Northern Tank Release (NTR). Investigations and remediation in relation to the NTR is ongoing and soil and groundwater impact from the release has been determined to extend beyond the western site boundary to properties adjacent to the west and southwest of the site. The most recent analytical data available for the NTR (4th Quarter 2014 Groundwater Monitoring and Remedial Progress Report) identified maximum concentration of total petroleum hydrocarbons – gasoline range (TVPH) at 9,700 micrograms per liter (ug/L); benzene at 1,800 ug/L; toluene at 290 ug/L; ethylbenzene at 1,100 ug/L and other petroleum constituents at elevated concentrations in groundwater. Remediation including soil vapor extraction and quarterly groundwater sampling continues in relation to the NTR.

Two additional petroleum LUST incidents have occurred at the site, one was identified in 1988 resulting in the excavation of soil (date unknown). This release received regulatory closure in September of 1990. Little additional information regarding this release was identified in available records reviewed. The other closed LUST incident was discovered in September of 1990 on the southern portion of the site in the area of three 12,000-gallon petroleum USTs and a dispenser island (separate USTs from the NTR release discussed above). These USTs were removed from the ground in November 1995 and this release is identified as the Los Angeles Times – South Tank Release (STR). Investigation and remediation in relation to this incident continued through the 2000s. The most recent analytical data for the STR identified residual impact to soil at a maximum concentration of 850 milligrams per kilogram (mg/kg) for TVPH; 0.900 mg/kg for benzene; 2.1 mg/kg for toluene; 66 mg/kg for xylenes; and 18 mg/kg for ethylbenzene, among others. The most recent groundwater analytical data (2011) detected elevated concentrations of petroleum constituents including TPVH at a maximum concentration of 1,800 micrograms per liter (ug/L); benzene at 280 ug/L; toluene at 7.7 ug/L; xylenes at 52 ug/L; ethylbenzene at 62 ug/L, among others. In 2013, the OCHCA issued closure for the STR citing that the extent of the release had been delineated (impacts were limited to the site)

and the potential for impact to human health appeared unlikely. Residual impact as a result of these releases likely remains at the site; however, these releases have been closed and the potential for further regulatory scrutiny appears low.

One 12,000-gallon double-walled diesel UST equipped with continuous interstitial monitoring is located to the east of the building. The UST powers an emergency generator located within the building. The UST was installed in 1989. Site representatives provided copies of a Permit to Operate the UST, a Spill Bucket Testing Report Form (July 2014) and Secondary Containment Testing Report Form (January 2015). These reports indicated that the UST piping, pipe sump, fill sump spill bucket and piping sump passed testing in 2014/2015. Given the age of the UST there is a potential for an unidentified release from this UST to have resulted in environmental impact to the site; however, releases from the UST were not identified in recent tank tightness tests conducted.

Several floor drains were observed within the building, primarily in AST containment areas, a plate-making room and janitorial closets. According to site representatives, the floor drains in the AST containment and plate-making room discharged water to an OWS and then to the sanitary sewer system. Based on information from site representatives, only minor amounts of inks, if any were discharged to floor drains in the AST areas and only wastewater containing allowable quantities of plate-making chemicals as discharged to the drains in the plate-making room. In addition, according to site representatives a secondary containment area for former ink ASTs to the east of the building is equipped with underground piping that was used to move ink from the outdoor ASTs to indoor areas. RPS GaiaTech could not confirm the age or integrity of the interior of the floor drains, OWS or underground piping. In addition, little information in relation to the generation of ignitable waste, corrosive waste, silver and tetrachloroethylene (TCE) at the site in large and small quantities from the 1980s to 2000 was identified in available information reviewed. Given the lack of available information regarding these historical operations the potential for impact to the site exists; however, site-wide petroleum impact would likely have been identified during extensive subsurface investigations completed at the site from the 1990s through the present.

3.2 Historical Photographs and Maps

RPS GaiaTech reviewed available historical aerial photographs and topographic maps from the sources listed in Section 8.0. According to EDR, no Sanborn fire insurance maps were available for the site area. The information from these sources is summarized below.

Period	Description
1896 Topo 1899 Topo 1901 Topo 1902 Topo 1905 Topo 1907 Topo 1911 Topo 1915 Topo 1920 Topo 1925 Topo 1930 Topo 1932 Topo 1938 Aerial 1939 Topo 1945 Topo 1947 Aerial 1946 Topo 1951 Topo 1953 Aerial 1958 Topo 1963 Aerial 1968 Topo	The site appears as undeveloped or agricultural land.
1972 Aerial 1975 Topo 1977 Topo 1977 Aerial 1981 Topo 1982 Topo 1983 Topo	The original portion of the current building (northern) is present. The southern portion of the site appears agricultural land.
1987 Aerial 1990 Aerial 1995 Aerial 2002 Aerial 2003 Aerial 2004 Aerial 2005 Aerial 2006 Aerial 2007 Aerial 2009 Aerial 2010 Aerial 2011 Aerial 2013 Aerial 2014 Aerial	The building has expanded to the south and the southern portion of the site appears developed with the building additions and paved-parking areas. The site appears in its current configuration.

3.3 Interviews and Agency Records

a) Information Provided by Site Representatives, Site Owner and Report User

Site Representatives
Site representatives indicated that the site was constructed in the 1960s and used as an office and printing facility for newspapers, primarily for the Los Angeles Times from that time until 2010 when printing operations ceased. Later, in 2014, administrative office operations ceased. The site has remained primarily vacant since that time with the exception of a charity that is allowed to use the office area of the building for storage (baby supplies) and a local car dealership that is allowed to park cars in the parking area. In addition, a guard shack is manned at the site entrance 24 hours a day.

Aside from the LUST incidents discussed in Section 3.1, site representatives were not aware of current or historical environmental impacts at the site.

User and Owner Representative
Mr. Carl Cade, on behalf of Tribune Media Company, indicated that aside from the LUST incidents discussed in Section 3.1, he was not aware of any environmental cleanup liens filed or recorded against the site; any AULs in place at the site; any specialized knowledge of the site or adjoining properties; any conditions that would affect the fair market value of the site; any knowledge of obvious indicators of the presence or likely presence of contamination at the site; or any other commonly known or reasonably ascertainable information regarding the environmental condition of the site.

b) Agency Interviews and File Review

RPS GaiaTech contacted or filed Freedom of Information Act (FOIA) requests with various agencies to obtain environmentally relevant information regarding the site. A listing of the various agencies contacted is provided in Section 8.0. Pertinent information from these agencies is summarized as follows.

- Orange County Assessor's Office: According to the property information provided for the site, the site is 18.956 acres; however, additional information provided by site representatives (a survey completed in 2013) indicated that the site is actually 21.121 acres.

- City of Costa Mesa: RPS GaiaTech requested copies of building department, utility department and fire department records for the site including records of building and/or occupancy permits; utility connection dates; records of current or historical septic systems or water wells or wastewater treatment systems; records of ASTs, USTs, hazardous material storage, wastes, spills, releases, clean-ups, and environmental compliance/permitting/inspection records. Mr. Michael Dunn, Deputy City Clerk responded that both building and HAZMAT records were

identified for the site; however, copies of same had not been received at the time of issuance of this report.

- Regional Water Quality Control Board (RWQCB): RPS GaiaTech conducted a search and reviewed available information for the site and site area through the State Water Board's online GeoTracker database. The site was identified in the database and relevant information from the database is included below or in Section 3.4.

- California Department of Toxic Substance Control (DTSC): GaiaTech conducted a search of the DTSC online Envirostor database. The site was not identified in the database. Information regarding relevant area facilities obtained from database records is included in Section 4.4.

- California Environmental Protection Agency (Cal EPA): GaiaTech reviewed information available online through the CalEPA's website for the site area. The site was not identified in Cal EPA databases reviewed. Relevant information obtained is discussed elsewhere in this report.

c) Database Search Report

RPS GaiaTech reviewed a database search report of federal and state environmental databases to determine if the site or nearby properties are listed and have a potential to adversely impact the site. Detailed descriptions of the databases that were searched and definitions of database acronyms are included within the Executive Summary Section and the Government Records Section of the database search report, which is included as Appendix D. Pertinent listings for the site are discussed below, and relevant listings for surrounding properties are discussed in Section 4.4

- The site address was identified in several databases including compliance-related databases such as the NPDES, AST, EMI, FINDS, US AIRS, WDS, ENVIROSTORE, RCRA and UST databases. The RCRA database indicated that this facility was a registered large quantity generator (LQG) in 1980 and 1990; a small quantity generator in 1996 and both a LQG and SQG in 2000 for the generation of ignitable waste, corrosive waste, silver and tetrachloroethylene (TCE). The database report indicated that 10 USTs at the site: one 6,000-gallon diesel UST installed in 1980; one 1,000-gallon waste oil UST installed in 1980; two "waste" UST of unidentified size installed in 1980; five 12,000-gallon gasoline UST installed in 1980; and one 5,000-gallon diesel UST installed in 1978.

  The remainder of the database listings (HIST Cortese, LUST, CA FID UST, SLIC, HIST UST, Orange Co. Industrial Site) are related to releases reported or identified at the site, primarily releases from USTs. Database records identified three UST releases at this facility. Additional information regarding these releases was obtained from the resources discussed in Section 3.3 (primarily GeoTracker and EnviroStor) and is summarized below.

- A petroleum release to soil was identified in 1988 resulting in the excavation of soil (date unknown). The release received regulatory closure in September of 1990. Little additional information regarding this release was identified in available records reviewed. There is a potential for residual impact to soil as a result of this release; however, given that the release was limited to soil impact and regulatory closure was granted further regulatory scrutiny in relation to this release appears unlikely.

- Another petroleum release was discovered in September of 1990 on the southern portion of the site in the area of three 12,000-gallon petroleum USTs and a dispenser island. These USTs were removed from the ground in November 1995 and this release is identified as the Los Angeles Times – South Tank release (STR). Investigation and remediation in relation to this incident continued through the 2000s and included the installation of soil vapor extraction systems. In 2013 the Orange County Health Care Agency (OCHCA) issued closure for the south tank release given that the extent of the release had been delineated and the potential for impact to human health appeared unlikely. Additional information regarding this release is discussed in Section 3.4.

- Another petroleum release was discovered on the central-western portion of the site in 1990, in the area of three additional 12,000-gallon petroleum USTs. These USTs were removed from the ground and this release resulted in a separate LUST incident known as the NTR in 1992. Investigation and remediation from this release is ongoing, as discussed in Section 3.4.

3.4 Prior Environmental Reports

Relevant information from available previous environmental reports for the site is summarized below.

<u>Los Angeles Times – South Tank Release (STR) Summary</u>

- In 1990 subsurface investigations were completed on the southwestern portion of the site. The investigations identified petroleum hydrocarbons and fuel constituents in soil and shallow groundwater.
- The southern UST fueling tanks were identified as the source of the release and several additional subsurface investigations were conducted to delineate impact from the USTs.
- In 1995, the three 12,000-gallon fiberglass gasoline USTs and a 250-gallon OWS on the southern portion of the site were removed. Discolored material (pea-gravel) was noted in the UST tank bed and petroleum impacted soil was identified during sampling.

- Impact to soil and groundwater by TVPH (i.e., gasoline-range hydrocarbons) and benzene, toluene, ethlybenzene and xylene (BTEX), as well as impact to groundwater from other fuel oxygenates (low levels) were identified at the site.
- During the late 1990s an interim remedial measure (IRM) consisting of soil vapor extraction (SVE) removed an estimated 26,800 pounds of petroleum hydrocarbon constituents and then a high-vacuum, dual-phase extraction (HVDPE) system was installed at the site for further remediation.
- The most recent analytical data (August 2011) for the site identified the following:
  - Soil impact at a maximum concentration of 850 milligrams per kilogram (mg/kg) for TVPH (gasoline standard) in soil at; 0.900 mg/kg for benzene; 2.1 mg/kg for toluene; 66 mg/kg for xylenes; and 18 mg/kg for ethylbenzene.
  - Groundwater impact at a maximum concentration of 1,800 micrograms per liter (ug/L) for TVPH; 280 ug/L for benzene; 7.7 ug/L for toluene; 52 ug/L for xylenes; 62 ug/L for ethylbenzene; 13 ug/L for methyl tert-butyl ether (MTBE); and 29 ug/L for tert-butanol (TBA).
- Remediation and delineation investigations for the STR continued through 2012, when the Orange County Health Care Agency – Public Health Services – Environmental Health (OCHCA) department issued a Notification of Pre-Closure Requirements for the STR. The notification advised that the release would receive closure after certification that all monitoring well destruction and waste disposal information was received.
- On February 11, 2013 a Remedial Action Completion Certification was issued by the OCHCA for the STR, closing the LUST incident, citing the following reasons for closure.
  - The USTs were removed;
  - The site is located in a light industrial area with no plans for redevelopment; and
  - The concentrations of constituents in groundwater and soil with respect to distance to receptors and groundwater production wells indicate that there is not a risk to human health.

Los Angeles Times – North Tank Release (NTR) Summary

- A release from the three gasoline USTs in the northern tank farm (central-western portion of the site, in 1990. In 1992 the USTs were removed from the ground and discolored material (pea-gravel) was reported in the UST tank bed and petroleum impacted soil was identified during sampling resulting in a LUST incident.
- Additional assessment activities were conducted from 1992 through 1995 and free product as a result of the release was identified. A bailing system and later an SVE were installed at the site to remove free product resulting in the removal of 27,042 pounds of hydrocarbons from the area.
- Investigations and remediation in relation to the NTR have taken place since the 1990s and soil and groundwater impact from the NTR has been determined to extend beyond the western site boundary properties adjacent to the west and

southwest of the site. The west adjacent property is a baseball field while the southwest adjacent property is an office building.

- The most recent analytical data available for investigation of the NTR (4th Quarter 2014 Groundwater Monitoring and Remedial Progress Report) identified the following:
  - Groundwater impact at a maximum concentration of TVPH 9,700 ug/L in an off-site well to the southwest; benzene at 1,800 ug/L in an off-site well to the southwest; toluene at 290 ug/L in an off-site well to the west; ethylbenzene at 1,100 ug/L in an off-site well to the west; xylenes at 95 ug/L in an off-site well to the west; MTBE at 35 ug/L in an on-site well; and TBA at 180 in an off-site well to the southwest.
  - Two SVE systems continue to operate at the site (although the remedial extraction system was nonoperational during the fourth quarter of 2014) and quarterly groundwater sampling continues in an attempt to further remediate the LUST incident and receive regulatory closure.

3.5 City Directories and Other Historical Sources

RPS GaiaTech attempted to review historical city directories at the Los Angeles Public Library and the Orange County Library; however, directories were not available for RPS GaiaTech's review. RPS GaiaTech requested historical city directory listings EDR; however, additional information had not been received at the time of issuance of this report.

4.0 SURROUNDING PROPERTIES

4.1 Surrounding Property Overview

The site area was largely undeveloped or used for agricultural and rural residential development from at least 1896 until the 1950s when a rail spur was developed to the west. By the 1960s industrial development began to the north and northwest while residential development expanded to the south and southwest. During the 1970s and 1980s commercial and light industrial development began and expanded to the north, northeast, northwest and west. By 1987 the former industrial facility to the north was razed and replaced with commercial structures. The site area was developed to its current relative configuration by 2003, after the constructive of an additional commercial facility (currently operated by Ikea) to the south. No historical site area operations with the potential for environmental impact to the site were identified.

4.2 Area Observations

The use of the properties surrounding the site is summarized below.

North: The site is bordered to the north by Sunflower Avenue and then a Codan facility (likely offices or warehouse) followed by a commercial/ warehouse complex.

East: The site is bordered to the east an Emulex Corporation (manufacturing) facility and then Susan Street followed by residential development and a parking lot.

South: The site is bordered to the south by South Coast Drive followed by an Ikea shopping center.

West: The site is bordered to the west by (from north to south) National University a baseball field (Harbor Ball Park), Triple A Automotive Club and then and office building. Farther west is Harbor Boulevard followed by commercial development and a school.

The neighboring properties generally appear well-maintained. No obvious potential for environmental impacts to the site from current uses of surrounding properties was identified. Area facilities identified in the environmental database report reviewed are discussed further in Section 4.4.

4.3 Historical Photographs and Maps

RPS GaiaTech reviewed readily available historical topographic maps and aerial photographs obtained from the sources listed in Section 8.0. According to EDR, no Sanborn fire insurance maps were available for the site area. The information from these sources is summarized below.

Period	Description
1896 Topo 1899 Topo 1901 Topo 1902 Topo 1905 Topo 1907 Topo 1911 Topo 1915 Topo 1920 Topo 1925 Topo 1930 Topo 1932 Topo 1938 Aerial 1939 Topo 1945 Topo 1946 Topo	Streets are present to the north and south and scattered residential development is visible throughout the area.
1947 Aerial 1951 Topo 1953 Aerial 1958 Topo	A railroad spur is present to the west.
1963 Aerial 1968 Topo	An industrial facility is present to the north (across Sunflower Avenue). An additional light industrial or industrial structure is present to the northwest. Residential development is present to the far south and southwest.
1972 Aerial 1975 Topo 1977 Topo	Light industrial, industrial or commercial development has expanded to the west and far north. The industrial facility to the north has expanded. The highway to the south is present.
1977 Aerial 1981 Topo 1982 Topo	Light industrial, industrial or commercial development has expanded to the far north.
1987 Aerial	The industrial plant to the north appears to have been razed and replaced with a commercial structure. Light industrial or commercial development has expanded to the northeast, northwest and southwest.
1995 Aerial 2002 Aerial	The north and west adjacent facilities are present. The immediate site area (properties adjacent to the site) appears developed to its current relative configuration with the exception of the baseball field to the west and the manufacturing facility to the east.

Period	Description
2003 Aerial 2004 Aerial 2005 Aerial 2006 Aerial 2007 Aerial 2009 Aerial 2010 Aerial 2011 Aerial	The light industrial building to the east (current Emulex) and commercial building to the south (currently Ikea) are present and the site area appears developed to its current relative configuration with the exception of the baseball field to the west.
2013 Aerial 2014 Aerial	The baseball field to the west is present and the site area appears developed to its current relative configuration.

4.4 Environmental Database Review

RPS GaiaTech reviewed the database search report discussed in Section 3.3 to evaluate the potential for surrounding properties to impact the site. This evaluation also included an assessment of vapor migration using available historical, subsurface, and regulatory information, as well as published regulatory guidance, industry standards (including critical screening distances) and professional experience.

Detailed descriptions of the databases that were searched and definitions of database acronyms are included within the Executive Summary Section and the Government Records Section of the database search report included as Appendix D. Relevant listings for surrounding properties are discussed below. Note that groundwater gradient discussions presented in this section are based on information described in Section 2.3.

- AMF Voit at 3801 s Harbor, adjacent to the northwest of the site, was identified in several databases including the CERCLIST-NFRAP, HIST Cortese and LUST databases. The CERCLIS-NFRAP database indicated that the facility underwent an assessment in 1990, was determined not to qualify for the NPL and was deferred to RCRA. The CORRACTS database indicated that the facility was a tire manufacturer and was added to the corrective action list in 1991 and assigned a medium priority. The LUST database indicated that a release was reported in 1987 and included impact to groundwater from solvents. Remediation in relation to the release began in 1987 and the release was issued closure by 1995. Little additional information was included in the database report; however, GeoTracker database records confirmed that the release was issued closure in June of 1995. Given the LUST incident received closure in 1995 the potential for impact to the site is reduced.

- Aviation Equipment at 1571 MacArthur Boulevard, approximately 2,400 feet north-northwest of the site, was identified in the Orange Co. Industrial Sites database for a release of halogenated solvents and organic compounds with little additional information provided. The release was issued closure in 2009; therefore, given the

distance of the facility from the site and the closed status of the release, the potential for impact to the site appears unlikely.

- South Coast Circuits Inc. at 3506 West Lake Center Drive, approximately 850 feet north of the site, was identified in the RCRA-LQG and ENVIROSTOR databases. The database report indicated that this facility has generated corrosive waste, arsenic, chromium, and lead from plating operations since at least 1997. The facility has received violations in relation to its RCRA status; however, each appears to have been minor. No indication of spills or releases from this facility were identified. Given the nature of these database listings and the distance of this facility relative to the site the potential for impact to the site appears low.

Although other facilities were identified in the database search report, due to gradient, status, distance and/or the type of the listing, no additional properties of potential environmental significance were identified.

4.5 Other Environmental and Historical Sources

a) Information from Site Representatives

Aside from impact as a result of the historical LUST incidents at the site, site representatives were not aware of potential or known environmental impacts associated with the neighboring properties.

b) City Directories

In the city directory review discussed in Section 3.5 city directories were not available for RPS GaiaTech's review.

c) Other Sources

Additional information pertaining to adjacent properties is discussed elsewhere in relevant section of this report, including Section 4.4. Based on RPS GaiaTech's review, no database listings that warrant additional scrutiny (such as the review of agency documentation) were identified in connection with neighboring properties.

5.0 SITE INSPECTION

5.1 Materials Use and Storage

Based on information provided by site representatives and RPS GaiaTech's field observations, no chemicals are used at the site and only small amounts (retail-sized containers) of janitorial products are stored at the site. The concrete floors within former the chemical storage areas were observed to be in good condition with no indications of cracking or deterioration.

Several floor drains were observed within the building, primarily in AST containment areas, in a plate-making room and in janitorial closets. According to site representatives, the floor drains in the AST containment and plate-making room discharge to an OWS while the janitorial floor drains (used for mop water) discharge to the sanitary sewer system. The floor drains and historical wastewater discharges are discussed further in Section 3.1.

Minor staining (ink and/or oil) was observed on the concrete floor inside the printing and support areas of the building; however, the concrete was observed to be in good condition with no evidence of cracks, breaks, or other direct conduits to the subsurface. As a result, this minor staining is not likely to represent a potential for environmental impact to the site.

Aside from those previously discussed, the site representatives were not aware of spills or releases at the site. RPS GaiaTech did not observe obvious visual indications of spills or releases, with the exception of the staining elsewhere in this report.

5.2 Storage Tanks

a) Underground Storage Tanks (USTs)

One 12,000-gallon diesel UST is located to the east of the building and is used as a fueling source for a generator located within the building. Site representative indicated that the UST was installed in 1989. The most recent Permit to Operate the UST (2015) indicated that the UST is double-walled and equipped with continuous interstitial monitoring. Site representatives provided a copy of a Consent Order issued by the OCHCA (aka OC CUPA) to the site in relation to the UST.

The Consent Order was filed to close compliance-related UST allegations and implement deadlines for corrective action as well as a penalty ($80,000 with the potential to have $35,000 waived). Compliance activities included annual monitoring system certification; obtaining a permit; secondary containment testing; and the submittal of information to the CUPA by March of 2015. The order indicated that a Hazardous Waste Specialist conducted a follow-up inspection of the facility and verified that the above corrective

actions were taken in relation to the UST. Site representatives provided copies of a Spill Bucket Testing Report Form (July 2014) and Secondary Containment Testing Report Form (January 2015). These reports indicated that the UST piping, pipe sump, fill sump spill bucket and piping sump passed testing in 2014/2015.

Given the age of the UST there is a potential for an unidentified release from this UST to have resulted in environmental impact to the site; however, releases from the UST were not identified in recent tank tightness tests conducted.

Aside from the USTs discussed in Section 3, site representatives were not aware of other historical USTs, and no evidence of additional historical USTs was identified through RPS GaiaTech's review of available historical information or during the site inspection.

b) Aboveground Storage Tanks (ASTs)

One approximately 1,500-gallon propane AST (empty) was located on the southern portion of the site. Site representativeness indicated that the AST had been out of service and empty since at least 2012. No staining was observed on the concrete beneath or surrounding the AST.

Several historical ASTs were identified in connection with site operations, primarily ASTs formerly containing inks and printing-related materials. Site representatives indicated that the ASTs were removed in 2012 and 2013. RPS GaiaTech observed minor areas of staining in indoor secondary containment areas for ASTs. Some of the secondary containment areas were equipped with floor drains. Site representatives indicated that the drains were in line with an oil water separator, discussed in Section 5.5). Otherwise, the concrete floors within the AST storage areas were observed to be in good condition with no indications of significant cracking or deterioration.

In addition, according to site representatives a secondary containment area for former ink storage ASTs (also removed from the site) to the east of the building is equipped with underground piping that was used to move ink from the ASTs indoors. The age and integrity of associated subgrade piping could not be confirmed by RPS GaiaTech.

5.3 Hazardous Waste

Based on RPS GaiaTech's observations and information from site representatives, hazardous waste is not currently generated at the site. Historical hazardous waste generation is discussed in Section 3.3.

RPS GaiaTech did not identify evidence of on-site disposal of hazardous wastes.

5.4 Non-Hazardous Waste

Based on RPS GaiaTech's observations and information from site representatives, waste is not currently generated at the site. RPS GaiaTech did not identify evidence of on-site waste disposal.

5.5 Wastewater Discharges

Sanitary wastewater is discharged to the municipal sewer system. No process wastewater discharges are currently generated at the site.

Historical wastewater discharges are discussed further in Section 3.1.

5.6 Storm Water Discharges

Storm water runoff sheet flows to paved parking areas outside the building and then to adjacent properties. No stained or distressed vegetation was noted and no indication of impact to storm water was identified.

5.7 Air Emissions

RPS GaiaTech did not identify obvious air emission sources with a potential to physically impact the site.

5.8 Polychlorinated Biphenyls (PCBs)

Two pad-mounted transformers were observed at the site. According to site representatives, the transformers are owned by the local utility company. The transformers were not labeled as to PCB content but appeared in good condition with no evidence of leaks or spills. In addition, one passenger and two freight elevators are located at the site. The elevator reservoir, located in a closet within the building, was not labelled but appeared in good condition with no evidence of releases/staining. RPS GaiaTech did not observe other equipment likely to contain PCBs.

5.9 Asbestos-Containing Materials (ACMs)

Site representatives were not aware of asbestos surveys for the site and none were identified in available site records. RPS GaiaTech identified suspect ACMs in the form of drywall and associated joint compound, vinyl floor tile and associated mastic, and drop ceiling tiles in the building. It should be noted that additional suspect ACMs may be present in inaccessible areas of the site structure, such as above fixed ceilings, behind

walls or in roofing systems, and were therefore not observed during the site reconnaissance. The suspect ACMs that were observed were in good condition. The building was constructed before asbestos stopped being commonly used in the construction industry; therefore, there is a potential for these materials to contain asbestos.

Because the original portions of the building were constructed before 1981, and due to the presence of vinyl flooring in the shop area, the OSHA regulations regarding management of presumed ACM (PACM) in building materials applies. The Former Los Angeles Times Facility does have a management program in place to address these regulations.

6.0 FINDINGS AND CONCLUSIONS

Environmental and other conditions associated with the site are characterized as RECs, CRECs, HRECs, de minimis conditions, noteworthy issues, or other issues as defined in Section 1.1 of this report. Any exceptions to, or deletions from, this practice are described in Section 1.2 and 1.3 of this report if not identified below.

This assessment revealed evidence of the following REC in connection with the site:

- **Current Leaking Underground Storage Tank (LUST) Incident:** A petroleum release from USTs in a fueling area on the central western portion of the site was discovered in the early 1990s that resulted in the removal of three 12,000-gallon gasoline USTs and the opening of a LUST case. This release is known as the Los Angeles Times – Northern Tank Release (NTR). Investigations and remediation in relation to the NTR is ongoing and soil and groundwater impact from the release has been determined to extend beyond the western site boundary to properties adjacent to the west and southwest of the site. The most recent analytical data available for the NTR (4th Quarter 2014 Groundwater Monitoring and Remedial Progress Report) identified maximum concentration of total petroleum hydrocarbons – gasoline range (TVPH) at 9,700 micrograms per liter (ug/L); benzene at 1,800 ug/L; toluene at 290 ug/L; ethylbenzene at 1,100 ug/L and other petroleum constituents at elevated concentrations in groundwater. Remediation including soil vapor extraction and quarterly groundwater sampling continues in relation to the NTR.

This assessment identified the following CREC in connection with the site:

- **Historical LUST Incidents:** Two additional petroleum LUST incidents have occurred at the site, one was identified in 1988 resulting in the excavation of soil (date unknown). This release received regulatory closure in September of 1990. Little additional information regarding this release was identified in available records reviewed. The other closed LUST incident was discovered in September of 1990 on the southern portion of the site in the area of three 12,000-gallon petroleum USTs and a dispenser island (separate USTs from the NTR release discussed above). These USTs were removed from the ground in November 1995 and this release is identified as the Los Angeles Times – South Tank Release (STR). Investigation and remediation in relation to this incident continued through the 2000s. The most recent analytical data for the STR identified residual impact to soil at a maximum concentration of 850 milligrams per kilogram (mg/kg) for TVPH; 0.900 mg/kg for benzene; 2.1 mg/kg for toluene; 66 mg/kg for xylenes; and 18 mg/kg for ethylbenzene, among others. The most recent groundwater analytical data (2011) detected elevated concentrations of petroleum constituents including TPVH at a maximum concentration of 1,800 micrograms per liter (ug/L); benzene at 280 ug/L; toluene at 7.7 ug/L; xylenes at 52 ug/L; ethylbenzene at 62 ug/L, among others. In 2013, the OCHCA issued closure for the STR citing that the extent of the release had been delineated (impacts were limited to the site) and the potential for

impact to human health appeared unlikely. Residual impact as a result of these releases likely remains at the site; however, these releases have been closed and the potential for further regulatory scrutiny appears low.

7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312, and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared by:

Jennifer Xavier
Senior Environmental Consultant

Technical Review and Concurrence by:

Kristen M. Magee
Principal Consultant
Environmental Professional

8.0 REFERENCES

The following sources were used in conducting the Phase I ESA detailed in this report. Where information obtained from these sources was determined to be useful by the Environmental Professional, it is summarized in the body of this report.

Agency/Company	Person Contacted	Telephone	Regarding
Former Los Angeles Times Facility Property Manager	Loraine Drown	Not provided	General site information
Tribune Real Estate (user representative	Mr. Carl Cade	323.717.8148	General site information
Orange County Assessor Office 625 North Ross Street Santa Ana, CA	Office representative On-line records database	714.834.2727	Property information
Orange County Clerk – Recorder 12 Civic Center Plaza Santa Ana, CA	Office representative	714.834.2500	Deed information
City of Costa Mesa Building Department 77 Fair Drive Costa Mesa, CA 92626	Counter Representative	714.754.5273	Historical building permits, certificates of occupancy, utility connection information
Costa Mesa Fire Department 77 Fair Drive Costa Mesa, CA 92626	FOIA Officer	714.327.7402	USTs, AST, hazardous material storage,
Orange County Health Agency Environmental Health 1241 East Dyer Road Santa Ana, CA	Office representative	714.433.6000	Hazardous Materials, USTs, ASTs, Spills, and Responses requests for the site.
California Department of Toxic Substances Control 5796 Corporate Avenue Cypress, CA 90630-4732	DTSC online information search	714.484.5300	USTs, spills, hazardous material releases
Regional Water Quality Control Board Santa Ana 3737 Main Street , Suite 500 Riverside, California	Online records	http://geotracker.waterboards.ca.gov	USTs, spills, hazardous material releases, water quality.
Environmental Data Resources 440 Wheelers Farms Road Milford, CT	Account representative	800.241.6497	Environmental Database Search Report, aerial photographs, city directory report.

Agency/Company	Person Contacted	Telephone	Regarding
Internet resources	N/A	N/A	Aerial photographs (Google Earth and historicaerials.com); environmental database searches (www.rtk.net, and www.epa.gov/echo/, and www.epa.gov/enviro)

9.0 LIMITATIONS, EXCEPTIONS, AND SIGNIFICANT ASSUMPTIONS

RPS GaiaTech performed this Phase I ESA on behalf of and exclusively for Tribune Media Company. This report and the findings shall not be relied upon, in whole or in part, by any other party, except by or with the express consent of RPS GaiaTech and an authorized representative of Tribune Media Company.

This assessment is subject to the stated limitations of ASTM-13 or the federal AAI standard, as applicable, and other qualifications as described within the report. Any reliance upon this report by third parties beyond its intended purpose shall be at the parties' sole risk. In the event reliance on this report is extended to additional parties, these parties may become "users" as defined by ASTM-13 and should independently confirm that they have addressed the User requirements outlined in ASTM-13.

This review was based on the time frame, budget and scope of the project. The review was intended to identify issues of relevance to the contemplated transaction that this report was prepared to support.

This assessment was conducted by or under the supervision of an individual(s) meeting the definition of an Environmental Professional under ASTM-13 and the federal AAI standard. Tasks not performed by an Environmental Professional were performed by individuals qualified based on education, training and experience to conduct such tasks for a property of the nature, history and setting of the site.

ASTM defines "data gaps" as an inability to obtain information required for the review despite good faith efforts (such as the lack of historical information back to 1940 or to the first developed use of the property [whichever is earlier]) or as an incompleteness in any of the activities required for the review (such as limited site accessibility or the inability to interview a key site representative). Unless otherwise described in the body of this report, if any one or more of the standard sources under ASTM-13 was not reviewed, this was due to information from the source not being readily available or a determination by the Environmental Professional that the standard source was not likely to be useful. Similarly, unless otherwise noted in this report, an incompleteness in connection with the review was determined not to affect the Environmental Professional's ability to form conclusions regarding the site.

Unless otherwise indicated herein, RPS GaiaTech was not made aware of any specialized knowledge of the landowner or client, any relationship of the purchase price to the fair market value of the site that may be indicative of an environmental concern, or any environmental liens or other activity and use limitations known by the client or user of the report. In the absence of this information, RPS GaiaTech is not able to form conclusions about the environmental condition of the site that may otherwise have been evident had any such information been made available. Unless otherwise indicated herein, the reason for performing this Phase I ESA is assumed to be (at least in part) to qualify for the innocent landowner, contiguous property owner,

or bona fide prospective purchaser liability defense under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

It should be noted that past agricultural use is considered a developed use under ASTM; any past use of the site for agricultural purposes suggests a potential for residual agricultural chemicals. Unless otherwise stated in this report, no evidence or reports of chemical spills or misuses of agricultural chemicals were identified.

During this Phase I ESA, RPS GaiaTech relied upon the information provided by site representatives, regulatory officials, and other informed individuals and reports and documents generated by other consultants. RPS GaiaTech has assumed, where reasonable, that the information reviewed is true and accurate but assumes no responsibility or liability for its accuracy or completeness.

RPS GaiaTech's site observations are of the conditions observed at the time of the assessment. RPS GaiaTech did not observe areas of the site or features of the site where that inspection would have interfered with operations. Additionally, RPS GaiaTech did not enter confined spaces. Pits, trenches or other subsurface features were inspected as thoroughly as possible from access points, vault openings, and through grated drains/lids. RPS GaiaTech did not test the integrity or engineering adequacy of subsurface pits, trenches, sewers, or containment features, aboveground containment systems or tanks. RPS GaiaTech's observation of such equipment/systems is limited to visual evidence of releases or significant deterioration.

RPS GaiaTech reviewed an environmental database search report. RPS GaiaTech's conclusions based on the search report are limited to the accuracy of that report. To the extent practicable, RPS GaiaTech's field observations were used to verify the information or identify errors and inconsistencies in the search report regarding the listed facilities in the immediate vicinity of the site, consistent with the federal AAI standard.

RPS GaiaTech evaluates environmental database listings and the potential for additional documentation maintained by regulatory agencies to materially alter the Environmental Professional's opinion with regard to the environmental condition of the site. Except where otherwise described in this report, the pursuit of additional documentation either through regulatory agency file reviews or requests for additional information from the site operator, site owner or the owners/operators of nearby properties, was determined to be unnecessary as it would not be expected to alter the findings of the assessment.

Conclusions provided with regard to subsurface soil and groundwater impacts are limited to those that can be formed based on a non-intrusive investigation. RPS GaiaTech has considered all the information collected during this assessment to ascertain the potential presence of a release or threatened release of hazardous substances at the property. Based on the totality of information, RPS GaiaTech has assessed whether or not an obvious conclusion may be drawn that there are conditions indicative of a release or threatened release, and considered whether the parties should be able to detect the release by conducting a subsurface investigation. Where RPS GaiaTech concludes that the potential for impact is present, it should be understood that such

impact can only be identified or ruled out through subsurface investigation. The absence of environmental hazards in the subsurface cannot be guaranteed based on conditions observed on the surface. The scope of this project did not include subsurface soil or groundwater sampling.

RPS GaiaTech evaluates the potential for the presence or likely presence of COC vapors in the subsurface of the site using our professional judgment and evaluation of the available information and may use portions of ASTM E2600-10 as a guide. Note that this evaluation is not a full Vapor Encroachment Screen (VES) pursuant to ASTM E2600-10. The vapor evaluation is not exhaustive and cannot wholly eliminate uncertainty regarding the presence or potential presence of COC vapors in the subsurface of the site.

The estimated groundwater gradients (flow directions) referenced throughout this report are based on field observations of the topography of the area, review of topographic map(s), information in the database search report, and other information as available. It should be noted that groundwater flow directions can be highly variable in neighboring areas, and can be influenced by factors such as water production wells or re-grading or development in the area.

The review of available wetlands information, if performed, was intended for purposes of evaluating risks associated with potential on-site impacts and does not represent a jurisdictional wetlands delineation. A certified wetlands delineation may be necessary prior to further site development.

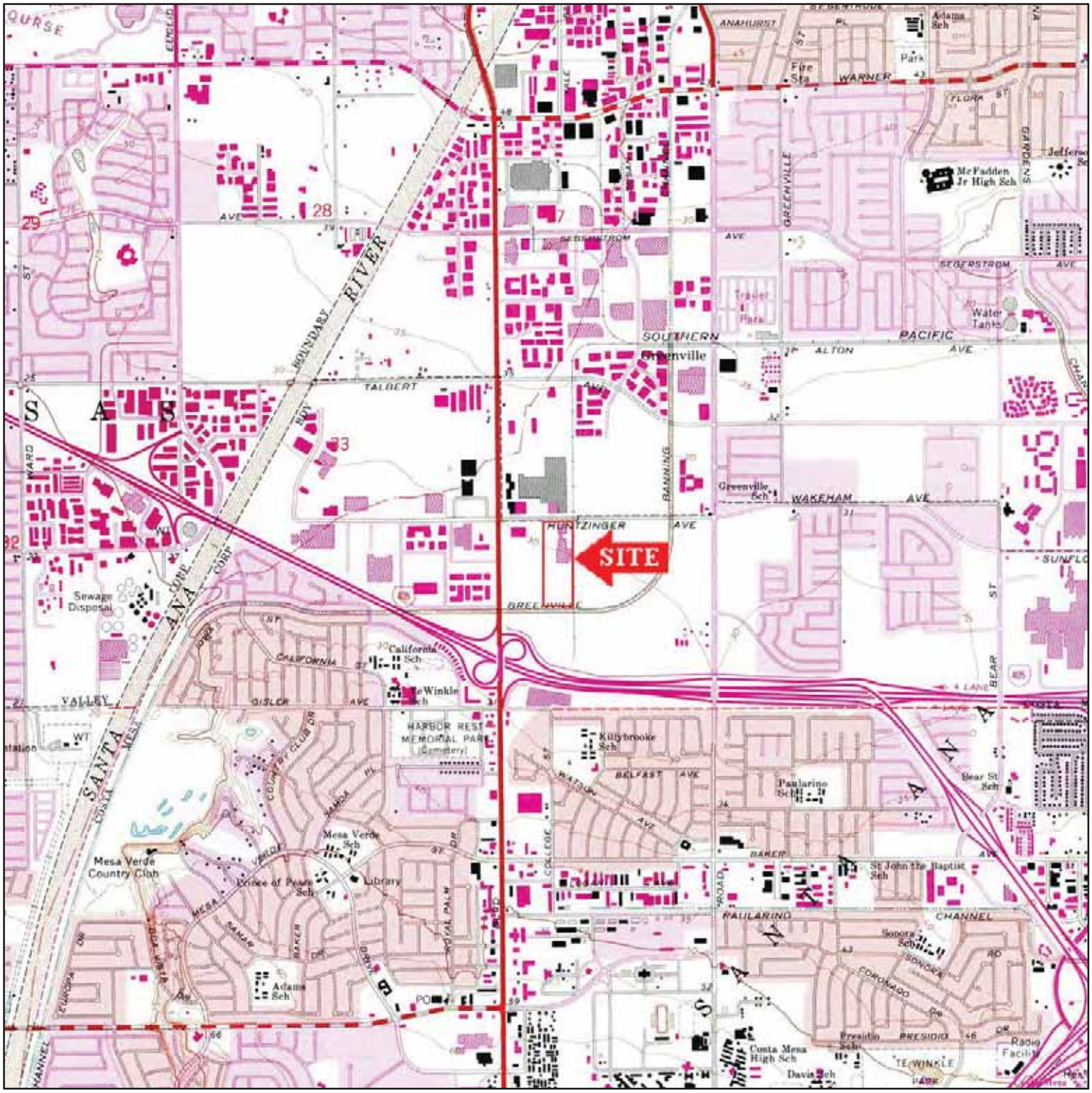
If conducted as part of this review, the visual inspection for potential ACM included materials that have historically been shown to have a potential to contain asbestos. Unless otherwise noted in this report, RPS GaiaTech's review of ACM is limited to interior building materials. The limited visual survey for potential ACM is intended to provide an indication of the potential for significant environmental issues associated with ACM and should not be regarded as a comprehensive survey for demolition or other purposes. Testing should generally be conducted to identify regulated ACM prior to remodeling or demolition of the site structures.

The scope of this report is limited to matters expressly covered. Implementation or use of the recommendations, findings or conclusions of this report does not preclude the potential for present or future environmental liability or ensure the fulfillment of a property owner's obligation to provide full environmental disclosure in accordance with any local, state or federal laws.

Appendix A

Site Maps and Diagrams

- Site Location Map
- Site Layout and Area Map



Scale 1:24 000
Contour Interval 5 Feet

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

Quadrangle Location

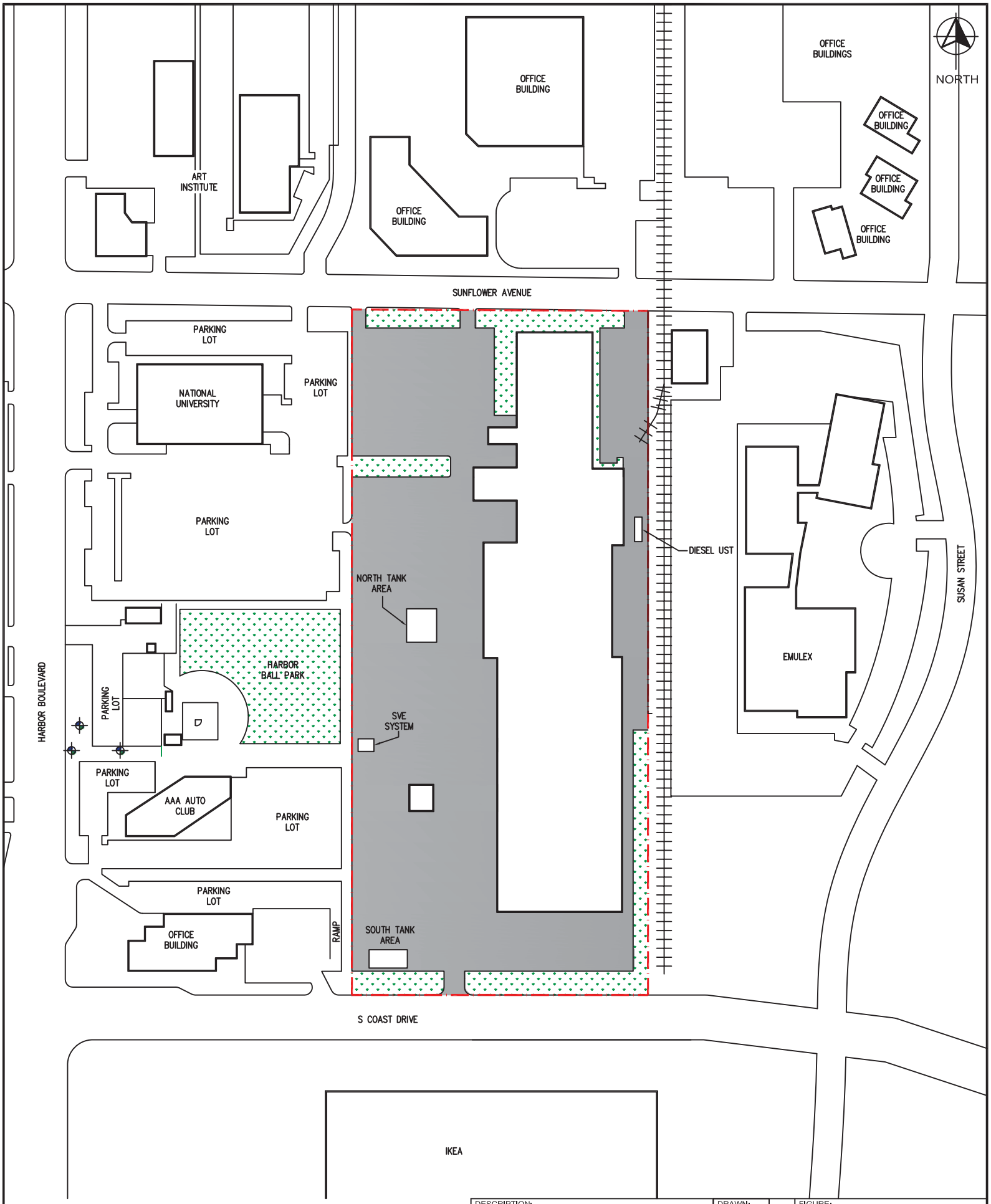
UNITED STATES GEOLOGICAL SURVEY
DEPARTMENT OF THE INTERIOR/USGS
NEWPORT BEACH QUADRANGLE
CALIFORNIA-ORANGE COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)

1965
PHOTOREVISED 1981

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

Site Location Map

RPS GaiaTech



LEGEND

SITE BOUNDARY

DESCRIPTION:	DRAWN:	FILE:	FIGURE:
FORMER LOS ANGELES TIMES FACILITY 1375 SUNFLOWER AVENUE COSTA MESA ,CA	JB	158195.611.00	SITE LAYOUT AND AREA MAP
	SCALE: NTS		RPS GaiaTech
	DATE: 06/23/15		

Appendix B

Site Photographs

Photo 1: General view of building

Photo 2: General view of grease trap access point

Photo 3: General view of area of UST

Photo 4: General view of rail spur and eastern side of building

Photo 5: General view of former AST containment area (east of building)

Photo 6: General view of boiler room

Photo 7: General view of former printing area

Photo •: General view of former AST storage area in the building

Photo 9: General view of floor drain in former plating room

Photo 10: General view of canopy associated with former north tank area

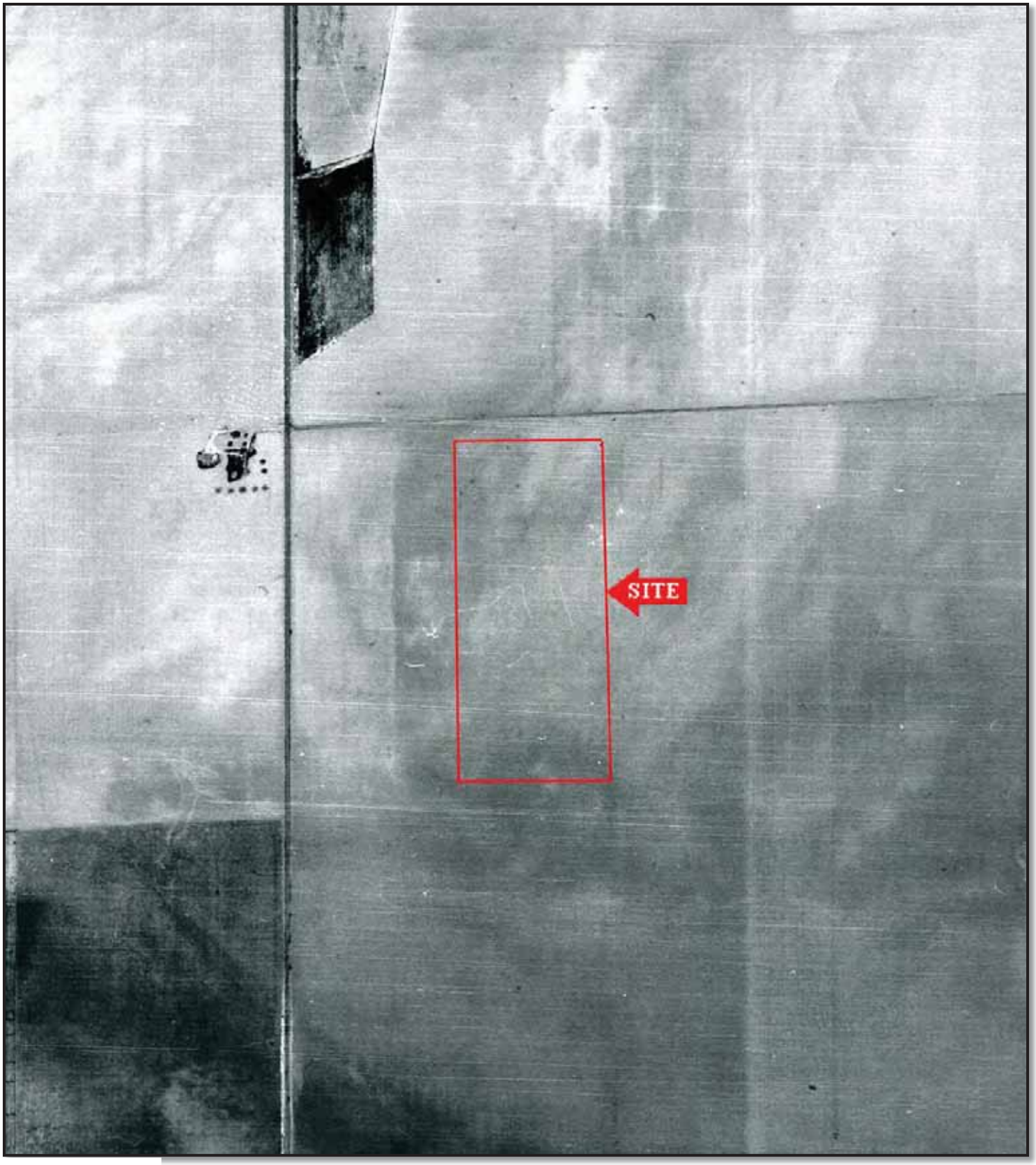
Photo 11: General view of SVE system

Photo 12: General view of monitoring wells on central-western portion of site

Appendix C

Historical Documentation

- Aerial Photographs
- Previous Environmental Reports (text only)



Scale: 1” = 500’

Aerial Photograph

1938

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

Scale: 1” = 500’

Aerial Photograph

1953

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

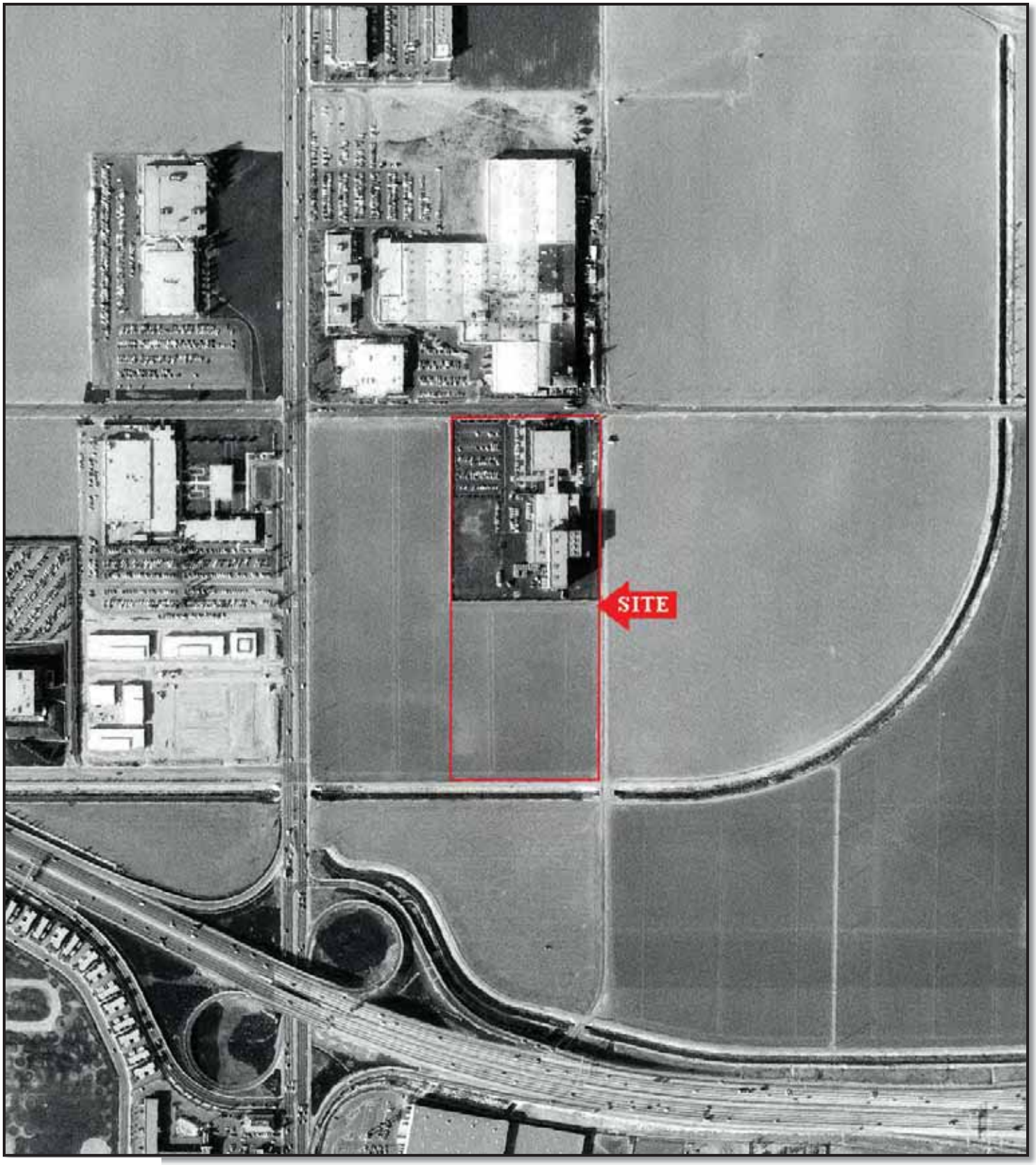
Scale: 1" = 500'

Aerial Photograph

1963

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech



Scale: 1" = 500'

Aerial Photograph

1972

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

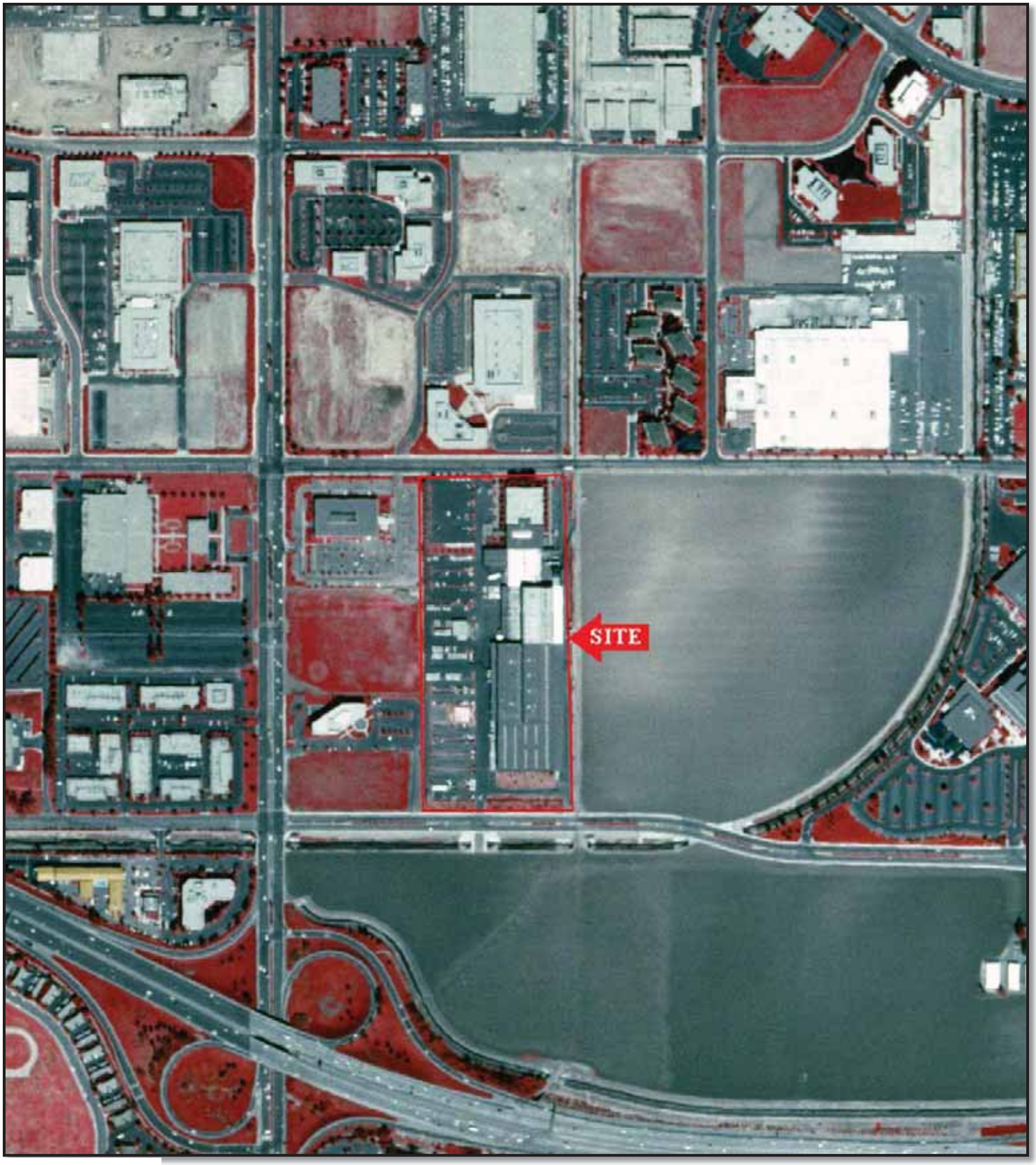
Scale: 1" = 500'

Aerial Photograph

1977

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech



Scale: 1" = 500'

Aerial Photograph

1987

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

Scale: 1" = 500'

Aerial Photograph

1990

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

Scale: 1" = 500'

Aerial Photograph

1995

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

Scale: 1" = 500'

Aerial Photograph

2012

Former Los Angeles Times Facility
Costa Mesa, California
Project No. 158195.611.00

RPS GaiaTech

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH

MARK A. REFOWITZ
DIRECTOR

DAVID M. SOULELES, MPH
DEPUTY AGENCY DIRECTOR

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1241 E. DYER RD., #120
SANTA ANA, CA 92705-5611

TELEPHONE: (714) 433-6000
FAX: (714) 754-1732
E-MAIL: ehealth@ochca.com

Excellence
Integrity
Service

February 11, 2013

Mark Anderson
Los Angeles Times
202 West First Street
Los Angeles, CA 90012

Subject: Remedial Action Completion Certification

Re: Los Angeles Times – South Tank Area
1375 Sunflower Avenue
Costa Mesa, California
OCHCA Case #91UT064

Dear Mr. Anderson:

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required. This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or,

- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

Please contact Denamarie Baker at (714) 433-6255 if you have any questions regarding this matter.

Sincerely,

Richard Sanchez, REHS, MPH
Director
Environmental Health

Attachment: Case Closure Summary

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board (electronic copy)
Larry Honeybourne, Water Quality Section, Environmental Health (electronic copy)
UST Cleanup Fund Manger, State Water Resources Control Board (electronic copy)
Mohammad Estiri, Eco & Associates (electronic copy)

Case Closure Summary

Leaking Underground Fuel Tank Program

I. Agency Information

Date: **Aug. 10, 2012**

Agency Name: **Orange County Health Care Agency**	Address: **1241 Dyer Road, Ste. 120**
City/State/Zip: **Santa Ana, CA 92705**	Phone: **(714) 433-6254**
Responsible staff person: **Denamarie Baker**	Title: **Hazardous Waste Specialist**

II. Case Information

Site Facility Name: **Los Angeles Times – South UST Area**		
Site Facility Address: **1375 Sunflower Avenue, Costa Mesa, CA**		
Geotracker Case No.: **T0605999595**	Local Case No.: **91UT064**	RO Case No.: **RO0002469**
URF Filing Date:	SWEEPS No.	
Responsible Party	Address	Phone Number
Mark Anderson **Los Angeles Times**	**202 West First Street** **Los Angeles, CA 90012**	**(213) 237-5068**

Tank No	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1, 2, 3	**12,000**	**Gasoline**	**Removed**	**November 1995**

III. Release and Site Characterization Information

Cause and type of release: **Underground storage tank system**		
Site characterization complete? **Yes**	Date approved by oversight agency: **June 12, 2007**	
Monitoring wells Installed? **Yes**	Number: **14**	Proper screened interval? **Yes**
Highest GW depth BGS: **13.82**	Lowest depth: **23.77**	Flow direction: **southwest**
Most sensitive current use: **Municipal, Agricultural, and Industrial**		
Are drinking water wells affected? **No**	Aquifer name:	
Is surface water affected? **No**	Nearest/affected SW name: **N/A**	
Off-site beneficial use impacts (addresses/locations): **None**		
Report(s) on file? **Yes**	Where is report(s) filed? **OCHCA and Geotracker**	

Treatment and Disposal of Affected Material

Material	Amount (include Units)	Action (treatment or disposal/destination)	Date
Tanks	**3, 12,000-gallon**	**Glenn F. Barton in Long Beach, CA**	**11-15-95**
Liquid (Oil & Water)	**250 gallons**	**Demenno/Kerdoon in Compton, CA**	**11-13-95**

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official file.

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Date: **Aug. 10, 2012** Case #: **91UT064**

III. Release and Site Characterization Information (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (mg/kg)		Water (µg/L)		Contaminant	Soil (mg/kg)		Water (µg/L)	
	Before	After	Before	After		Before	After	Before	After
TPHd	NA	NA	NA	NA	Ethylbenzene	270	16	2,400	62
TPHg	13,000	850	77,000	1,800	MTBE	NA	NA	97	13
TRPH	92	NA	NA	NA	TBA	NA	NA	83	29
Benzene	210	0.900	16,000	280	Naphthalene	NA	NA	NA	400
Toluene	1,000	2.1	9,700	7.7	1,2,4-TMB	NA	NA	NA	16
Xylenes	1,500	66	7,500	52	1,3,5-TMB	NA	NA	NA	9.7

Comments (Depth of Remediation, etc.):

The Site is used for newspaper publishing and distribution and there are no plans that indicate any change in land use. The Site consists of a large distribution (and formerly printing) warehouse located on the eastern portion of the property, paved parking lots on the western portion of the property and several smaller buildings such as storage facilities and guard shacks.

In June 1990, five hand auger borings (HA-1 through HA-5) were advanced near the southwestern corner of the storage building located on the southwestern portion of the site to investigate the potential dumping of waste oil in that area. Soil sample analytical results indicated a maximum of 92 milligrams per kilogram (mg/kg) of total recoverable petroleum hydrocarbons (TRPH) and 820 mg/kg of total petroleum hydrocarbons as gasoline (TPHg). The samples were not analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX, collectively).

In September 1990, three borings (BH-1, BH-3, and BH-4) were drilled and four groundwater monitoring wells (MW-2, MW-5, MW-5A, and MW-6) were installed at the site. TPHg was not detected in the samples collected from the borings. Only one of the soil samples was analyzed for BTEX constituents. Soil samples collected during the well installation indicated maximum TPHg and benzene concentrations of 810 and 1.2 mg/kg, respectively.

To further assess the lateral and vertical extents of impacted groundwater, six additional groundwater monitoring wells (MW-7 through MW-12) were installed in October 1991. The maximum TPHg and benzene concentrations detected were: 13,000 and 210 mg/kg, respectively.

In August 1992, six additional borings were advanced (MW-13, MW-13A, MW-14, MW-15, MW-16, and EB-2). Four of the borings were subsequently converted to groundwater monitoring wells (MW-13A, MW-14, MW-15 and MW-16). A well was not installed in MW-13, despite the use of the MW designation. The maximum TPHg and benzene concentrations detected were 200 and 1.30 mg/kg, respectively.

Three, 12,000-gallon gasoline underground storage tanks (UST's), dispenser island and associated piping were removed from the site on November 13, 1995. A two-foot thick concrete tank tie-down pad was present at approximately 12 feet below ground surface (bgs). Consequently, soil samples were not collected from the bottom of the tank excavation. One soil sample (PI1-3') was collected from approximately three feet beneath the former dispenser and one soil sample (PP1-3') was collected from approximately three feet beneath the former product piping. The maximum TPHg concentration, 3.3 mg/kg, and the maximum benzene concentration, 0.0375 mg/kg, were detected in sample PP1-3'.

In February 1996, two additional groundwater monitoring wells (MW-30 and MW-7A) were installed at the site. MW-7A was installed to replace MW-7 which was destroyed prior to removal of the UST's in 1995. Petroleum hydrocarbons were not detected in soil samples collected from MW-30. MW-7A had maximum TPHg and benzene concentrations of 9.5 and 0.820 mg/kg, respectively.

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Date: **Aug. 10, 2012** Case #: **91UT064**

During 1995 and 1996, soil vapor extraction was conducted as an interim remedial action. An estimated 26,800 pounds of petroleum hydrocarbons were removed during this period. In February 1998, construction was completed on the permanent high-vacuum, dual-phase extraction (HVDPE) system using a thermal/catalytic oxidizer to treat hydrocarbon vapors. The HVDPE system operated from February 1998 through August 28, 2001 and from December 17, 2001 through March 1, 2002.

In response to a closure request dated December 13, 2002, the Orange County Local Oversight Program (OCLOP) requested verification borings to assess the effectiveness of remediation efforts. On May 12, 2003, four verification borings (VB-1 through VB-4) were drilled and sampled. The maximum TPHg and benzene concentrations were 2,800 and 35.8 mg/kg in a soil sample collected from boring VB-2 at 25 feet bgs. Methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA) and other fuel oxygenates were not detected in any of the soil samples collected.

Based on the results of the verification borings, the OCLOP requested additional remediation in the vicinity of VB-1 and VB-2. In December 2004, two additional soil vapor extraction (SVE) wells (HVS-8 and HVS-9) were installed at the site. The maximum TPHg concentration was 850 mg/kg in a sample collected from HVS-8 at a depth of approximately 16.5 feet bgs. The maximum benzene concentration was 0.900 mg/kg in a sample collected from HVS-9 at 21.5 feet bgs. MTBE, TBA, and other fuel oxygenates were not detected in any of the soil samples collected.

Additional vapor extraction activities were conducted in the South Tank area from December 15, 2005 to April 5, 2006. An estimated 82 additional pounds of hydrocarbons were removed from the South Tank area during this period. Since 1995, a total of approximately 28,800 pounds of hydrocarbons has been removed from the subsurface.

Quarterly groundwater monitoring has been conducted at the site since November 1991 and was most recently conducted on August 5 and 6, 2011 (3Q11). Free product has been observed at the site at a maximum apparent thickness of 0.70 foot and was last observed as a sheen in April 1996. Third quarter 2011 groundwater samples contained the following maximum concentrations: 1,800 micrograms per liter (µg/L) TPHg, 280 µg/L benzene, 7.7 µg/L toluene, 62 µg/L ethylbenzene, 52 µg/L total xylenes, 13 µg/L MTBE, 29 µg/L TBA, 400 µg/L naphthalene, 16 µg/L 1,2,4-trimethylbenzene, and 9.7 µg/L 1,3,5-trimethylbenzene. Post-remedial groundwater monitoring was conducted to monitor rebound and/or stability of remaining hydrocarbon concentrations in groundwater. Analytical results showed that overall dissolved phase hydrocarbon and fuel oxygenate concentrations in groundwater continued to decrease and were stable, without any further down gradient migration.

According to the Orange County Water District, the nearest groundwater production well is approximately 1000 feet upgradient from the site.

This site is recommended for closure based on the following:

- The former USTs have been removed from the site.
- Based on distance to the nearest receptors (greater than 100 feet), residual benzene in soil and groundwater do not appear to present a risk to human health.
- The most recent MTBE and TBA concentrations in groundwater are 13 µg/L and 29 µg/L, respectively.
- The site is located in a light industrial area and there are no plans for redevelopment.
- The nearest groundwater production well is approximately 1000 feet upgradient from the site.

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Date: **Aug. 10, 2012** Case #: **91UT064**

IV. Closure

Does completed corrective action protect *existing* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does completed corrective action protect *potential* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does corrective action protect public health for current land use? **Yes**		
Site management requirements: **Land-use change and handling contaminated soil properly.**		
Should corrective action be reviewed if land use changes? **Yes**		
Monitoring wells decommissioned: **No**	Number decommissioned: **0**	Number Retained: **13**
List enforcement actions taken:		
List enforcement actions rescinded:		

V. Local Agency Representative Data

Name: **Osman Taban, PG #5986**	Title: **Geologist**
Signature: Osman Taban	Date: 8/10/2012
Name: **Geniece Higgins**	Title: **Supervising Hazardous Waste Specialist**
Signature:	Date: 8/10/12
Name: **Anthony Martinez, CEG #2255**	Title: **LOP Program Manager**
Signature:	Date: 8-14-12

VI. RWQCB Notification

Date Submitted to RB:	RB Response:
Name: **Kenneth R. Williams**	Title: **Chief, UST Section**
Signature:	Date:

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official file.

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Date: **Aug. 10, 2012** Case #: **91UT064**

IV. Closure

Does completed corrective action protect *existing* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does completed corrective action protect *potential* beneficial uses per the Regional Board Basin Plan? **Yes**		
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Signature: Osman Taban	Date: 8/10/2012
Name: **Geniece Higgins**	Title: **Supervising Hazardous Waste Specialist**
Signature:	Date: 8/10/12
Name: **Anthony Martinez, CEG #2258**	Title: **LOP Program Manager**
Signature:	Date: 8.14.12

VI. RWQCB Notification

Date Submitted to RB:	RB Response:
Name: **Kenneth R. Williams**	Title: **Chief, UST Section**
Signature: Kenneth R. Williams	Date: 8/28/2012

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official file.

Eco & Associates, Inc. ▪ 1855 W. Katella Ave. ▪ Suite 340 ▪ Orange ▪ CA ▪ 92867 ▪ phone (714) 289-0995 ▪ fax (714) 289-0965

March 16, 2015 via FedEx

Ms. Denamarie Baker
Orange County Health Care Agency
Hazardous Materials Management Section
1241 E. Dyer Road, #120
Santa Ana, California 92705

SUBJECT: SUBMITTAL OF FINAL 4TH QUARTER 2014 – GROUNDWATER MONITORING AND REMEDIAL PROGRESS REPORT FOR THE LOS ANGELES TIMES, COSTA MESA FACILITY, NORTH TANKS SITE IN COSTA MESA, CALIFORNIA

Dear Ms. Baker:

Please find enclosed one paper-bound copy and one copy on CD-ROM of the Final 4TH Quarter 2014 – Groundwater Monitoring and Remedial Progress Report for the subject site located in Costa Mesa, California, prepared by Eco & Associates, Inc. for your records.

We appreciate the opportunity to work with you and your colleagues on this project. If you have any questions, please do not hesitate to contact us at (714) 289-0995.

Sincerely,
Eco & Associates, Inc.

Mohammad Estiri, Ph.D.
Project Director

cc: One hard copy with one copy on CD to:
Ms. Racine Watts, Los Angeles Times Environmental Affairs
Mr. Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Ms. Jennifer Ruddy, ACSC
Mr. Jon Lovegreen, Tetra Tech
Mr. Steve Bonham or Ms. Heather Castner, Brinderson Holdings Company

Enclosure

4TH QUARTER 2014 – QUARTERLY GROUNDWATER MONITORING

AND

REMEDIAL PROGRESS REPORT

March 16, 2015

Los Angeles Times, Costa Mesa Facility
North Tanks Site
1375 Sunflower Avenue
Costa Mesa, California

Prepared for:
Los Angeles Times
Environmental Affairs
2000 East 8th Street
Los Angeles, California 90021

Prepared by:
Eco & Associates, Inc.
1855 W. Katella Avenue, Suite 340
Orange, California 92867
Phone: (714) 289-0995
Fax: (714) 289-0965

Environmental Excellence

4TH QUARTER 2014 – QUARTERLY GROUNDWATER MONITORING

AND

REMEDIAL PROGRESS REPORT

Los Angeles Times, Costa Mesa Facility
North Tanks Site
1375 Sunflower Avenue
Costa Mesa, California

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Mohammad Estiri, PhD
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Project Geologist

March 16, 2015

Project No. Eco-12-516

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ABBREVIATIONS, ACRONYMS, & SYMBOLS

µg/L	micrograms per liter
ACSC	Automobile Club of Southern California
AMEC	AMEC, plc
BTEX	benzene, toluene, ethylbenzene, and xylenes
bgs	below ground surface
DO	dissolved oxygen
DPVE	dual-phase vapor extraction
EC	electrical conductivity
Eco	Eco & Associates, Inc.
ETBE	ethyl tertiary butyl ether
GAC	granular activated carbon
IAW	in accordance with
ICE	Internal Combustion Engine
LA Times	Los Angeles Times
lb	pound
LOP	Local Oversight Program
MDL	method detection limit
mg/L	milligrams per liter
mL	milliliter
msl	mean sea level
MTBE	methyl tertiary butyl ether
NPDES	National Pollutant Discharge Elimination System
OCHCA	Orange County Health Care Agency
ORP	oxidation-reduction potential
PID	photoionization detector
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
scfm	standard cubic feet per minute
TBA	tertiary butyl alcohol
TestAmerica	TestAmerica Laboratories, Inc.
TPH	total petroleum hydrocarbons
TPH-g	total petroleum hydrocarbons as gasoline
TVPH	total volatile petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

EXECUTIVE SUMMARY

Eco & Associates, Inc. (Eco) was contracted to provide environmental services at the LA Times Orange County Facility, North Tanks Site, in Costa Mesa, California (hereafter, "Site"). This document describes the fourth quarter 2014 groundwater monitoring and remediation activities (i.e., monitoring, operation, and maintenance) performed between October 1, 2014 and December 31, 2014.

ACTIVITIES

During this quarter, 21 wells were monitored for groundwater levels and 14 groundwater wells were sampled based on current Orange County Health Care Agency (OCHCA) monitoring requirements. Collected groundwater samples were submitted to a State of California certified laboratory and analyzed for total volatile petroleum hydrocarbons (TVPH) and volatile organic compounds (VOCs). The remedial extraction system was nonoperational during the entire three months of 2014-Q4.

FINDINGS

Groundwater Level Measurement

The depth to groundwater was measured at all 21 wells on August 20, 2014. The depths to groundwater in the wells were measured from 16.04 to 21.55 feet below ground surface. Groundwater elevations ranged from 11.89 to 14.33 feet above mean sea level.

In comparison to the previous quarter, groundwater elevations were observed to decrease in all wells except for well MW-31, where the elevation increased by 0.28 feet. Groundwater elevation decreased an average of 1 foot over the Site.

Based on data collected during this quarter, the groundwater flows toward the southwest with a gradient of approximately 0.0028 feet per foot. This is consistent with the previously interpreted groundwater gradient at the Site.

Groundwater Sampling and Analysis

Fourteen groundwater monitoring wells were sampled and analyzed during this groundwater monitoring period.

Total Volatile Petroleum Hydrocarbons

Groundwater samples collected from thirteen of the fourteen wells sampled this quarter were reported with TVPH concentrations above the method detection limit (MDL). TVPH concentrations decreased in two of the sampled wells (MW-24 and MW-28) and increased in four of the sampled wells (MW-27, MW-29, MW-33, and MW-35) since the previous sampling event.

The greatest TVPH concentration increases were observed in groundwater samples collected from well MW-33 (from 6,100 micrograms per liter [µg/L] to 9,700 µg/L) and in well MW-35 (from ND<50 to 3,400 µg/L). The sample collected from MW-33 was reported with the highest concentration of TVPH (9,700 µg/L). The groundwater sample collected from MW-33 has been reported to contain the highest TVPH concentration in most of the recent sampling events. The concentrations of TVPH over time are graphed for each well (see Appendix C).

Benzene

Groundwater samples collected from eight of the fourteen wells sampled this quarter were reported with benzene concentrations above the MDL. Increases and decreases in benzene concentrations since the previous sampling event were comparable to those changes described above for TVPH, in both direction and magnitude.

The sample collected from well MW-38 was reported with the highest concentration of benzene (1,800 µg/L).

Methyl Tertiary Butyl Ether

Groundwater samples collected from six of the fourteen wells sampled this quarter were reported with methyl tertiary butyl ether (MTBE) concentrations above the MDL. The sample collected from well MW-17 was reported with the highest concentration of MTBE (35 µg/L).

Tertiary Butyl Alcohol

Only three of the samples collected from the fourteen wells sampled this quarter were reported to contain tertiary butyl alcohol (TBA) concentrations above the MDL. The sample collected from MW-38 was reported with the highest TBA concentration (180 µg/L).

4TH QUARTER 2014 – QUARTERLY GROUNDWATER MONITORING *AND* REMEDIAL PROGRESS REPORT

Los Angeles Times, Costa Mesa Facility
North Tanks Site
1375 Sunflower Avenue
Costa Mesa, California

1.0 INTRODUCTION

In April 2012, Eco & Associates, Inc. (Eco) was contracted to provide environmental services at the LA Times Orange County Facility, North Tanks Site, located at 1375 Sunflower Avenue in Costa Mesa, California (hereafter, referred to as the "Site") (Figure 1). The Site remediation and monitoring activities were previously administered by AMEC, plc (AMEC). This report describes monitoring and remediation activities performed during the fourth quarter of 2014. It contains the following sections:

- Site Description and Background
- Summary of Field Activities
- Current Quarterly Monitoring Results
- Data Evaluation and Recommendations

The purpose of the monitoring and remediation program is to operate, maintain, and modify the existing remediation systems, as well as to provide chemical data useful for contaminant concentration trend analysis to be utilized in the evaluation of Site closure.

2.0 SITE DESCRIPTION

The Site is located on approximately 31 acres of flat land comprised of buildings and asphalt parking areas. It is located approximately 0.23 mile north of the San Diego Freeway (Interstate 405) and approximately 1 mile east of the Santa Ana River Trail (Figure 1).

2.1 SITE HISTORY

The Site's subsurface soil and groundwater were impacted by leaking underground storage tanks (USTs). The contamination was detected in September 1990, and a case was opened with the Regional Water Quality Control Board (RWQCB) at that time. In 1992, three USTs in

the northern portion of the Site were removed and the LA Times was directed by the Orange County Health Care Agency (OCHCA) Local Oversight Program (LOP) to initiate a subsurface investigation adjacent to the USTs.

ENSR Consulting and Engineering conducted onsite investigations between 1992 and 1995, including the installation of 29 groundwater monitoring wells. Soil and groundwater within the vicinity of the tank areas were noted to contain elevated concentrations of total petroleum hydrocarbons (TPH) and benzene. The concentration of benzene exceeded 3,000 micrograms per liter (µg/L). As part of the corrective action, a vapor extraction system and an Internal Combustion Engine (ICE) system were used to remediate the Site.

Groundwater Technology, Inc. reported in March 1996 that almost 27,000 pounds (lbs) of hydrocarbons had been removed by the remedial system between August 1994 and July 1995. In October 1995, three USTs in the southern portion of the Site and the ICE system were removed.

Impacts at the Site have been separated into two separate cases by the RWQCB and OCHCA: the North Tank Site and the South Tank Site. The South Tank Site was determined to be eligible for case closure on September 17, 2012. All wells in the South Tank Area were abandoned on November 21, 2012. The South Tank Site case has been closed as of February 11, 2013.

2.2 REMEDIATION SYSTEM HISTORY

The construction of the first on-site Dual-Phase Vapor Extraction (DPVE) system, identified as the 'Stealth' system, was initiated in October 1997 in accordance with (IAW) the Remedial Action Plan approved by the OCHCA on May 21, 1997. The system was constructed and connected to the North Tank area wells and began operation in February 1998. In 2003, additional wells were installed; those wells were also connected to the Stealth DPVE system. In 2005, another DPVE system, the 'Baker' system, was added next to the existing system and connected to the newly installed wells on the nearby Automobile Club of Southern California (ACSC) property.

2.3 SITE GEOLOGY AND HYDROGEOLOGY

The hydrogeology information in this report was taken from the 1996 report by Groundwater Technology, Inc. The Site is located in the southernmost coastal plain physiographic province of Orange County, approximately 1 mile north of Newport Mesa. The freshwater-bearing materials within the coastal plain consist of unconsolidated sand, gravel, and conglomerates with some silt and clay. Geologic and geophysical logging indicates this freshwater-bearing stratum occurs in three separate groundwater systems. These systems are referred to as the upper, middle, and lower aquifer systems.

The Upper Aquifer System consists of all water-bearing strata above the main aquifer (the uppermost aquifer of the Middle Aquifer System) and has an average thickness of 800 feet. The principal shallow aquifers in this zone are the Talbert Aquifer and the 80-foot gravel aquifer. In addition, numerous semi-perched aquifers of limited extent are also present in the shallow portion of the Upper Aquifer System. The Upper Aquifer System occurs in recent

alluvial deposits and the semi-consolidated gravels, sands, and silts of the Upper Pleistocene Lakewood and La Habra formations.

Aquifers of the Middle Aquifer System are of greater thickness and areal extent than those of the upper and lower systems. The total thickness of the Middle Aquifer System ranges from a maximum of 1,600 feet in the center of the plain to less than 50 feet in the Coyote Hills. The uppermost aquifer of the Middle Aquifer System occurs in the lower Pleistocene sands, gravels, and silts of the Coyote Hills and San Pedro Formations.

The Lower Aquifer System consists of numerous interconnected aquifers of varying thickness. This system was declined on the basis of an extensive low permeability cap. The thickest aquifer in the Orange County Coastal Plain occurs at the base of the Lower Aquifer System and ranges in thickness from 350 to greater than 500 feet. Geologic data suggests that the Lower Aquifer System occurs within the semi-consolidated gravels and sands of the upper member of the Late Pliocene Fernando Group.

The soils beneath the LA Times facility consist of fluvial deposits composed of interbedded clay, silt, and sand with minor gravel. The fine-grained clays and silts typically occur from approximately 10 to 25 feet below ground surface (bgs). Stringers of sandy material occur within the clay/silt at depths ranging from 10 to 20 feet bgs. The clays and silts occur directly above a reddish-brown silty sand at approximately 25 feet bgs. This silty sand is typically saturated and grades into a medium-grained sand at approximately 30 feet bgs. The sand/silty sand is usually underlain by a silt layer that occurs between 30 to 35 feet bgs.

During this monitoring event, groundwater depths ranged from 16.04 feet bgs in well MW-26 to 21.55 feet bgs in well MW-33. Groundwater elevations were calculated to be between 11.89 feet above mean sea level (msl) in well MW-36 and 14.33 feet msl in well MW-23 with a general flow toward the southwest (see Figure 3). The hydraulic gradient is approximately 0.27 percent (0.0027 feet per foot).

3.0 SUMMARY OF GROUNDWATER MONITORING ACTIVITIES

The fourth quarter 2014 sampling event included the collection of groundwater samples from fourteen wells. Field documents related to this activity are presented in Appendix A. A summary of the field activities are described in the following sections.

3.1 GROUNDWATER MONITORING

The following groundwater monitoring activities were conducted IAW a memorandum prepared by Eco and sent to LA Times and OCHCA describing the planned low-flow sampling procedures (see Appendix D) and IAW RWQCB and OCHCA groundwater monitoring requirements. The following activities were performed in addition to the activities described in the above-referenced documents:

- Each monitoring well was inspected for integrity and deficiencies before sampling.

- All wells were sounded for depth to water from the top of the casing with accuracy of ±0.01 foot.
- Samples from groundwater wells were obtained and sent to a State of California certified laboratory for analysis.
- Field parameters (pH, temperature, electrical conductivity [EC], oxidation-reduction potential [ORP], dissolved oxygen [DO], and turbidity) were measured and recorded on sampling logs for sampled wells.
- The sampling flow rate was maintained at or less than 500 milliliters (mL) per minute for samples to be analyzed for volatile organic compounds (VOCs) to minimize volatilization.
- One laboratory-supplied trip blank was carried in the ice chest throughout the day and submitted with the field samples from each area for analysis.
- Decontamination of sampling equipment was conducted IAW the United States Environmental Protection Agency (USEPA) standards to ensure the quality of samples collected.
- Disposable equipment intended for one-time use was packaged for appropriate disposal.
- The sampled water bottles were kept on ice and transferred to the lab for analysis immediately upon completion of sampling.
- The generated data was utilized to create contaminant concentration trends and to evaluate if Site closure could be granted, or if additional remedial actions were necessary.
- Per discussion with the OCHCA on March 6, 2014, there is no longer a requirement to collect duplicate samples during groundwater monitoring activities.

3.2 INVESTIGATION-DERIVED WASTE

Groundwater purge water and decontamination wastewater was placed in the water storage tank associated with dual-phase extraction activities conducted at the Site for subsequent treatment and discharge.

3.3 GROUNDWATER MONITORING RESULTS

Groundwater sampling for the fourth quarter 2014 groundwater monitoring period was conducted on November 25, 2014. During this event, groundwater samples were collected from fourteen monitoring wells.

The samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica), a State of California certified laboratory for analysis. The following subsections summarize the groundwater monitoring results.

3.3.1 DEPTH TO GROUNDWATER

The depth to groundwater was measured in each well on November 25, 2014. The depths to groundwater in the wells ranged from 16.04 to 21.55 feet. The groundwater elevations for each well were calculated using the measured groundwater depth and the surveyed casing elevation. The groundwater elevations ranged from 11.89 to 14.33 feet above msl.

In comparison to the previous quarter, groundwater elevations were observed to decrease in all wells except for well MW-31, where the elevation increased by 0.28 feet. Groundwater elevation decreased an average of 1 foot over the Site.

Details and the depth to groundwater measured during this sampling event are provided in Table 1. Groundwater elevation contours are shown in Figure 3. These contours are based on elevations calculated from monitoring wells with available survey data. Based on these groundwater contours, the groundwater flows toward the southwest with a gradient of approximately 0.0027 feet per foot. This is consistent with the previously interpreted groundwater gradient at the Site.

3.3.2 GROUNDWATER ANALYTICAL RESULTS AND FINDINGS

Fourteen groundwater monitoring wells were sampled and analyzed during this groundwater monitoring event. A summary of groundwater analytical results from all sampled monitoring wells is provided in Table 2. The laboratory analytical results for groundwater are provided in Appendix B.

3.3.2.1 Total Volatile Petroleum Hydrocarbons

Thirteen of the fourteen wells sampled during this sampling event were reported to contain total volatile petroleum hydrocarbons (TVPH) concentrations above the method detection limit (MDL). TVPH concentrations decreased in two of the sampled wells (MW-24 and MW-28) and increased in five of the sampled wells (MW-27, MW 29, MW-33, MW-35, and MW-38) since the previous sampling event. The greatest increases were observed in well MW-33 (from 6,100 micrograms per liter [µg/L] to 9,700 µg/L) and in well MW-35 (from <50 µg/L to 3,400 µg/L).

There is no apparent spatial correlation between those wells that showed decreases or increases in TVPH concentrations. The sample from well MW-33 was reported with the highest concentration of TVPH (9,700 µg/L). Groundwater collected from MW-33 has been reported to contain the highest TVPH concentration in the majority of recent sampling events. The concentrations of TVPH over time are graphed for each well (see Appendix C).

3.3.2.2 Benzene

Eight of the fourteen wells sampled this quarter were reported to contain benzene concentrations above the MDL. Increases and decreases in benzene concentrations since the previous sampling event were comparable to those changes described above for TVPH, in both direction and magnitude. The sample from well MW-38 was reported with the highest concentration of benzene (1,800 µg/L).

3.3.2.3 Methyl Tertiary Butyl Ether

Six of the fourteen wells sampled this quarter were reported to contain methyl tertiary butyl ether (MTBE) concentrations above the MDL. The sample from well MW-17 was reported with the highest concentration of MTBE (35 µg/L).

3.3.2.4 Tertiary Butyl Alcohol

Only three of the fourteen wells sampled this quarter were reported to contain tertiary butyl alcohol (TBA) concentrations above the MDL. The sample collected from MW-38 was reported with the highest TBA concentration (180 µg/L).

3.4 UPCOMING GROUNDWATER SAMPLING

The next quarterly groundwater sampling event is scheduled for the 1st quarter of 2015. The wells sampled will be based on current OCHCA monitoring requirements.

4.0 SUMMARY OF REMEDIAL ACTIVITIES

4.1 DUAL-PHASE EXTRACTION SYSTEM

There are two extraction systems located in the central portion of the LA Times property (see Figure 2) that are secured with walls and fences, which have locked entry gates. One system, operating under catalytic oxidation conditions, is referred to as the "Baker" system; the other system operating under thermal oxidation conditions, is referred to as the "Stealth" system. Both systems have been named and are referred to by Eco after their respective manufacturers.

When in operation, each system generally runs 24 hours per day, 7 days per week. The two systems had previously been connected to separate wells: the Baker system connected to ACSC wells, and the Stealth system connected to Former Farm Property and North Tank wells.

However, during the fourth quarter of 2012, the systems were connected so that any well might be connected to either of the two systems in order to have more control over remedial activities, as well as to maintain backup in case of the shutdown of one of the systems.

The wells are connected to the systems via piping that can be opened or closed with in-line valves. This allows for sampling of individual wells, rebound testing, and the closing of certain wells to extraction. Wells chosen to be opened to extraction are typically chosen based on VOC readings collected using a photoionization detector (PID) as well as vapor sample analytical results, when applicable.

As is shown in the schematic (Figure 7), vapor extracted from each well enters into a 4-inch manifold and is sent to a phase separator (water knockout vessel) where the liquid and vapor is separated.

The liquid phase is treated with granular activated carbon (GAC) and released to the stormwater conveyance system under a National Pollutant Discharge Elimination System (NPDES) permit. The vapor is sent to a furnace for thermal or catalytic oxidation.

The influent and effluent gas is monitored on a weekly basis with a PID. In addition, influent and effluent samples of water and vapor are collected monthly for laboratory analysis.

The remedial extraction system was non-operational during the 4th Quarter of 2014.

During system operation, the concentrations of VOCs at the inlet and outlet of the system are monitored on a weekly basis using a PID. Since the system was not operational during this reporting period, no influent or effluent vapor samples were collected from the systems.

Monthly sampling was also not conducted, as the system was not in operation during this reporting period. Table 3 provides the contamination mass removal up to present.

Remedial activities were not conducted at the Site during this quarter.

4.2 WEEKLY AND MONTHLY ACTIVITIES

4.2.1 WEEKLY ACTIVITIES

Each system is being operated under a South Coast Air Quality Management District (SCAQMD) Permit to Operate. As per the requirements of the permit, weekly readings of the following parameters are collected for each system (when operating):

- Total flow rate, measured in standard cubic feet per minute (scfm)
- Temperature measured in degrees Fahrenheit at the outlet of the combustion chamber (for thermal oxidation mode) or at the inlet of the catalytic chamber (for catalytic oxidation mode)
- VOC influent and effluent concentrations, measured with a PID calibrated in parts per million by volume as isobutylene (corrected for hexane)

4.2.2 MONTHLY ACTIVITIES

4.2.2.1 Influent/Effluent Vapor Sampling

Vapor sampling did not take place in this quarter because the system was non-operational.

4.2.2.2 Influent/Effluent Water Sampling

Monthly water samples from inlet and outlet of the GAC reactor were collected once this quarter. The system was non-operational and water was not discharged during the quarter. In December 2014, storm water which had collected in the secondary containment for the system was pumped into the water storage tank. The water was treated and discharged in the beginning of January.

4.3 UPCOMING ACTIVITIES / ACTION ITEMS

- Continue quarterly groundwater monitoring

5.0 RECOMMENDATIONS

The following recommendation is based on observed field conditions and measured contaminant concentrations during the fourth quarter groundwater monitoring and remediation activities in 2014.

- It is recommended that groundwater monitoring continue until OCHCA finds that the Site meets the criteria of the Low Threat UST Case Closure Policy

6.0 BIBLIOGRAPHY

AMEC, 2011. *Work Plan for In-Situ Chemical Oxidation and Enhanced Bioremediation at Building 244*. Joint Forces Training Base, Los Alamitos, CA, California Army National Guard; September 26, 2011.

Groundwater Technology, Inc., 1996. *Remediation Alternatives Evaluation.* For Los Angeles Times; March 1996.

Appendix D

Environmental Database Search Report

LA Times
1375 Sunflower Avenue
Costa Mesa, CA 92626

Inquiry Number: 4310748.2s
June 01, 2015

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1375 SUNFLOWER AVENUE
COSTA MESA, CA 92626

COORDINATES

Latitude (North):	33.6937000 - 33˚ 41' 37.32''
Longitude (West):	117.9161000 - 117˚ 54' 57.96''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	415094.4
UTM Y (Meters):	3728378.0
Elevation:	31 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	33117-F8 NEWPORT BEACH (DIGITAL), CA
Most Recent Revision:	0

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120505
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1375 SUNFLOWER AVENUE
COSTA MESA, CA 92626

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1		1375 SUNFLOWER AVE	AST		TP
A2	TIMES MIRROR COMPANY	1375 SUNFLOWER AVENU	RCRA-SQG		TP
A3	LOS ANGELES TIMES CO	1375 SUNFLOWER AVE	SWEEPS UST, EMI		TP
A4	L A TIMES	1375 SUNFLOWER	RGA LUST		TP
A5	LOS ANGELES TIMES-NO	1375 SUNFLOWER AVE	RGA LUST		TP
A6	LOS ANGELES TIMES-NO	1375 SUNFLOWER	RGA LUST		TP
A7	LOS ANGELES TIMES CO	1375 SUNFLOWER	RCRA-SQG, FINDS, NPDES, HIST CORTESE, LUST, CA FID...		TP
A8	L.A. TIMES	1375 SUNFLOWER AVENU	RGA LUST		TP
A9	LOS ANGELES TIMES CO	1375 SUNFLOWER AVE	HAZNET		TP
A10		LOS ANGELES TIMES BL	ERNS		TP
A11		1375 SUNFLOWER	ERNS		TP
A12	LOS ANGELES TIMES	1375 SUNFLOWER AVENU	RGA LUST		TP
A13	LOS ANGELES TIMES	1375	RGA LUST		TP
A14	LOS ANGELES TIMES-SO	1375 SUNFLOWER	RGA LUST		TP
A15	L A TIMES	1375 SUNFLOWER AVE	RGA LUST		TP
A16	LOS ANGELES TIMES-SO	1375 SUNFLOWER AVE	RGA LUST		TP
A17	LOS ANGELES TIMES	1375 SUNFLOWER AVE.	EMI		TP
A18	LOS ANGELES TIMES	1375 SUNFLOWER AVE	RGA LUST		TP
19	BABCOCK ELECTRO-MECH	3501 HARBOR BLVD	RCRA-SQG, FINDS	Higher	502, 0.095, NW
20	BRUNSWICK CORPORATIO	3333 HARBOR BOULEVAR	RCRA-LQG	Lower	661, 0.125, West
B21	COSTA MESA COMMERCE	3303 S HARBOR BLVD	RCRA-SQG	Lower	671, 0.127, SW
B22	ON SITE PHOTO GRAPHI	1410 3303 E6 HARBOR	RCRA-SQG, FINDS	Lower	671, 0.127, SW
B23	PERFECT PRINTING	3303 HARBOR BLVD	RCRA-SQG, FINDS	Lower	671, 0.127, SW
C24	AMF VOIT INC	3801 S HARBOR BLVD	LUST, ENVIROSTOR, HWP	Higher	743, 0.141, NW
C25	MINSTAR (AMF-VOIT)	3801 HARBOR	HIST CORTESE, LUST	Higher	743, 0.141, NW
C26	A M F VOIT INC	3801 S HARBOR BLVD	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA NonGen /...	Higher	743, 0.141, NW
27	DRY CLEAN USA	3701 S HARBOR BLVD E	RCRA-SQG, FINDS	Higher	988, 0.187, NW
D28	SOUTH COAST CIRCUITS	3506 W LAKE CENTER D	RCRA-LQG	Higher	1083, 0.205, North
D29	SOUTH COAST CIRCUITS	3506 WEST LAKE CENTE	ENVIROSTOR	Higher	1083, 0.205, North
E30		3611 S HARBOR BLVD	EDR US Hist Auto Stat	Higher	1312, 0.248, NNW
E31		3621 S HARBOR BLVD	EDR US Hist Auto Stat	Higher	1312, 0.248, NNW
F32	ARCO#6131	3201 HARBOR BLVD	LUST	Higher	1852, 0.351, SSW
F33	MOBIL #18-HDR	3195 HARBOR BLVD	HIST CORTESE, LUST, CA FID UST, SWEEPS UST	Higher	1905, 0.361, SSW
F34	CHEVRON 94660	3190 HARBOR BLVD.	RCRA-LQG, FINDS, HIST CORTESE, LUST, CA FID UST,...	Higher	1935, 0.366, SSW
G35	SHELL SERVICE STATIO	3820	HIST CORTESE	Lower	2247, 0.426, ENE
36	ICN PHARMACEUTICALS	3300 HYLAND AVE	HIST CORTESE, LUST	Lower	2256, 0.427, West
37	STATE FARM INSURANCE	3333 HYLAND AVE	RCRA-SQG, FINDS, HIST CORTESE, LUST, CA FID UST,...	Lower	2280, 0.432, West
38	AUTOMOBILE CLUB OF S	3333 FAIRVIEW RD	HIST CORTESE, LUST, CA FID UST, SWEEPS UST, HAZNET	Lower	2302, 0.436, ESE
G39	SHELL SERVICE STATIO	3820 S FAIRVIEW / SU	RCRA-SQG, LUST	Lower	2347, 0.445, ENE

MAPPED SITES SUMMARY

Target Property Address:
1375 SUNFLOWER AVENUE
COSTA MESA, CA 92626

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
G40	SHELL #3820	3820 FAIRVIEW AVE	LUST	Lower	2347, 0.445, ENE
41	C J SEGERSTROM & SON	3315 FAIRVIEW RD	HIST CORTESE, LUST, CA FID UST, CHMIRS	Higher	2356, 0.446, ESE
G42	ARCO #3083	3470 FAIRVIEW	HIST CORTESE	Lower	2393, 0.453, ENE
G43	MOBIL #18-JMY	3470 FAIRVIEW RD	HIST CORTESE, LUST, CA FID UST, SWEEPS UST	Lower	2393, 0.453, ENE
H44	UNOCAL #5404	3599 HARBOR BLVD	HIST CORTESE, LUST	Higher	2425, 0.459, NNW
H45	UNION CAR WASH/BEACO	1501 MACARTHUR BLVD	LUST	Higher	2452, 0.464, NNW
46	AVIATION EQUIPMENT	1571 MACARTHUR BLVD	NPDES, Orange Co. Industrial Site, ENVIROSTOR	Higher	2618, 0.496, NNW
47	ARMSTRONG RANCH HIGH	3529 SOUTH GREENVILL	SCH, HIST CORTESE, LUST, ENVIROSTOR	Higher	3918, 0.742, NE
48	PIONEER CIRCUITS INC	3000 SOUTH SHANNON S	RCRA-LQG, ENVIROSTOR	Higher	4619, 0.875, NNW
49	SELECT CIRCUITS	3700 WEST SGERSTROM	RCRA-LQG, ENVIROSTOR	Higher	4801, 0.909, North
50	METROPOLITAN CIRCUIT	1267 LOGAN AVENUE	HIST Cal-Sites, CA BOND EXP. PLAN, HIST CORTESE,...	Higher	4875, 0.923, SSE
51	RBC TRANSPORT DYNAMI	3131 W SEGERSTROM AV	NPDES, EMI, ENVIROSTOR, WDS	Higher	4944, 0.936, NNE
52	TRICO (FMR. UNITED C	18101-18111 MOUNT WA	ENVIROSTOR	Higher	5007, 0.948, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
1375 SUNFLOWER AVE 1375 SUNFLOWER AVE COSTA MESA, CA 92626	AST	N/A
TIMES MIRROR COMPANY 1375 SUNFLOWER AVENU COSTA MESA, CA 92626	RCRA-SQG EPA ID:: CAT080011901	CAT080011901
LOS ANGELES TIMES CO 1375 SUNFLOWER AVE COSTA MESA, CA 92626	SWEEPS UST Comp Number: 161 Status: A Tank Status: A EMI Facility Id: 124906	N/A
L A TIMES 1375 SUNFLOWER COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES-NO 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES-NO 1375 SUNFLOWER COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES CO 1375 SUNFLOWER COSTA MESA, CA 92626	RCRA-SQG EPA ID:: CAD043644236 FINDS Registry ID:: 110001152984 NPDES Facility Status: Active HIST CORTESE Reg Id: 083001520T LUST Global Id: T0605901160 Global Id: T0605979014 Global Id: T0605999595 Current Status: 9 Current Status: 7 Global ID: T0605901160 Global ID: T0605979014 Global ID: T0605999595 Status: Open - Remediation Status: Completed - Case Closed Facility Id: 88UT115 Facility Id: 91UT064 Facility Id: 92UT073 Facility Status: Remedial action (cleanup) Underway Facility Status: Post remedial action monitoring Facility Status: Case Closed CA FID LUST	CAD043644236

EXECUTIVE SUMMARY

L.A. TIMES 1375 SUNFLOWER AVENU COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES CO 1375 SUNFLOWER AVE COSTA MESA, CA 92626	HAZNET GEPAID: CAD043644236	N/A
LOS ANGELES TIMES BL LOS ANGELES TIMES BL COSTA MESA, CA 92626	ERNS EDR ID:: 00171223	N/A
1375 SUNFLOWER 1375 SUNFLOWER COSTA MESA, CA 92626	ERNS EDR ID:: 00238303	N/A
LOS ANGELES TIMES 1375 SUNFLOWER AVENU COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES 1375 COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES-SO 1375 SUNFLOWER COSTA MESA, CA	RGA LUST	N/A
L A TIMES 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES-SO 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A
LOS ANGELES TIMES 1375 SUNFLOWER AVE. COSTA MESA, CA 92626	EMI Facility Id: 124906	N/A
LOS ANGELES TIMES 1375 SUNFLOWER AVE COSTA MESA, CA	RGA LUST	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal RCRA generators list

RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
WMUDS/SWAT..... Waste Management Unit Database

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
SCH..... School Property Evaluation Program
Toxic Pits..... Toxic Pits Cleanup Act Sites
CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System

EXECUTIVE SUMMARY

PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
UIC	UIC Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
Notify 65	Proposition 65 Records
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
Financial Assurance	Financial Assurance Information Listing
PROC	Certified Processors Database
HWT	Registered Hazardous Waste Transporter Database
MWMP	Medical Waste Management Program Listing
LEAD SMELTERS	Lead Smelter Sites
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH DOE	Steam-Electric Plant Operation Data
2020 COR ACTION	2020 Corrective Action Program List
PRP	Potentially Responsible Parties

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC	*3801 S HARBOR BLVD*	*NW 1/8 - 1/4 (0.141 mi.)*	*C26*	*62*

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC	*3801 S HARBOR BLVD*	*NW 1/8 - 1/4 (0.141 mi.)*	*C26*	*62*

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC	*3801 S HARBOR BLVD*	*NW 1/8 - 1/4 (0.141 mi.)*	*C26*	*62*

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SOUTH COAST CIRCUITS	3506 W LAKE CENTER D	N 1/8 - 1/4 (0.205 mi.)	D28	66

Lower Elevation	Address	Direction / Distance	Map ID	Page
BRUNSWICK CORPORATIO	3333 HARBOR BOULEVAR	W 1/8 - 1/4 (0.125 mi.)	20	52

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 5 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BABCOCK ELECTRO-MECH	***3501 HARBOR BLVD***	***NW 0 - 1/8 (0.095 mi.)***	***19***	***51***
DRY CLEAN USA	***3701 S HARBOR BLVD E***	***NW 1/8 - 1/4 (0.187 mi.)***	***27***	***65***

Lower Elevation	Address	Direction / Distance	Map ID	Page
COSTA MESA COMMERCE	3303 S HARBOR BLVD	SW 1/8 - 1/4 (0.127 mi.)	B21	53
ON SITE PHOTO GRAPHI	***1410 3303 E6 HARBOR***	***SW 1/8 - 1/4 (0.127 mi.)***	***B22***	***55***
PERFECT PRINTING	***3303 HARBOR BLVD***	***SW 1/8 - 1/4 (0.127 mi.)***	***B23***	***56***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, and dated 05/04/2015 has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN CIRCUIT Status: Certified Facility Id: 30360008	***1267 LOGAN AVENUE***	***SSE 1/2 - 1 (0.923 mi.)***	***50***	***172***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/04/2015 has revealed that there are 9 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMF VOIT INC Facility Id: 80001572 Status: Refer: RWQCB	***3801 S HARBOR BLVD***	***NW 1/8 - 1/4 (0.141 mi.)***	***C24***	***57***
SOUTH COAST CIRCUITS Facility Id: 71003634 Status: Inactive - Needs Evaluation	3506 WEST LAKE CENTE	N 1/8 - 1/4 (0.205 mi.)	D29	73
AVIATION EQUIPMENT Facility Id: 71003283 Facility Id: 30370195 Status: Inactive - Needs Evaluation Status: Refer: 1248 Local Agency	***1571 MACARTHUR BLVD***	***NNW 1/4 - 1/2 (0.496 mi.)***	***46***	***149***
ARMSTRONG RANCH HIGH Facility Id: 30010009 Status: No Further Action	***3529 SOUTH GREENVILL***	***NE 1/2 - 1 (0.742 mi.)***	***47***	***153***
PIONEER CIRCUITS INC Facility Id: 71003564 Status: Inactive - Needs Evaluation	***3000 SOUTH SHANNON S***	***NNW 1/2 - 1 (0.875 mi.)***	***48***	***157***
SELECT CIRCUITS Facility Id: 71003772 Status: Inactive - Needs Evaluation	***3700 WEST SGERSTROM***	***N 1/2 - 1 (0.909 mi.)***	***49***	***167***
METROPOLITAN CIRCUIT Facility Id: 30360008 Status: Certified	***1267 LOGAN AVENUE***	***SSE 1/2 - 1 (0.923 mi.)***	***50***	***172***
RBC TRANSPORT DYNAMI Facility Id: 71002407 Status: Inactive - Needs Evaluation	***3131 W SEGERSTROM AV***	***NNE 1/2 - 1 (0.936 mi.)***	***51***	***191***
TRICO (FMR. UNITED C Facility Id: 60002073 Status: Active	18101-18111 MOUNT WA	WNW 1/2 - 1 (0.948 mi.)	52	199

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 03/13/2015 has revealed that there are 14 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMF VOIT INC Global Id: T0605900473 Status: Completed - Case Closed	***3801 S HARBOR BLVD***	***NW 1/8 - 1/4 (0.141 mi.)***	***C24***	***57***
MINSTAR (AMF-VOIT) Global ID: T0605900473 Facility Status: Case Closed	***3801 HARBOR***	***NW 1/8 - 1/4 (0.141 mi.)***	***C25***	***60***
ARCO#6131 Global Id: T0605901336 Current Status: 9 Global ID: T0605901336 Status: Completed - Case Closed Facility Id: 92UT012 Facility Status: Remedial action (cleanup) Underway	3201 HARBOR BLVD	SSW 1/4 - 1/2 (0.351 mi.)	F32	75
MOBIL #18-HDR Global Id: T0605900556 Current Status: 7 Global ID: T0605900556 Status: Open - Eligible for Closure Facility Id: 87UT226 Facility Status: Remedial action (cleanup) Underway	***3195 HARBOR BLVD***	***SSW 1/4 - 1/2 (0.361 mi.)***	***F33***	***78***
CHEVRON 94660 Global Id: T0605998652 Global Id: T0605900914 Current Status: 9 Global ID: T0605900914 Status: Completed - Case Closed Facility Id: 98UT111 Facility Id: 89UT031 Facility Status: Case Closed	***3190 HARBOR BLVD.***	***SSW 1/4 - 1/2 (0.366 mi.)***	***F34***	***86***
C J SEGERSTROM & SON Global Id: T0605901920 Current Status: 9 Global ID: T0605901920 Status: Completed - Case Closed Facility Id: 95UT073 Facility Status: Case Closed	***3315 FAIRVIEW RD***	***ESE 1/4 - 1/2 (0.446 mi.)***	***41***	***129***
UNOCAL #5404 Global Id: T0605901461 Current Status: 8 Global ID: T0605901461 Status: Open - Remediation Facility Id: 91UT134 Facility Status: Post remedial action monitoring	***3599 HARBOR BLVD***	***NNW 1/4 - 1/2 (0.459 mi.)***	***H44***	***142***
UNION CAR WASH/BEACO Global ID: T0605900458 Facility Status: Case Closed	1501 MACARTHUR BLVD	NNW 1/4 - 1/2 (0.464 mi.)	H45	147

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
ICN PHARMACEUTICALS	***3300 HYLAND AVE***	***W 1/4 - 1/2 (0.427 mi.)***	***36***	***101***
Global Id: T0605900064				
Current Status: 9				
Global ID: T0605900064				
Status: Completed - Case Closed				
Facility Id: 89UT150				
Facility Status: Case Closed				
STATE FARM INSURANCE	***3333 HYLAND AVE***	***W 1/4 - 1/2 (0.432 mi.)***	***37***	***104***
Global Id: T0605957851				
Global Id: T0605901167				
Current Status: 9				
Global ID: T0605901167				
Status: Completed - Case Closed				
Facility Id: 93UT001				
Facility Id: 90UT111				
Facility Status: Case Closed				
AUTOMOBILE CLUB OF S	***3333 FAIRVIEW RD***	***ESE 1/4 - 1/2 (0.436 mi.)***	***38***	***114***
Global Id: T0605902033				
Current Status: 9				
Global ID: T0605902033				
Status: Completed - Case Closed				
Facility Id: 97UT003				
Facility Status: Case Closed				
SHELL SERVICE STATIO	***3820 S FAIRVIEW / SU***	***ENE 1/4 - 1/2 (0.445 mi.)***	***G39***	***118***
Global Id: T0605902158				
Status: Open - Remediation				
SHELL #3820	3820 FAIRVIEW AVE	ENE 1/4 - 1/2 (0.445 mi.)	G40	128
Global ID: T0605902158				
Facility Status: Pollution Characterization				
MOBIL #18-JMY	***3470 FAIRVIEW RD***	***ENE 1/4 - 1/2 (0.453 mi.)***	***G43***	***134***
Global Id: T0605900040				
Global Id: T0605901818				
Current Status: 7				
Current Status: 9				
Global ID: T0605900040				
Global ID: T0605901818				
Status: Open - Remediation				
Status: Completed - Case Closed				
Facility Id: 94UT055				
Facility Id: 86UT174				
Facility Status: Remedial action (cleanup) Underway				
Facility Status: Case Closed				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN CIRCUIT	*1267 LOGAN AVENUE*	*SSE 1/2 - 1 (0.923 mi.)*	*50*	*172*

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A M F VOIT INC	*3801 S HARBOR BLVD*	*NW 1/8 - 1/4 (0.141 mi.)*	*C26*	*62*

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METROPOLITAN CIRCUIT	*1267 LOGAN AVENUE*	*SSE 1/2 - 1 (0.923 mi.)*	*50*	*172*

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 11 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MINSTAR (AMF-VOIT) Reg Id: 083000587T	*3801 HARBOR*	*NW 1/8 - 1/4 (0.141 mi.)*	*C25*	*60*
MOBIL #18-HDR Reg Id: 083000703T	*3195 HARBOR BLVD*	*SSW 1/4 - 1/2 (0.361 mi.)*	*F33*	*78*
CHEVRON 94660 Reg Id: 083001156T	*3190 HARBOR BLVD.*	*SSW 1/4 - 1/2 (0.366 mi.)*	*F34*	*86*
C J SEGERSTROM & SON Reg Id: 083002787T	*3315 FAIRVIEW RD*	*ESE 1/4 - 1/2 (0.446 mi.)*	*41*	*129*
UNOCAL #5404 Reg Id: 083001957T	*3599 HARBOR BLVD*	*NNW 1/4 - 1/2 (0.459 mi.)*	*H44*	*142*

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO Reg Id: 083003174T	3820	ENE 1/4 - 1/2 (0.426 mi.)	G35	101
ICN PHARMACEUTICALS Reg Id: 083000081T	***3300 HYLAND AVE***	***W 1/4 - 1/2 (0.427 mi.)***	***36***	***101***
STATE FARM INSURANCE Reg Id: 083001527T	***3333 HYLAND AVE***	***W 1/4 - 1/2 (0.432 mi.)***	***37***	***104***
AUTOMOBILE CLUB OF S Reg Id: 083000754T Reg Id: 083002970T	***3333 FAIRVIEW RD***	***ESE 1/4 - 1/2 (0.436 mi.)***	***38***	***114***
ARCO #3083 Reg Id: 083000049T	3470 FAIRVIEW	ENE 1/4 - 1/2 (0.453 mi.)	G42	133
MOBIL #18-JMY Reg Id: 083002609T	***3470 FAIRVIEW RD***	***ENE 1/4 - 1/2 (0.453 mi.)***	***G43***	***134***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 02/23/2015 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMF VOIT INC EPA Id: CAD008369753 Cleanup Status: CLOSED	***3801 S HARBOR BLVD***	***NW 1/8 - 1/4 (0.141 mi.)***	***C24***	***57***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

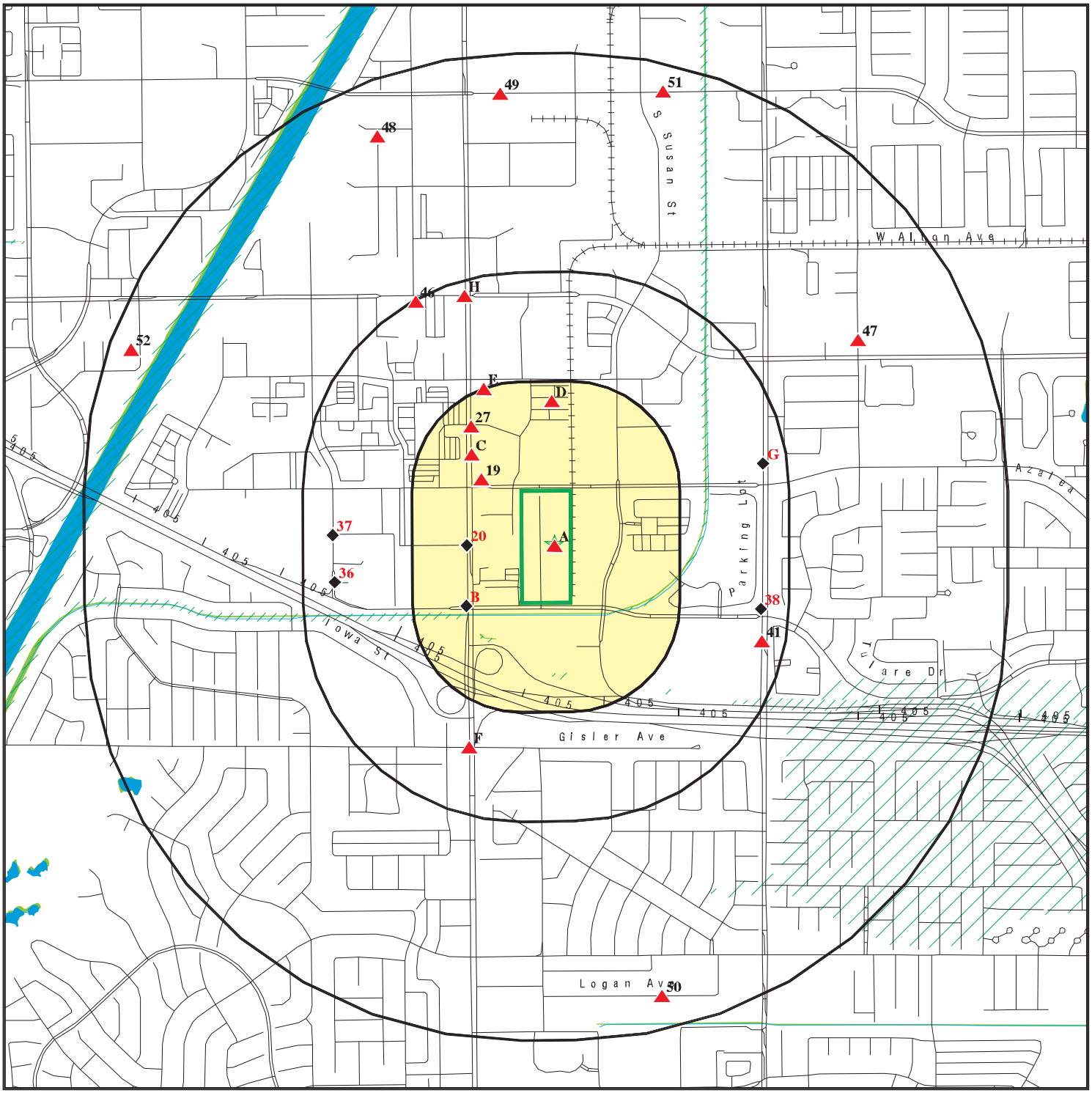
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3611 S HARBOR BLVD	NNW 1/8 - 1/4 (0.248 mi.)	E30	74
Not reported	3621 S HARBOR BLVD	NNW 1/8 - 1/4 (0.248 mi.)	E31	74

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
LA QUINTA HOTEL	HAZNET
SAKIOKA FARMS	SLIC
SUNFLOWER PLAZA METRO CLEANERS	SLIC

OVERVIEW MAP - 4310748.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: LA Times	CLIENT: GaiaTech Inc.
ADDRESS: 1375 Sunflower Avenue Costa Mesa CA 92626	CONTACT: Jen Xavier INQUIRY #: 4310748.2s
LAT/LONG: 33.6937 / 117.9161	DATE: June 01, 2015 12:58 pm

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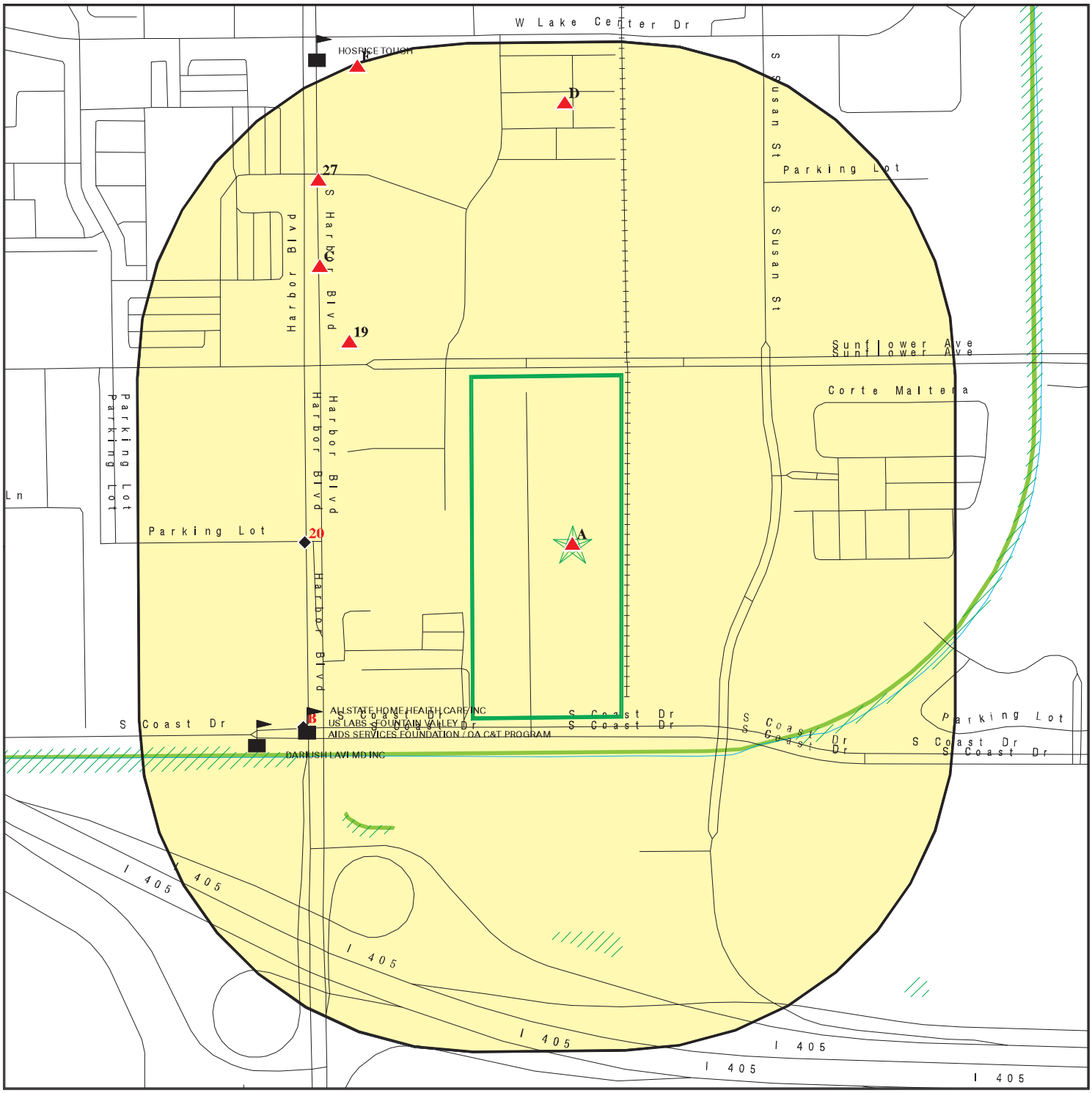
DETAIL MAP - 4310748.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: LA Times	CLIENT: GaiaTech Inc.
ADDRESS: 1375 Sunflower Avenue Costa Mesa CA 92626	CONTACT: Jen Xavier INQUIRY #: 4310748.2s
LAT/LONG: 33.6937 / 117.9161	DATE: June 01, 2015 1:01 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	1	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	1	0	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	1	0	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		0	2	NR	NR	NR	2
RCRA-SQG	0.250	2	1	4	NR	NR	NR	7
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP	2	NR	NR	NR	NR	NR	2
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000	1	0	2	1	6	NR	10
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500	1	0	2	12	NR	NR	15

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500	1	0	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250	1	0	0	NR	NR	NR	1
AST	0.250	1	0	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	1	NR	1
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250	1	0	0	NR	NR	NR	1
HIST UST	0.250	1	0	0	NR	NR	NR	1
SWEEPS UST	0.250	1	0	0	NR	NR	NR	1
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	TP		NR	NR	NR	NR	NR	0
Orange Co. Industrial Site	TP	1	NR	NR	NR	NR	NR	1
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
NPDES	TP	1	NR	NR	NR	NR	NR	1
UIC	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500	1	0	1	10	NR	NR	12
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP	1	NR	NR	NR	NR	NR	1
HAZNET	TP	1	NR	NR	NR	NR	NR	1
EMI	TP	3	NR	NR	NR	NR	NR	3
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
WDS	TP	1	NR	NR	NR	NR	NR	1
Financial Assurance	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	1	0	0	NR	1
MWMP	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP	1	NR	NR	NR	NR	NR	1
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	2	NR	NR	NR	2
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LUST	TP	10	NR	NR	NR	NR	NR	10
RGA LF	TP		NR	NR	NR	NR	NR	0
- Totals --		33	1	18	23	9	0	84

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
1375 SUNFLOWER AVE
COSTA MESA, CA 92626

AST **A100336716**
N/A

Site 1 of 18 in cluster A

Actual: 31 ft.

AST:

Certified Unified Program Agencies:	Orange
Owner:	LOS ANGELES TIMES
Total Gallons:	1,320

A2
Target Property
TIMES MIRROR COMPANY THE
1375 SUNFLOWER AVENUE
COSTA MESA, CA 92626

RCRA-SQG **1000221231**
CAT080011901

Site 2 of 18 in cluster A

Actual: 31 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	TIMES MIRROR COMPANY THE
Facility address:	1375 SUNFLOWER AVENUE COSTA MESA, CA 92626
EPA ID:	CAT080011901
Mailing address:	220 W FIRST ST LOS ANGELES, CA 90053
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	THE TIMES MIRROR COMPANY
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

TIMES MIRROR COMPANY THE (Continued) **1000221231**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	10/27/1980
Site name:	TIMES MIRROR COMPANY THE
Classification:	Large Quantity Generator
Violation Status:	No violations found

A3 Target Property **LOS ANGELES TIMES COMMUNICATIONS LLC** **SWEEPS UST** **1005584961**
1375 SUNFLOWER AVE **EMI** **N/A**
COSTA MESA, CA 92626

Site 3 of 18 in cluster A

Actual: 31 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000004
Tank Status:	Not reported
Capacity:	6000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	7

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000007
Tank Status:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Capacity:	1000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000009
Tank Status:	Not reported
Capacity:	12000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000010
Tank Status:	Not reported
Capacity:	12000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000012
Tank Status:	Not reported
Capacity:	12000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000015
Tank Status:	Not reported
Capacity:	6000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	161
Number:	Not reported
Board Of Equalization:	44-015752
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000017
Tank Status:	Not reported
Capacity:	100000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000011
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	6

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000013
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000014
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000016
Tank Status:	A
Capacity:	5000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	P
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000019
Tank Status:	A
Capacity:	100000
Active Date:	Not reported

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Tank Use:	UNKNOWN
STG:	P
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	161
Number:	9
Board Of Equalization:	44-015752
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-000161-000020
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

EMI:

Year:	2002
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	9
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	9
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Year:	2004
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9.36473
Reactive Organic Gases Tons/Yr:	9.25
Carbon Monoxide Emissions Tons/Yr:	0.9073
NOX - Oxides of Nitrogen Tons/Yr:	0.743
SOX - Oxides of Sulphur Tons/Yr:	0.00931
Particulate Matter Tons/Yr:	0.09681
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.09

Year:	2005
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7.67359
Reactive Organic Gases Tons/Yr:	6.14055049
Carbon Monoxide Emissions Tons/Yr:	.22865
NOX - Oxides of Nitrogen Tons/Yr:	.2306
SOX - Oxides of Sulphur Tons/Yr:	.00545
Particulate Matter Tons/Yr:	.05923
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.05908936

Year:	2006
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.930201051660002933
Reactive Organic Gases Tons/Yr:	3.808
Carbon Monoxide Emissions Tons/Yr:	.263
NOX - Oxides of Nitrogen Tons/Yr:	.673
SOX - Oxides of Sulphur Tons/Yr:	.008
Particulate Matter Tons/Yr:	.323
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.2492

Year:	2007
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **1005584961**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.930201051660002933
Reactive Organic Gases Tons/Yr:	3.808
Carbon Monoxide Emissions Tons/Yr:	.263
NOX - Oxides of Nitrogen Tons/Yr:	.673
SOX - Oxides of Sulphur Tons/Yr:	.008
Particulate Matter Tons/Yr:	.323
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.2492

Year:	2008
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4.186234629807863300
Reactive Organic Gases Tons/Yr:	4.08357208499
Carbon Monoxide Emissions Tons/Yr:	.93703
NOX - Oxides of Nitrogen Tons/Yr:	.62
SOX - Oxides of Sulphur Tons/Yr:	.009732958268
Particulate Matter Tons/Yr:	.343850090168
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.271850090168

Year:	2012
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.018805641504
Reactive Organic Gases Tons/Yr:	0.01491
Carbon Monoxide Emissions Tons/Yr:	0.0425
NOX - Oxides of Nitrogen Tons/Yr:	0.1917
SOX - Oxides of Sulphur Tons/Yr:	0.000140105
Particulate Matter Tons/Yr:	0.01347
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.01312332

A4 **L A TIMES** **RGA LUST** **S114640937**
Target **1375 SUNFLOWER** **N/A**
Property **COSTA MESA, CA**

Site 4 of 18 in cluster A

Actual:
31 ft.

RGA LUST:

2012	L A TIMES	1375 SUNFLOWER
2011	L A TIMES	1375 SUNFLOWER
2010	L A TIMES	1375 SUNFLOWER
2009	L A TIMES	1375 SUNFLOWER
2008	L A TIMES	1375 SUNFLOWER
2007	L A TIMES	1375 SUNFLOWER

L A TIMES (Continued) **S114640937**

2006	L A TIMES	1375 SUNFLOWER
2005	L A TIMES	1375 SUNFLOWER

A5 Target Property **LOS ANGELES TIMES-NORTH TANKS** **RGA LUST** **S114645325**
1375 SUNFLOWER AVE **N/A**
COSTA MESA, CA

Site 5 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

2003	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER AVE

A6 Target Property **LOS ANGELES TIMES-NORTH TANKS** **RGA LUST** **S114645326**
1375 SUNFLOWER **N/A**
COSTA MESA, CA

Site 6 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

2012	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2011	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2010	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2009	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2008	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2007	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2006	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER
2005	LOS ANGELES TIMES-NORTH TANKS	1375 SUNFLOWER

A7 Target Property **LOS ANGELES TIMES COMMUNICATIONS L L C** **RCRA-SQG** **1000102036**
1375 SUNFLOWER **FINDS** **CAD043644236**
COSTA MESA, CA 92626 **NPDES**
HIST CORTESE
Site 7 of 18 in cluster A **LUST**
CA FID UST
SLIC
Actual: 31 ft. **UST**
HIST UST
Orange Co. Industrial Site
ENF
EMI
ENVIROSTOR
US AIRS
WDS

RCRA-SQG:

Date form received by agency:	10/12/2000
Facility name:	LOS ANGELES TIMES COMMUNICATIONS L L C
Site name:	LOS ANGELES TIMES ORANGE COUNTY FACILITY
Facility address:	1375 SUNFLOWER
	COSTA MESA, CA 92626
EPA ID:	CAD043644236
Contact:	MARY ELLEN VOJTEK
Contact address:	Not reported
	Not reported
Contact country:	US

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Contact telephone: (213) 237-5014
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: L A TIMES COMMUNICATIONS LLC
Owner/operator address: 202 W 1ST ST
LOS ANGELES, CA 90012
Owner/operator country: Not reported
Owner/operator telephone: (212) 237-5014
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/15/2000
Site name: LOS ANGELES TIMES COMMUNICATIONS L L C
Classification: Small Quantity Generator

Date form received by agency: 08/15/2000
Site name: LOS ANGELES TIMES COMMUNICATIONS L L C
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D011
. Waste name: SILVER

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

Date form received by agency: 09/01/1996
Site name: LOS ANGELES TIMES COMMUNICATIONS L L C
Classification: Large Quantity Generator

Date form received by agency: 04/13/1990
Site name: LOS ANGELES TIMES
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 02/04/1993
Date achieved compliance: 01/11/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 06/16/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/18/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/25/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 04/01/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Evaluation date: 01/11/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 02/04/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/11/1994
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110001152984

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

AIR MAJOR

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

NPDES:
Npdes Number: CAS000001

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Facility Status:	Active
Agency Id:	0
Region:	8
Regulatory Measure Id:	209028
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30I016012
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	08/14/2000
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Los Angeles Times Communications LLC
Discharge Address:	2000 E 8th St
Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90021
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	8
Regulatory Measure Id:	209028
Order No:	Not reported
Regulatory Measure Type:	Industrial
Place Id:	Not reported
WDID:	8 30I016012
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	05/09/2008
PROCESSED DATE:	08/14/2000
STATUS CODE NAME:	Active
STATUS DATE:	08/14/2000
PLACE SIZE:	20
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Racine Watts
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	213-237-5680
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	racine.watts@latimes.com
OPERATOR NAME:	Los Angeles Times Communications LLC
OPERATOR ADDRESS:	2000 E 8th St
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90021
OPERATOR CONTACT NAME:	Racine Watts
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	213-237-5680
OPERATOR CONTACT PHONE EXT:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

OPERATOR CONTACT EMAIL:	racine.watts@latimes.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	714-966-5645
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Pacific Ocean
CERTIFIER NAME:	Emerson Lego
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	06-APR-12
PRIMARY SIC:	2711-Newspapers: Publishing, or Publishing and Printing
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAG918001
Facility Status:	Active
Agency Id:	26204
Region:	8
Regulatory Measure Id:	206063
Order No:	R8-2012-0027
Regulatory Measure Type:	Enrollee
Place Id:	228229
WDID:	8 302818001
Program Type:	NPDNONMUNIPRCS
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	12/31/1996
Expiration Date Of Regulatory Measure:	07/01/2017
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Los Angeles Times Communications LLC
Discharge Address:	2000 East 8th Street
Discharge City:	Los Angeles
Discharge State:	CA
Discharge Zip:	90021
RECEIVED DATE:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001520T

LUST:

Region:	STATE
Global Id:	T0605901160
Latitude:	33.693822
Longitude:	-117.916868
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	02/23/1998
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001520T
LOC Case Number:	92UT073
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel, Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901160
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	cbernhardt@waterboards.ca.gov
Phone Number:	9517824495

Global Id:	T0605901160
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605901160
Status:	Open - Case Begin Date
Status Date:	05/22/1992

Global Id:	T0605901160
Status:	Open - Remediation
Status Date:	02/23/1998

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Regulatory Activities:

Global Id: T0605901160
Action Type: RESPONSE
Date: 10/15/2013
Action: Other Workplan - Regulator Responded

Global Id: T0605901160
Action Type: RESPONSE
Date: 03/14/2014
Action: Other Workplan - Regulator Responded

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 08/12/2010
Action: File review

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 04/07/2011
Action: File review

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/01/2011
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/16/2010
Action: File review

Global Id: T0605901160
Action Type: Other
Date: 05/22/1992
Action: Leak Discovery

Global Id: T0605901160
Action Type: REMEDIATION
Date: 02/23/1998
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901160
Action Type: REMEDIATION
Date: 02/01/2003
Action: Free Product Removal

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 07/15/2011
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/02/1992
Action: Notice of Responsibility

Global Id: T0605901160

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Action Type: ENFORCEMENT
Date: 07/25/2003
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/20/2007
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/21/2007
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 09/26/2005
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/30/2005
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/27/2006
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 06/18/2007
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 12/20/2011
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 09/18/2012
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 03/15/2006
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 04/29/2008
Action: Staff Letter

Global Id: T0605901160
Action Type: ENFORCEMENT
Date: 11/04/2013

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Action:	Staff Letter
Global Id:	T0605901160
Action Type:	ENFORCEMENT
Date:	07/31/2013
Action:	Staff Letter
Global Id:	T0605901160
Action Type:	Other
Date:	05/22/1992
Action:	Leak Reported
Global Id:	T0605901160
Action Type:	ENFORCEMENT
Date:	10/01/2008
Action:	Staff Letter
Global Id:	T0605901160
Action Type:	ENFORCEMENT
Date:	12/22/2008
Action:	Staff Letter
Global Id:	T0605901160
Action Type:	ENFORCEMENT
Date:	11/02/2012
Action:	Staff Letter
Global Id:	T0605901160
Action Type:	ENFORCEMENT
Date:	07/13/2009
Action:	Staff Letter
Global Id:	T0605901160
Action Type:	ENFORCEMENT
Date:	12/31/2009
Action:	Staff Letter

Region:	STATE
Global Id:	T0605979014
Latitude:	33.694511
Longitude:	-117.916361
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/1990
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	88UT115
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Contact:

Global Id:	T0605979014
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	cbernhardt@waterboards.ca.gov
Phone Number:	9517824495

Global Id:	T0605979014
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605979014
Status:	Open - Case Begin Date
Status Date:	05/21/1988

Global Id:	T0605979014
Status:	Completed - Case Closed
Status Date:	09/26/1990

Regulatory Activities:

Global Id:	T0605979014
Action Type:	Other
Date:	05/21/1988
Action:	Leak Discovery

Global Id:	T0605979014
Action Type:	Other
Date:	05/21/1988
Action:	Leak Reported

Region:	STATE
Global Id:	T0605999595
Latitude:	33.692277
Longitude:	-117.916434
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/11/2013
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	SL8R156
LOC Case Number:	91UT064
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605999595
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Global Id:	T0605999595
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	cbernhardt@waterboards.ca.gov
Phone Number:	9517824495

Status History:

Global Id:	T0605999595
Status:	Completed - Case Closed
Status Date:	02/11/2013

Global Id:	T0605999595
Status:	Open - Verification Monitoring
Status Date:	02/28/2002

Global Id:	T0605999595
Status:	Open - Case Begin Date
Status Date:	09/26/1990

Global Id:	T0605999595
Status:	Open - Eligible for Closure
Status Date:	01/08/2013

Regulatory Activities:

Global Id:	T0605999595
Action Type:	ENFORCEMENT
Date:	04/28/2010
Action:	Staff Letter

Global Id:	T0605999595
Action Type:	ENFORCEMENT
Date:	12/22/2010
Action:	Staff Letter

Global Id:	T0605999595
Action Type:	Other
Date:	09/26/1990
Action:	Leak Discovery

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Global Id: T0605999595
Action Type: REMEDIATION
Date: 01/01/1995
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: REMEDIATION
Date: 12/15/2005
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: REMEDIATION
Date: 02/01/2001
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: REMEDIATION
Date: 12/17/2001
Action: Soil Vapor Extraction (SVE)

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 02/27/1991
Action: Notice of Responsibility

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 04/18/2003
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 09/22/2003
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 03/30/2005
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 06/21/2007
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 03/15/2006
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 04/17/2012
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Date: 02/11/2013
Action: Closure/No Further Action Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 08/10/2012
Action: Notification - Preclosure

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 08/10/2012
Action: Notification - Preclosure

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 08/10/2012
Action: Notification - Preclosure

Global Id: T0605999595
Action Type: Other
Date: 05/10/1991
Action: Leak Reported

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 03/26/2012
Action: Petition Submitted for Review

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 09/17/2012
Action: Staff Letter

Global Id: T0605999595
Action Type: ENFORCEMENT
Date: 07/15/2009
Action: Staff Letter

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 88UT115
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 09/26/1990
Case Type: Soil Only
Record ID: RO0001604

Region: ORANGE
Facility Id: 91UT064
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 02/11/2013
Case Type: Other Ground Water
Record ID: RO0002469

Region: ORANGE

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Facility Id:	92UT073
Current Status:	Remedial Action
Released Substance:	Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed:	Not reported
Case Type:	Other Ground Water
Record ID:	RO0002698

Region:	ORANGE
Facility Id:	92UT073
Current Status:	Remedial Action
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	Not reported
Case Type:	Other Ground Water
Record ID:	RO0002698

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083001520T
Local Case Num:	92UT073
Case Type:	Other ground water affected
Substance:	12034,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605901160
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	5/22/1992
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	2/23/1998
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	ND
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6955108
Longitude:	-117.9137948
MTBE Date:	3/12/2002
Max MTBE GW:	3100

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

MTBE Concentration:	0
Max MTBE Soil:	0
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	CAB
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	88UT115
Case Type:	Soil only
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605979014
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	5/21/1988
Enforcement Date:	Not reported
Close Date:	9/26/1990
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Post remedial action monitoring
Case Number:	SL8R156
Local Case Num:	91UT064
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	SA
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605999595
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	9/26/1990
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	2/28/2002
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class: *
Staff: CAB
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30001018
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149665645
Mail To: Not reported
Mailing Address: LOS ANGELES TIMES-OR
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SLIC REG 8:
Type: Surface Water
Facility Status: Closed
Staff: XXX
Substance: CHROMIUM
Lead Agency: Local Agency
Location Code: CM-9
Thomas Bros Code: 859-A3

ORANGE CO. UST:
Facility ID: FA0067847

HIST UST:
Region: STATE
Facility ID: 00000019406
Facility Type: Other
Other Type: NEWSPAPER
Contact Name: Not reported
Telephone: 7149572000
Owner Name: TIMES MIRROR CORPORATION

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Owner Address:	TIMES MIRROW SQUARE
Owner City,St,Zip:	LOS ANGELES, CA 90053
Total Tanks:	0010
Tank Num:	001
Container Num:	1
Year Installed:	1980
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	1980
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	4
Year Installed:	1980
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	004
Container Num:	5
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	005
Container Num:	6
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	006
Container Num:	7
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Tank Num:	007
Container Num:	8
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	008
Container Num:	9
Year Installed:	1980
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	009
Container Num:	10
Year Installed:	1978
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	010
Container Num:	11
Year Installed:	Not reported
Tank Capacity:	00006000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None

Orange Co. Industrial Site:

Case ID:	91IC005
Region:	ORANGE
Record ID:	RO0000337
Current Status:	CLOSED 5/15/1991
Closure Type:	Transferred to OCLOP Program
Released Chemical:	INK/SOLVENT

ENF:

Region:	8
Facility Id:	246123
Agency Name:	Los Angeles Times Communications LLC
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	2711

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

SIC Desc 1:	Newspapers: Publishing, or Publishing and Printing
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	8 302600N01
Reg Measure Id:	158762
Reg Measure Type:	Unregulated
Region:	8
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	224832
Region:	8
Order / Resolution Number:	89-031
Enforcement Action Type:	Admin Civil Liability
Effective Date:	02/24/1989

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Adoption/Issuance Date:	Not reported
Achieve Date:	3/6/1989
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 302600N01
Description:	SPILL OF COOLING WATER WITH CHROMATE SOLUTION.
Program:	UNREGS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0.00
Initial Assessed Amount:	0.00
Liability $ Amount:	0.00
Project $ Amount:	0.00
Liability $ Paid:	0.00
Project $ Completed:	0.00
Total $ Paid/Completed Amount:	0.00

Region:	8
Facility Id:	246123
Agency Name:	Los Angeles Times Communications LLC
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	2711
SIC Desc 1:	Newspapers: Publishing, or Publishing and Printing
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	UNREGS
# Of Programs:	Not reported
WDID:	8 302600N01
Reg Measure Id:	158762

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Reg Measure Type:	Unregulated
Region:	8
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	223730
Region:	8
Order / Resolution Number:	90-039
Enforcement Action Type:	Admin Civil Liability
Effective Date:	02/05/1990
Adoption/Issuance Date:	Not reported
Achieve Date:	2/21/1990
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 302600N01
Description:	13383 - THREE SEPERATE DISCHARGES: 11/22/89 - 12/26/89, 11/27/89, AND 1/22/90
Program:	UNREGS
Latest Milestone Completion Date:	2/21/1990
# Of Programs1:	1
Total Assessment Amount:	30,000.00
Initial Assessed Amount:	0.00
Liability $ Amount:	30,000.00
Project $ Amount:	0.00
Liability $ Paid:	30,000.00
Project $ Completed:	0.00
Total $ Paid/Completed Amount:	30,000.00

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	37
Reactive Organic Gases Tons/Yr:	37
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	76
Reactive Organic Gases Tons/Yr:	76
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	19
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	16
Reactive Organic Gases Tons/Yr:	12
Carbon Monoxide Emissions Tons/Yr:	0

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

County Code:	30
Air Basin:	SC
Facility ID:	4623
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	18
Reactive Organic Gases Tons/Yr:	18
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

ENVIROSTOR:

Facility ID:	71003669
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	74
Senate:	37
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.69555
Longitude:	-117.9158
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD043644236
Alias Type:	EPA Identification Number
Alias Name:	110001152984
Alias Type:	EPA (FRS #)
Alias Name:	71003669
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

AIRS (AFS):

Compliance and Violation Data Major Sources:

EPA plant ID:	110001152984
Plant name:	LOS ANGELES TIMES COMMUNICATIONS LLC
Plant address:	1375 SUNFLOWER AVE COSTA MESA, CA 92626
County:	ORANGE
Region code:	09
Dunn & Bradst #:	043644236
Air quality cntrl region:	024
Sic code:	2711
Sic code desc:	NEWSPAPERS
North Am. industrial classf:	511110
NAIC code description:	Newspaper Publishers
Default compliance status:	IN COMPLIANCE - INSPECTION
Default classification:	ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS
Govt facility:	ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT
Current HPV:	Not reported

WDS:

Facility ID:	Santa Ana River 30I016012
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	Not reported
Facility Contact:	Not reported
Agency Name:	LOS ANGELES TIMES
Agency Address:	202 W. 1ST STREET
Agency City,St,Zip:	LOS ANGELES 90012
Agency Contact:	MARY ELLEN VOJTEK
Agency Telephone:	2132375014
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.
Facility ID:	Santa Ana River 302818001
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG918001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	2132375014
Facility Contact:	MARY ELLEN VOJTEK
Agency Name:	LOS ANGELES TIMES
Agency Address:	202 W. 1ST STREET
Agency City,St,Zip:	LOS ANGELES 90012
Agency Contact:	MARY ELLEN VOJTEK
Agency Telephone:	2132375014
Agency Type:	Private
SIC Code:	4959
SIC Code 2:	Not reported
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Primary Waste:	CNWTRS
Waste Type2:	Not reported
Waste2:	Contaminated Ground Water
Primary Waste Type:	Hazardous/Influent or Solid Wastes that contain toxic, corrosive, ignitable or reactive substances and must be managed according to applicable DOHS standards.
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported

LOS ANGELES TIMES COMMUNICATIONS L L C (Continued) **1000102036**

Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Complexity:	Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.

A8 Target Property **L.A. TIMES** **RGA LUST** **S114641047**
1375 SUNFLOWER AVENUE **N/A**
COSTA MESA, CA

Site 8 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

1992 L.A. TIMES 1375 SUNFLOWER AVENUE

A9 Target Property **LOS ANGELES TIMES COMMUNICATIONS LLC** **HAZNET** **S113000577**
1375 SUNFLOWER AVE **N/A**
COSTA MESA, CA 92626

Site 9 of 18 in cluster A

Actual: 31 ft.

HAZNET:

envid:	S113000577
Year:	2012
GEPAID:	CAD043644236
Contact:	EMERSON LEGO/MGR ENVMTL AFFAIR
Telephone:	2132373040
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.1
Facility County:	Orange

envid:	S113000577
Year:	2012
GEPAID:	CAD043644236
Contact:	EMERSON LEGO/MGR ENVMTL AFFAIR
Telephone:	2132373040
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **S113000577**

Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.38
Facility County:	Orange

envid:	S113000577
Year:	2012
GEPAID:	CAD043644236
Contact:	EMERSON LEGO/MGR ENVMTL AFFAIR
Telephone:	2132373040
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Orange
TSD EPA ID:	ARD981057870
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.22101
Facility County:	Orange

envid:	S113000577
Year:	2011
GEPAID:	CAD043644236
Contact:	EMERSON LEGO/MGR ENVMTL AFFAIR
Telephone:	2132373040
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Not reported
TSD EPA ID:	TXD077603371
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.06
Facility County:	Orange

envid:	S113000577
Year:	2011
GEPAID:	CAD043644236
Contact:	EMERSON LEGO/MGR ENVMTL AFFAIR
Telephone:	2132373040
Mailing Name:	Not reported
Mailing Address:	2000 E 8TH ST
Mailing City,St,Zip:	LOS ANGELES, CA 900210000
Gen County:	Not reported
TSD EPA ID:	NVT330010000
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.6
Facility County:	Orange

LOS ANGELES TIMES COMMUNICATIONS LLC (Continued) **S113000577**

Click this hyperlink while viewing on your computer to access
255 additional CA_HAZNET: record(s) in the EDR Site Report.

A10
Target Property
Actual: 31 ft.

ERNS **90171223**
N/A

LOS ANGELES TIMES BLDG./1375 W.SUNFLOWER
COSTA MESA, CA 92626

Site 10 of 18 in cluster A

Click this hyperlink while viewing on your computer to access
additional ERNS detail in the EDR Site Report.

A11
Target Property
Actual: 31 ft.

ERNS **91238303**
N/A

1375 SUNFLOWER
COSTA MESA, CA 92626

Site 11 of 18 in cluster A

Click this hyperlink while viewing on your computer to access
additional ERNS detail in the EDR Site Report.

A12
Target Property
Actual: 31 ft.

RGA LUST **S114645331**
N/A

LOS ANGELES TIMES
1375 SUNFLOWER AVENUE
COSTA MESA, CA

Site 12 of 18 in cluster A

RGA LUST:

1998	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
1997	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
1996	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
1995	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
1994	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE
1993	LOS ANGELES TIMES	1375 SUNFLOWER AVENUE

A13
Target Property
Actual: 31 ft.

RGA LUST **S114645332**
N/A

LOS ANGELES TIMES
1375
COSTA MESA, CA

Site 13 of 18 in cluster A

RGA LUST:

2000	LOS ANGELES TIMES	1375

A14 Target Property — **LOS ANGELES TIMES-SOUTH TANKS**, **1375 SUNFLOWER**, **COSTA MESA, CA** — **RGA LUST** — **S114645329** / **N/A**

Site 14 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

2012	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2011	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2010	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2009	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2008	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2007	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2006	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER
2005	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER

A15 Target Property — **L A TIMES**, **1375 SUNFLOWER AVE**, **COSTA MESA, CA** — **RGA LUST** — **S114640936** / **N/A**

Site 15 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

2003	L A TIMES	1375 SUNFLOWER AVE

A16 Target Property — **LOS ANGELES TIMES-SOUTH TANKS**, **1375 SUNFLOWER AVE**, **COSTA MESA, CA** — **RGA LUST** — **S114645328** / **N/A**

Site 16 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

2003	LOS ANGELES TIMES-SOUTH TANKS	1375 SUNFLOWER AVE

A17 Target Property — **LOS ANGELES TIMES**, **1375 SUNFLOWER AVE.**, **COSTA MESA, CA 92626** — **EMI** — **S106834724** / **N/A**

Site 17 of 18 in cluster A

Actual: 31 ft.

EMI:

Year:	2001
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	B
Total Organic Hydrocarbon Gases Tons/Yr:	10
Reactive Organic Gases Tons/Yr:	10
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	11
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

LOS ANGELES TIMES (Continued) **S106834724**

Year:	2009
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.1370514971565799
Reactive Organic Gases Tons/Yr:	3.023142
Carbon Monoxide Emissions Tons/Yr:	1.08412
NOX - Oxides of Nitrogen Tons/Yr:	0.48235
SOX - Oxides of Sulphur Tons/Yr:	0.0106245
Particulate Matter Tons/Yr:	0.350657
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.27846675199999998

Year:	2010
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.87149321585437101
Reactive Organic Gases Tons/Yr:	0.81301999999999996
Carbon Monoxide Emissions Tons/Yr:	0.44932
NOX - Oxides of Nitrogen Tons/Yr:	0.33898
SOX - Oxides of Sulphur Tons/Yr:	5.9699999999999996E-3
Particulate Matter Tons/Yr:	0.30769999999999997
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.23409568

Year:	2011
County Code:	30
Air Basin:	SC
Facility ID:	124906
Air District Name:	SC
SIC Code:	2711
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.044681894431
Reactive Organic Gases Tons/Yr:	0.02583
Carbon Monoxide Emissions Tons/Yr:	0.18407
NOX - Oxides of Nitrogen Tons/Yr:	0.23958
SOX - Oxides of Sulphur Tons/Yr:	0.00389
Particulate Matter Tons/Yr:	0.02813
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.02770856

A18 Target Property | **LOS ANGELES TIMES** | **RGA LUST** | **S114645330**
1375 SUNFLOWER AVE | **N/A**
COSTA MESA, CA

Site 18 of 18 in cluster A

Actual: 31 ft.

RGA LUST:

2002	LOS ANGELES TIMES	1375 SUNFLOWER AVE
2001	LOS ANGELES TIMES	1375 SUNFLOWER AVE

---

19 NW < 1/8 0.095 mi. 502 ft. | **BABCOCK ELECTRO-MECHANICAL INC** | **RCRA-SQG** | **1000178702**
3501 HARBOR BLVD | **FINDS** | **CAD087387759**
COSTA MESA, CA 92626

Relative: Higher

Actual: 32 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	BABCOCK ELECTRO-MECHANICAL INC
Facility address:	3501 HARBOR BLVD COSTA MESA, CA 92626
EPA ID:	CAD087387759
Mailing address:	3501 HARBOR BLVD. COSTA MESA, CA 92626
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BABCOCK MECHANICAL,INC.
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

BABCOCK ELECTRO-MECHANICAL INC (Continued) **1000178702**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	08/18/1980
Site name:	BABCOCK ELECTRO-MECHANICAL INC
Classification:	Large Quantity Generator
Violation Status:	No violations found

FINDS:

Registry ID: 110002662510

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

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20 West 1/8-1/4 0.125 mi. 661 ft. | **BRUNSWICK CORPORATION DEFENSE DIVISION** | **RCRA-LQG** | **1007199597**
3333 HARBOR BOULEVARD | **CAD981683626**
COSTA MESA, CA 92626

Relative: Lower

Actual: 27 ft.

RCRA-LQG:

Date form received by agency:	03/30/1994
Facility name:	BRUNSWICK CORPORATION DEFENSE DIVISION
Facility address:	3333 HARBOR BOULEVARD COSTA MESA, CA 926260000
EPA ID:	CAD981683626
Contact:	VIRGIL WENTZ
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	(714) 546-8030
Telephone ext.:	6333

BRUNSWICK CORPORATION DEFENSE DIVISION (Continued) **1007199597**

Contact email: Not reported
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

B21 **COSTA MESA COMMERCE PARK** **RCRA-SQG** **1007569217**
SW **3303 S HARBOR BLVD** **CAR000157313**
1/8-1/4 **COSTA MESA, CA 92626**
0.127 mi.
671 ft. **Site 1 of 3 in cluster B**

Relative:
Lower

Actual:
18 ft.

RCRA-SQG:
Date form received by agency: 10/05/2004
Facility name: COSTA MESA COMMERCE PARK
Facility address: 3303 S HARBOR BLVD
STE F 8
COSTA MESA, CA 92626
EPA ID: CAR000157313
Contact: DELLA GABELSBERG
Contact address: 3303 S HARBOR BLVD STE F 8
COSTA MESA, CA 92626
Contact country: US
Contact telephone: 714-979-9997
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

COSTA MESA COMMERCE PARK (Continued) **1007569217**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	RREEF AMERICA
Owner/operator address:	3303 S HARBOR BLVD STE F 8 COSTA MESA, CA 92626
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	07/01/2003
Owner/Op end date:	Not reported

Owner/operator name:	RREEF AMERICA RREEF MGMT
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	07/01/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

B22 SW 1/8-1/4 0.127 mi. 671 ft. | **ON SITE PHOTO GRAPHICS INC**
1410 3303 E6 HARBOR BLVD
COSTA MESA, CA 92626 | **RCRA-SQG FINDS** | **1000596182 CAD983601451**

Site 2 of 3 in cluster B

Relative: Lower

Actual: 18 ft.

RCRA-SQG:

Date form received by agency:	08/12/1991
Facility name:	ON SITE PHOTO GRAPHICS INC
Facility address:	1410 3303 E6 HARBOR BLVD COSTA MESA, CA 92626
EPA ID:	CAD983601451
Contact:	KAREN BENAVIDES
Contact address:	PO BOX 1410 3303 E6 HARBR BLVD COSTA MESA, CA 92628
Contact country:	US
Contact telephone:	(714) 540-0668
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BERNARD BURRY
Owner/operator address:	PO BOX 1410 3033 E6 HARBR BLVD COSTA MESA, CA 92628
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 540-0668
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110008282232

ON SITE PHOTO GRAPHICS INC (Continued) **1000596182**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

B23 **PERFECT PRINTING** **RCRA-SQG** **1000857894**
SW **3303 HARBOR BLVD** **FINDS** **CAD983673468**
1/8-1/4 **COSTA MESA, CA 92626**
0.127 mi.
671 ft. **Site 3 of 3 in cluster B**

Relative:
Lower

Actual:
18 ft.

RCRA-SQG:

Date form received by agency:	08/27/1993
Facility name:	PERFECT PRINTING
Facility address:	3303 HARBOR BLVD STE B2 COSTA MESA, CA 92626
EPA ID:	CAD983673468
Mailing address:	HARBOR BLVD STE B2 COSTA MESA, CA 92626
Contact:	HIEN DINH
Contact address:	3303 HARBOR BLVD STE B2 COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 434-2696
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	HIEN DINH
Owner/operator address:	3303 HARBOR BLVD STE B2 COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 434-2696
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

PERFECT PRINTING (Continued) **1000857894**

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002903010

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

C24
NW
1/8-1/4
0.141 mi.
743 ft.

AMF VOIT INC **LUST** **S109284193**
3801 S HARBOR BLVD **ENVIROSTOR** **N/A**
SANTA ANA, CA 92704 **HWP**

Site 1 of 3 in cluster C

Relative:
Higher

Actual:
33 ft.

LUST:
Region: STATE
Global Id: T0605900473
Latitude: 33.698940793
Longitude: -117.9194035
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 06/21/1995
Lead Agency: SANTA ANA RWQCB (REGION 8)
Case Worker: CAB
Local Agency: SANTA ANA, CITY OF
RB Case Number: 083000587T
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: * Solvents
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605900473
Contact Type: Local Agency Caseworker
Contact Name: CHRISTOPHER CIRAULO
Organization Name: SANTA ANA, CITY OF
Address: 1439 S. BROADWAY
City: SANTA ANA
Email: cciraulo@santa-ana.org

AMF VOIT INC (Continued) **S109284193**

Phone Number: Not reported

Global Id: T0605900473
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: cbernhardt@waterboards.ca.gov
Phone Number: 9517824495

Status History:
Global Id: T0605900473
Status: Open - Case Begin Date
Status Date: 04/01/1984

Global Id: T0605900473
Status: Completed - Case Closed
Status Date: 06/21/1995

Global Id: T0605900473
Status: Open - Remediation
Status Date: 12/14/1987

Global Id: T0605900473
Status: Open - Site Assessment
Status Date: 04/01/1984

Global Id: T0605900473
Status: Open - Site Assessment
Status Date: 08/06/1987

Regulatory Activities:
Global Id: T0605900473
Action Type: Other
Date: 07/12/1987
Action: Leak Reported

ENVIROSTOR:
Facility ID: 80001572
Status: Refer: RWQCB
Status Date: 01/01/2008
Site Code: Not reported
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 0
NPL: NO
Regulatory Agencies: RWQCB
Lead Agency: WQC
Program Manager: Not reported
Supervisor: * Unknown
Division Branch: Cleanup Cypress
Assembly: 74
Senate: 37
Special Program: Not reported

AMF VOIT INC (Continued) **S109284193**

Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.69849
Longitude: -117.9197
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD008369753
Alias Type: EPA Identification Number
Alias Name: 110002633446
Alias Type: EPA (FRS #)
Alias Name: 80001572
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 02/04/1991
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HWP:
EPA Id: CAD008369753
Cleanup Status: CLOSED
Latitude: 33.69849
Longitude: -117.9197
Facility Type: Historical - Non-Operating
Facility Size: Not reported
Team: Not reported
Supervisor: Not reported
Site Code: Not reported
Assembly District: 74
Senate District: 37
Public Information Officer: Not reported

Activities:
EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: New Operating Permit - CALL-IN LETTER ISSUED
Actual Date: 11/29/1982

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1

AMF VOIT INC (Continued) **S109284193**

Event Description: New Operating Permit - APPLICATION PART B RECEIVED
Actual Date: 04/08/1983

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED
Actual Date: 04/08/1983

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: New Operating Permit - APPLICATION PART A RECEIVED
Actual Date: 11/12/1980

Closure:
EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: Closure Final - RECEIVE CLOSURE CERTIFICATION
Actual Date: 06/05/1985

EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1
Event Description: Closure Final - ISSUE CLOSURE VERIFICATION
Actual Date: 06/05/1985

Alias:
EPA Id: CAD008369753
Facility Type: Historical - Non-Operating
Alias Type: FRS
Alias: 110002633446

C25 **MINSTAR (AMF-VOIT)** **HIST CORTESE** **S101300011**
NW **3801 HARBOR** **LUST** **N/A**
1/8-1/4 **SANTA ANA, CA 92704**
0.141 mi.
743 ft. **Site 2 of 3 in cluster C**

Relative:
Higher

Actual:
33 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000587T

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000587T
Local Case Num: Not reported
Case Type: Aquifer affected
Substance: Solvents

MINSTAR (AMF-VOIT) (Continued) **S101300011**

Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	SUNFLOWER
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0605900473
How Stopped Date:	Not reported
Enter Date:	8/6/1987
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	4/1/1984
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	6/21/1995
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	8/6/1987
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	12/14/1987
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	8/6/1987
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.69894079
Longitude:	-117.9194035
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: 03-26-91 RESULTS OF LATEST INVESTIGATION DUE BY APRIL 18, 1991.
Not reported
CONSULTANT IS RITA LAVELLE, NUTECH (800) 722-8896.

C26 NW 1/8-1/4 0.141 mi. 743 ft. | **A M F VOIT INC**
3801 S HARBOR BLVD
SANTA ANA, CA 92704

Site 3 of 3 in cluster C

RCRA-TSDF
CERC-NFRAP
CORRACTS
RCRA NonGen / NLR
FINDS

1000135646
CAD008369753

Relative: Higher

Actual: 33 ft.

RCRA-TSDF:

Date form received by agency:	08/03/1992
Facility name:	A M F VOIT INC
Facility address:	3801 S HARBOR BLVD SANTA ANA, CA 92704
EPA ID:	CAD008369753
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHASE MANHATTAN BANK TRUSTEE
Owner/operator address:	1 CHASE MANHATTAN PLAZA NEW YORK CITY, NY 10015
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	AMF VOIT, INC
Owner/operator address:	3801 S HARBOR BLVD CITY NOT REPORTED, CA 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 546-4220
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

A M F VOIT INC (Continued) **1000135646**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/18/1980
Site name: A M F VOIT INC
Classification: Not a generator, verified

Corrective Action Summary:
Event date: 02/04/1991
Event: CA029WQ

Event date: 02/04/1991
Event: CA049PA

Event date: 02/04/1991
Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.

Event date: 02/04/1991
Event: CA074ME

Event date: Not reported
Event: CA03193

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/10/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/08/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/30/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/16/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/29/1985

A M F VOIT INC (Continued) **1000135646**

Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

CERC-NFRAP:
Site ID: 0900367
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Deferred to RCRA

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13288650.00000
Person ID: 13003854.00000

Contact Sequence ID: 13294245.00000
Person ID: 13003858.00000

Contact Sequence ID: 13300103.00000
Person ID: 13004003.00000

Program Priority:
Description: RCRA Deferral Audit

Description: RCRA Deferral - Lead Confirmed

Description: RCRA Deferral - Further Superfund Assessment

CERCLIS-NFRAP Assessment History:
Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 03/08/91
Priority Level: Deferred to RCRA (Subtitle C)

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 01/23/96
Priority Level: Not reported

Action: DISCOVERY
Date Started: / /
Date Completed: 08/24/90
Priority Level: Not reported

CORRACTS:

EPA ID: CAD008369753
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910204
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): 326211 33992
Tire Manufacturing (except Retreading)
Sporting and Athletic Goods Manufacturing

A M F VOIT INC (Continued) **1000135646**

Original schedule date: Not reported
Schedule end date: Not reported

FINDS:

Registry ID: 110002633446

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

27
NW
1/8-1/4
0.187 mi.
988 ft.

Relative:
Higher

Actual:
33 ft.

DRY CLEAN USA
3701 S HARBOR BLVD E
SANTA ANA, CA 92704

RCRA-SQG **1000594830**
FINDS **CAD983587148**

RCRA-SQG:
Date form received by agency: 06/27/1991
Facility name: DRY CLEAN USA
Facility address: 3701 S HARBOR BLVD E
SANTA ANA, CA 92704
EPA ID: CAD983587148
Mailing address: S HARBOR BLVD E
SANTA ANA, CA 92704
Contact: RON CAMBARE
Contact address: 3701 S HARBOR BLVD E
SANTA ANA, CA 92704
Contact country: US
Contact telephone: (714) 846-3761
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: RON VANGIE CAMBARE ENTERPRISE
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED

DRY CLEAN USA (Continued) **1000594830**

NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002847625

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D28 **SOUTH COAST CIRCUITS INC** **RCRA-LQG** **1001126718**
North **3506 W LAKE CENTER DR - A** **CAR000018010**
1/8-1/4 **SANTA ANA, CA 92704**
0.205 mi.
1083 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
34 ft.

RCRA-LQG:
Date form received by agency: 03/01/2014
Facility name: SOUTH COAST CIRCUITS INC
Facility address: 3506 W LAKE CENTER DR - A
SANTA ANA, CA 92704
EPA ID: CAR000018010
Mailing address: W LAKE CENTER DR - A
SANTA ANA, CA 92704
Contact: NHAN T TRAN
Contact address: W LAKE CENTER DR - A
SANTA ANA, CA 92704
Contact country: Not reported

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

Contact telephone: (714) 966-2018
Telephone ext.: 28
Contact email: NHAN@SCCIRCUITS.COM
EPA Region: 09
Land type: Private
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: CHUCK BENSON
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Owner/operator name: CHUCK BENSON
Owner/operator address: 3506 W. LAKE CENTER DR., "A"
SANTA ANA, CA 92704
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Owner/operator name: CHUCK BENSON
Owner/operator address: W LAKE CENTER DR - A
SANTA ANA, CA 92704
Owner/operator country: Not reported
Owner/operator telephone: (714) 966-2108
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Owner/operator name: CHUCK BENSON
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

Owner/Op start date: 05/01/1985
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 132
. Waste name: 132

. Waste code: 171
. Waste name: 171

. Waste code: 181
. Waste name: 181

. Waste code: 792
. Waste name: 792

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Historical Generators:
Date form received by agency: 03/13/2012
Site name: SOUTH COAST CIRCUITS,INC.

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

Classification: Large Quantity Generator

. Waste code: 132
. Waste name: 132

. Waste code: 171
. Waste name: 171

. Waste code: 181
. Waste name: 181

. Waste code: 792
. Waste name: 792

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/25/2010
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

. Waste code: 132
. Waste name: 132

. Waste code: 171
. Waste name: 171

. Waste code: 181
. Waste name: 181

. Waste code: 352
. Waste name: 352

. Waste code: 792
. Waste name: 792

. Waste code: D002
. Waste name: CORROSIVE WASTE

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/06/2008
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/27/2006
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

. Waste code: 132
. Waste name: 132

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 01/30/2004
Site name: SOUTH COAST CIRCUITS, INC
Classification: Large Quantity Generator

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/15/2002
Site name: SOUTH COAST CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Site name: SOUTH COAST CIRCUITS
Classification: Large Quantity Generator

Date form received by agency: 02/21/1997
Site name: SOUTH COAST CIRCUITS
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:
Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 38073.4

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 16513.8

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 16513.8

Waste code: D008
Waste name: LEAD

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

Amount (Lbs): 16513.8

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
Amount (Lbs): 40500

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/21/2010
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/11/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/11/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/21/2010

SOUTH COAST CIRCUITS INC (Continued) **1001126718**

Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	Not reported
Evaluation lead agency:	State
Evaluation date:	05/22/2009
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State
Evaluation date:	05/11/2006
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	Not reported
Evaluation lead agency:	Local
Evaluation date:	03/08/2005
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	Not reported
Evaluation lead agency:	State Contractor/Grantee
Evaluation date:	10/02/2003
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State Contractor/Grantee

D29 **SOUTH COAST CIRCUITS** **ENVIROSTOR** **S110494315**
North **3506 WEST LAKE CENTER DRIVE, SUITE A** **N/A**
1/8-1/4 **SANTA ANA, CA 92704**
0.205 mi.
1083 ft. **Site 2 of 2 in cluster D**

Relative:
Higher

Actual:
34 ft.

ENVIROSTOR:

Facility ID:	71003634
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Cypress
Assembly:	69
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.69879
Longitude:	-117.9166
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED

SOUTH COAST CIRCUITS (Continued) **S110494315**

Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAR000018010
Alias Type: EPA Identification Number
Alias Name: 110002916097
Alias Type: EPA (FRS #)
Alias Name: 71003634
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

E30 **EDR US Hist Auto Stat** **1015449334**
NNW **3611 S HARBOR BLVD** **N/A**
1/8-1/4 **SANTA ANA, CA 92704**
0.248 mi.
1312 ft. **Site 1 of 2 in cluster E**

Relative:
Higher

Actual:
34 ft.

EDR Historical Auto Stations:
Name: CONOCOPHILLIPS
Year: 2004
Address: 3611 S HARBOR BLVD

Name: CONOCOPHILLIPS
Year: 2005
Address: 3611 S HARBOR BLVD

E31 **EDR US Hist Auto Stat** **1015449968**
NNW **3621 S HARBOR BLVD** **N/A**
1/8-1/4 **SANTA ANA, CA 92704**
0.248 mi.
1312 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
34 ft.

EDR Historical Auto Stations:
Name: E Z LUBE
Year: 2010
Address: 3621 S HARBOR BLVD

F32 SSW 1/4-1/2 0.351 mi. 1852 ft. | **ARCO#6131**
3201 HARBOR BLVD
COSTA MESA, CA 92626

LUST | **S103988307**
N/A

Site 1 of 3 in cluster F

Relative: Higher

Actual: 33 ft.

LUST:

Region:	STATE
Global Id:	T0605901336
Latitude:	33.686964
Longitude:	-117.919628
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/08/2006
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001784T
LOC Case Number:	92UT012
File Location:	Local Agency Warehouse
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901336
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	vjahn-bull@waterboards.ca.gov
Phone Number:	9517824903

Global Id:	T0605901336
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605901336
Status:	Completed - Case Closed
Status Date:	03/08/2006

Global Id:	T0605901336
Status:	Open - Verification Monitoring
Status Date:	02/28/2005

Global Id:	T0605901336
Status:	Open - Case Begin Date
Status Date:	12/27/1990

Global Id:	T0605901336

ARCO#6131 (Continued) **S103988307**

Status: Open - Remediation
Status Date: 08/13/1998

Regulatory Activities:

Global Id: T0605901336
Action Type: Other
Date: 12/27/1990
Action: Leak Discovery

Global Id: T0605901336
Action Type: REMEDIATION
Date: 08/13/1998
Action: Soil Vapor Extraction (SVE)

Global Id: T0605901336
Action Type: REMEDIATION
Date: 11/06/2000
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901336
Action Type: REMEDIATION
Date: 12/11/2000
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 03/08/2006
Action: Closure/No Further Action Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 02/05/1992
Action: Notice of Responsibility

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 07/14/2003
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 01/11/2005
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 04/12/2005
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 03/08/2004
Action: Staff Letter

Global Id: T0605901336
Action Type: ENFORCEMENT
Date: 06/27/2005

ARCO#6131 (Continued) **S103988307**

Action:	Staff Letter
Global Id:	T0605901336
Action Type:	Other
Date:	01/28/1992
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	92UT012
Current Status:	Certification (Case Closed)
Released Substance:	Waste oil/Used oil
Date Closed:	03/08/2006
Case Type:	Other Ground Water
Record ID:	RO0001148

Region:	ORANGE
Facility Id:	92UT012
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	03/08/2006
Case Type:	Other Ground Water
Record ID:	RO0001148

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083001784T
Local Case Num:	92UT012
Case Type:	Other ground water affected
Substance:	12035,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	SA
How Stopped:	New Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605901336
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/27/1990
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	8/13/1998
Date Post Remedial Action Monitoring:	Not reported

ARCO#6131 (Continued) **S103988307**

Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.686964
Longitude:	-117.919628
MTBE Date:	12/13/2001
Max MTBE GW:	8900
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F33
SSW
1/4-1/2
0.361 mi.
1905 ft.

MOBIL #18-HDR
3195 HARBOR BLVD
COSTA MESA, CA 92626

Site 2 of 3 in cluster F

HIST CORTESE **S101631292**
LUST **N/A**
CA FID UST
SWEEPS UST

Relative:
Higher

Actual:
33 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000703T

LUST:

Region:	STATE
Global Id:	T0605900556
Latitude:	33.686694
Longitude:	-117.919622
Case Type:	LUST Cleanup Site
Status:	Open - Eligible for Closure
Status Date:	01/30/2012
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000703T
LOC Case Number:	87UT226
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the

MOBIL #18-HDR (Continued) **S101631292**

accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900556
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Global Id:	T0605900556
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605900556
Status:	Open - Verification Monitoring
Status Date:	01/15/2010

Global Id:	T0605900556
Status:	Open - Case Begin Date
Status Date:	11/04/1987

Global Id:	T0605900556
Status:	Open - Eligible for Closure
Status Date:	01/30/2012

Global Id:	T0605900556
Status:	Open - Remediation
Status Date:	11/04/1987

Regulatory Activities:

Global Id:	T0605900556
Action Type:	ENFORCEMENT
Date:	03/25/2011
Action:	File review

Global Id:	T0605900556
Action Type:	ENFORCEMENT
Date:	12/17/2010
Action:	File review

Global Id:	T0605900556
Action Type:	ENFORCEMENT
Date:	07/01/2011
Action:	File review

MOBIL #18-HDR (Continued) **S101631292**

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/11/2011
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 09/15/2010
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/19/2010
Action: File review

Global Id: T0605900556
Action Type: Other
Date: 11/23/1987
Action: Leak Discovery

Global Id: T0605900556
Action Type: RESPONSE
Date: 03/25/2010
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605900556
Action Type: REMEDIATION
Date: 05/31/1996
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 04/15/1999
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 04/06/2000
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 06/02/2003
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605900556
Action Type: REMEDIATION
Date: 10/29/1987
Action: Excavation

Global Id: T0605900556
Action Type: REMEDIATION
Date: 09/28/1994
Action: Excavation

Global Id: T0605900556
Action Type: REMEDIATION

MOBIL #18-HDR (Continued) **S101631292**

Date: 05/03/1995
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900556
Action Type: REMEDIATION
Date: 08/24/2006
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 05/24/2011
Action: File review

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/23/2010
Action: Staff Letter

Global Id: T0605900556
Action Type: REMEDIATION
Date: 08/01/2011
Action: Excavation

Global Id: T0605900556
Action Type: REMEDIATION
Date: 03/29/1999
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/13/1987
Action: Notice of Responsibility

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 04/17/2003
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/06/2003
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/06/2004
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 02/06/2006
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 08/13/2007
Action: Staff Letter

MOBIL #18-HDR (Continued) **S101631292**

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/27/2006
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 12/10/2007
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 12/29/2003
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/06/2006
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 03/21/2008
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 01/30/2012
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/06/2013
Action: File review

Global Id: T0605900556
Action Type: Other
Date: 11/23/1987
Action: Leak Reported

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 10/31/2008
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/21/2008
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/04/2010
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT

MOBIL #18-HDR (Continued) **S101631292**

Date: 02/24/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 06/22/2011
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/06/2013
Action: Clean Up Fund - Letter to RP

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 11/06/2013
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0605900556
Action Type: RESPONSE
Date: 01/14/2014
Action: Correspondence

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 04/21/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/10/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 07/27/2009
Action: Staff Letter

Global Id: T0605900556
Action Type: ENFORCEMENT
Date: 09/21/2009
Action: Staff Letter

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 87UT226
Current Status: Remedial Action
Released Substance: Waste oil/Used oil
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0001598

Region: ORANGE
Facility Id: 87UT226
Current Status: Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded

MOBIL #18-HDR (Continued) **S101631292**

Date Closed:	Not reported
Case Type:	Other Ground Water
Record ID:	RO0001598

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083000703T
Local Case Num:	87UT226
Case Type:	Other ground water affected
Substance:	12035,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	New Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605900556
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	11/23/1987
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	11/4/1987
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.686694
Longitude:	-117.919622
MTBE Date:	5/20/2004
Max MTBE GW:	1520
MTBE Concentration:	0
Max MTBE Soil:	169
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN

MOBIL #18-HDR (Continued) **S101631292**

Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30000717
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7145459268
Mail To: Not reported
Mailing Address: 3225 GALLOWS RD ATTN: EAR
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 2069
Number: 9
Board Of Equalization: 44-000400
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002069-000001
Tank Status: A
Capacity: 1000
Active Date: Not reported
Tank Use: PETROLEUM
STG: P
Content: Not reported
Number Of Tanks: 4

Status: Active
Comp Number: 2069
Number: 9
Board Of Equalization: 44-000400
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002069-000004
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P

MOBIL #18-HDR (Continued) **S101631292**

Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	2069
Number:	9
Board Of Equalization:	44-000400
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002069-000005
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	2069
Number:	9
Board Of Equalization:	44-000400
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002069-000006
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

F34 **CHEVRON 94660** **RCRA-LQG** **1000595747**
SSW **3190 HARBOR BLVD.** **FINDS** **CAD983597014**
1/4-1/2 **COSTA MESA, CA 92626** **HIST CORTESE**
0.366 mi. **LUST**
1935 ft. **Site 3 of 3 in cluster F** **CA FID UST**
CHMIRS

Relative:
Higher

Actual:
32 ft.

RCRA-LQG:

Date form received by agency:	02/17/2008
Facility name:	CHEVRON 94660
Facility address:	3190 HARBOR BLVD. COSTA MESA, CA 92626
EPA ID:	CAD983597014
Mailing address:	PO BOX 6004 SAN RAMON, CA 94583
Contact:	KATHY L NORRIS
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	(925) 842-5931
Contact email:	NAWTDESK@CHEVRON.COM

CHEVRON 94660 (Continued) **1000595747**

EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: CHEVRON PRODUCTS CO.
Owner/operator address: PO BOX 6004
SAN RAMON, CA 94583
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/13/1967
Owner/Op end date: Not reported

Owner/operator name: CHEVRON PRODUCTS CO.
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 11/13/1967
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

CHEVRON 94660 (Continued) **1000595747**

. Waste code: D018
. Waste name: BENZENE

Historical Generators:
Date form received by agency: 05/14/2002
Site name: CHEVRON STATION NO 94660
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 10/12/2000
Site name: CHEVRON 94660
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110057106457

Environmental Interest/Information System
STATE MASTER

Registry ID: 110002854536

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

HIST CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001156T

LUST:
Region: STATE
Global Id: T0605998652
Latitude: 33.686734
Longitude: -117.918989
Case Type: LUST Cleanup Site
Status: Completed - Case Closed

CHEVRON 94660 (Continued) **1000595747**

Status Date:	10/04/2002
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	98UT111
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605998652
Contact Type:	Regional Board Caseworker
Contact Name:	TOM E. MBEKE-EKANEM
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	tmbeke-ekanem@waterboards.ca.gov
Phone Number:	9513202007

Global Id:	T0605998652
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605998652
Status:	Completed - Case Closed
Status Date:	10/04/2002

Global Id:	T0605998652
Status:	Open - Case Begin Date
Status Date:	07/17/1998

Regulatory Activities:

Global Id:	T0605998652
Action Type:	Other
Date:	07/17/1998
Action:	Leak Discovery

Global Id:	T0605998652
Action Type:	Other
Date:	07/17/1998
Action:	Leak Reported

Global Id:	T0605998652
Action Type:	ENFORCEMENT
Date:	07/15/2002
Action:	LOP Case Closure Summary to RB

CHEVRON 94660 (Continued) **1000595747**

Region:	STATE
Global Id:	T0605900914
Latitude:	33.6865971
Longitude:	-117.919197
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/27/1997
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001156T
LOC Case Number:	89UT031
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900914
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Global Id:	T0605900914
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605900914
Status:	Completed - Case Closed
Status Date:	03/27/1997

Global Id:	T0605900914
Status:	Open - Case Begin Date
Status Date:	01/20/1989

Regulatory Activities:

Global Id:	T0605900914
Action Type:	Other
Date:	01/20/1989
Action:	Leak Discovery

Global Id:	T0605900914
Action Type:	Other
Date:	01/20/1989
Action:	Leak Reported

CHEVRON 94660 (Continued) **1000595747**

Global Id:	T0605900914
Action Type:	ENFORCEMENT
Date:	03/20/1997
Action:	LOP Case Closure Summary to RB

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	98UT111
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	10/04/2002
Case Type:	Soil Only
Record ID:	RO0001456

Region:	ORANGE
Facility Id:	89UT031
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	03/27/1997
Case Type:	Other Ground Water
Record ID:	RO0001570

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083001156T
Local Case Num:	89UT031
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900914
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/20/1989
Enforcement Date:	Not reported
Close Date:	3/27/1997
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=

CHEVRON 94660 (Continued) **1000595747**

Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6865971
Longitude:	-117.919197
MTBE Date:	11/21/2001
Max MTBE GW:	32
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	98UT111
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605998652
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	7/17/1998
Enforcement Date:	Not reported
Close Date:	10/4/2002
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CA FID UST:

Facility ID:	30000903
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145409560
Mail To:	Not reported
Mailing Address:	P O BOX 2833 1300 S
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

CHMIRS:

OES Incident Number:	15-1629
OES notification:	03/21/2015
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	648
Year:	2015
Agency:	Chevron Corp.
Incident Date:	3/21/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline, Unleaded
Quantity Released:	14
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No

CHEVRON 94660 (Continued) **1000595747**

Comments:	Not reported
Description:	RP states that a customer overfilled their vehicle causing the release. Cleanup was completed by onsite station personnel.
OES Incident Number:	15-1681
OES notification:	03/24/2015
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business
Cleanup By:	Responsible Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1350
Year:	2015
Agency:	NRC
Incident Date:	3/24/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	GASOLINE
Quantity Released:	12

CHEVRON 94660 (Continued) **1000595747**

Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Per NRC#1111628: "CALLER IS REPORTING THAT CUSTOMER WAS PUMPING GASOLINE AND OVERFILLED THEIR VEHICLE. CONTAINED AND CLEANED BY STATION PERSONNEL"
OES Incident Number:	14-4679
OES notification:	08/20/2014
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1848
Year:	2014
Agency:	NRC
Incident Date:	8/20/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	24
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Human Error
Fatals:	No
Comments:	Not reported
Description:	Per NRC Fax: the caller reported that 24 ounces of gasoline discharged from the nozzle due to customer overfill. REMEDIAL ACTIONS, Clean-up was completed by store personnel.

OES Incident Number:	15-1831
OES notification:	04/02/2015
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	0615 and 0940
Year:	2015
Agency:	Chevron
Incident Date:	4/2/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	8
Unknown:	Not reported
Substance #2:	Gasoline 8
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Two spills occurred at this location by two different customers topping off their vehicles. First release occurred at 0615 and the second release occurred at 0915 today 4/2/15. The releases were to asphalt only and no waterways were affected by these two releases. The releases were cleaned by the service station attendant.

CHEVRON 94660 (Continued) **1000595747**

OES Incident Number:	14-7457
OES notification:	12/31/2014
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Oz.
Other:	Not reported
Date/Time:	1624
Year:	2014
Agency:	NRC
Incident Date:	12/30/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline; Automotive Unleaded
Quantity Released:	20
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported

CHEVRON 94660 (Continued) **1000595747**

Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Human Error
Fatals:	No
Comments:	Not reported
Description:	Per NRC: "Caller stated a customer was not attentive to what they were doing and spilled gasoline onto the ground while fueling their vehicle at a gas station. Remedial Actions: caller stated the spill was contained and cleaned up."

OES Incident Number:	15-0244
OES notification:	01/13/2015
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	on site personnel
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM

CHEVRON 94660 (Continued) **1000595747**

Measure:	Oz.
Other:	Not reported
Date/Time:	2120
Year:	2015
Agency:	NRC
Incident Date:	1/13/2015
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Fuel - Gasoline
Quantity Released:	16
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Per NRC report: The caller is reporting a gasoline discharge onto concrete pad at a gas station, the caller stated that the spill was due to customer negligence when the tank was overfilled as the subject talked on his cell phone.

G35
ENE
1/4-1/2
0.426 mi.
2247 ft.

SHELL SERVICE STATION **HIST CORTESE** **S104758583**
3820 **N/A**
SANTA ANA, CA 92704

Site 1 of 5 in cluster G

Relative:
Lower

Actual:
24 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083003174T

36
West
1/4-1/2
0.427 mi.
2256 ft.

ICN PHARMACEUTICALS **HIST CORTESE** **S100869272**
3300 HYLAND AVE **LUST** **N/A**
COSTA MESA, CA 92626

Relative:
Lower

Actual:
20 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA

ICN PHARMACEUTICALS (Continued) **S100869272**

Reg Id: 083000081T

LUST:

Region:	STATE
Global Id:	T0605900064
Latitude:	33.692939
Longitude:	-117.923536
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/22/1991
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000081T
LOC Case Number:	89UT150
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900064
Contact Type:	Regional Board Caseworker
Contact Name:	PATRICIA HANNON
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	phannon@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605900064
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605900064
Status:	Open - Case Begin Date
Status Date:	08/07/1989

Global Id:	T0605900064
Status:	Completed - Case Closed
Status Date:	01/22/1991

Regulatory Activities:

Global Id:	T0605900064
Action Type:	Other
Date:	08/07/1989
Action:	Leak Discovery

ICN PHARMACEUTICALS (Continued) **S100869272**

Global Id:	T0605900064
Action Type:	Other
Date:	08/07/1989
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	89UT150
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	01/22/1991
Case Type:	Soil Only
Record ID:	RO0002724

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000081T
Local Case Num:	89UT150
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900064
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	8/7/1989
Enforcement Date:	Not reported
Close Date:	1/22/1991
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6933248
Longitude:	-117.9247702
MTBE Date:	Not reported

ICN PHARMACEUTICALS (Continued) **S100869272**

Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	PAH
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

37
West
1/4-1/2
0.432 mi.
2280 ft.

Relative:
Lower

Actual:
25 ft.

STATE FARM INSURANCE
3333 HYLAND AVE
COSTA MESA, CA 92626

RCRA-SQG **1000397159**
FINDS **CAD982020851**
HIST CORTESE
LUST
CA FID UST
HIST UST
SWEEPS UST
HAZNET
EMI

RCRA-SQG:

Date form received by agency:	08/05/1987
Facility name:	STATE FARM INSURANCE
Facility address:	3333 HYLAND AVE COSTA MESA, CA 92626
EPA ID:	CAD982020851
Mailing address:	HYLAND AVE COSTA MESA, CA 92626
Contact:	ENVIRONMENTAL MANAGER
Contact address:	3333 HYLAND AVE COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 241-2141
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STATE FARM INSURANCE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner

STATE FARM INSURANCE (Continued) **1000397159**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002778414

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HIST CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001527T

LUST:
Region: STATE
Global Id: T0605957851
Latitude: 33.694007
Longitude: -117.926398

STATE FARM INSURANCE (Continued) **1000397159**

Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/07/1990
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	90UT111
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605957851
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605957851
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605957851
Status:	Open - Case Begin Date
Status Date:	04/18/1990

Global Id:	T0605957851
Status:	Completed - Case Closed
Status Date:	11/07/1990

Regulatory Activities:

Global Id:	T0605957851
Action Type:	Other
Date:	04/18/1990
Action:	Leak Discovery

Global Id:	T0605957851
Action Type:	Other
Date:	04/18/1990
Action:	Leak Reported

Region:	STATE
Global Id:	T0605901167

STATE FARM INSURANCE (Continued) **1000397159**

Latitude:	33.6924891
Longitude:	-117.9248468
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/21/1996
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001527T
LOC Case Number:	93UT001
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901167
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605901167
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605901167
Status:	Open - Case Begin Date
Status Date:	12/23/1992

Global Id:	T0605901167
Status:	Completed - Case Closed
Status Date:	08/21/1996

Regulatory Activities:

Global Id:	T0605901167
Action Type:	Other
Date:	12/23/1992
Action:	Leak Discovery

Global Id:	T0605901167
Action Type:	Other
Date:	12/23/1992
Action:	Leak Reported

Global Id:	T0605901167

STATE FARM INSURANCE (Continued) **1000397159**

Action Type:	ENFORCEMENT
Date:	08/21/1996
Action:	Closure/No Further Action Letter

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	93UT001
Current Status:	Certification (Case Closed)
Released Substance:	Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed:	08/21/1996
Case Type:	Other Ground Water
Record ID:	RO0001800

Region:	ORANGE
Facility Id:	90UT111
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	11/07/1990
Case Type:	Soil Only
Record ID:	RO0002021

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083001527T
Local Case Num:	93UT001
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901167
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/23/1992
Enforcement Date:	Not reported
Close Date:	8/21/1996
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported

STATE FARM INSURANCE (Continued) **1000397159**

Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6937858
Longitude:	-117.9250382
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	90UT111
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605957851
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	4/18/1990
Enforcement Date:	Not reported
Close Date:	11/7/1990
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported

STATE FARM INSURANCE (Continued) **1000397159**

Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CA FID UST:

Facility ID:	30003171
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7142412141
Mail To:	Not reported
Mailing Address:	1 STATE FARM PLZ
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

HIST UST:

Region:	STATE
Facility ID:	00000000631
Facility Type:	Other
Other Type:	INSURANCE
Contact Name:	Not reported
Telephone:	7142412137
Owner Name:	STATE FARM INSURANCE COMPANY
Owner Address:	3333 HYLAND AVENUE
Owner City,St,Zip:	COSTA MESA, CA 92626
Total Tanks:	0002
Tank Num:	001

STATE FARM INSURANCE (Continued) **1000397159**

Container Num: 2
Year Installed: 1980
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Tank Num: 002
Container Num: 1
Year Installed: 1983
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor, Vapor Sniff Well, Pressure Test

SWEEPS UST:
Status: Not reported
Comp Number: 6376
Number: Not reported
Board Of Equalization: 44-008105
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-006376-000003
Tank Status: Not reported
Capacity: 6000
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: Not reported
Number Of Tanks: 1

Status: Active
Comp Number: 6376
Number: 9
Board Of Equalization: 44-008105
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-006376-000001
Tank Status: A
Capacity: 6000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 2

Status: Active
Comp Number: 6376
Number: 9
Board Of Equalization: 44-008105
Referral Date: 09-30-92

STATE FARM INSURANCE (Continued) **1000397159**

Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-006376-000002
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

HAZNET:

envid:	1000397159
Year:	2005
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Not reported
TSD EPA ID:	CAD050806850
TSD County:	Not reported
Waste Category:	Liquids with polychloronated biphenyls >= 50 Mg./L
Disposal Method:	Not reported
Tons:	Not reported
Facility County:	Orange

envid:	1000397159
Year:	2004
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Not reported
TSD EPA ID:	CAD008364432
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Transfer Station
Tons:	0.15
Facility County:	Orange

envid:	1000397159
Year:	2004
GEPAID:	CAD982020851
Contact:	JOHN HINKLE
Telephone:	6616631951
Mailing Name:	Not reported
Mailing Address:	3333 HYLAND AVE
Mailing City,St,Zip:	COSTA MESA, CA 926261507
Gen County:	Not reported
TSD EPA ID:	CAT080033681
TSD County:	Not reported
Waste Category:	Latex waste

STATE FARM INSURANCE (Continued) **1000397159**

Disposal Method: Disposal, Land Fill
Tons: 1
Facility County: Orange

envid: 1000397159
Year: 2004
GEPAID: CAD982020851
Contact: JOHN HINKLE
Telephone: 6616631951
Mailing Name: Not reported
Mailing Address: 3333 HYLAND AVE
Mailing City,St,Zip: COSTA MESA, CA 926261507
Gen County: Not reported
TSD EPA ID: CAT080033681
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.91
Facility County: Orange

envid: 1000397159
Year: 2004
GEPAID: CAD982020851
Contact: JOHN HINKLE
Telephone: 6616631951
Mailing Name: Not reported
Mailing Address: 3333 HYLAND AVE
Mailing City,St,Zip: COSTA MESA, CA 926261507
Gen County: Not reported
TSD EPA ID: CAT080033681
TSD County: Not reported
Waste Category: Off-specification, aged or surplus inorganics
Disposal Method: Recycler
Tons: 0.25
Facility County: Orange

Click this hyperlink while viewing on your computer to access
20 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:
Year: 1987
County Code: 30
Air Basin: SC
Facility ID: 6898
Air District Name: SC
SIC Code: 5311
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 5
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

STATE FARM INSURANCE (Continued) **1000397159**

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	6898
Air District Name:	SC
SIC Code:	6411
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	6898
Air District Name:	SC
SIC Code:	6411
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

38
ESE
1/4-1/2
0.436 mi.
2302 ft.

AUTOMOBILE CLUB OF SO CALIFORN
3333 FAIRVIEW RD
COSTA MESA, CA 92626

HIST CORTESE **S101609497**
LUST **N/A**
CA FID UST
SWEEPS UST
HAZNET

Relative:
Lower

Actual:
30 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000754T

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002970T

LUST:

Region:	STATE
Global Id:	T0605902033
Latitude:	33.691495
Longitude:	-117.909485
Case Type:	LUST Cleanup Site

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

Status:	Completed - Case Closed
Status Date:	06/05/1998
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002970T
LOC Case Number:	97UT003
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605902033
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	vjahn-bull@waterboards.ca.gov
Phone Number:	9517824903

Global Id:	T0605902033
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605902033
Status:	Completed - Case Closed
Status Date:	06/05/1998

Global Id:	T0605902033
Status:	Open - Case Begin Date
Status Date:	01/27/1997

Regulatory Activities:

Global Id:	T0605902033
Action Type:	Other
Date:	01/27/1997
Action:	Leak Discovery

Global Id:	T0605902033
Action Type:	Other
Date:	01/27/1997
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

Facility Id:	97UT003
Current Status:	Certification (Case Closed)
Released Substance:	Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed:	06/05/1998
Case Type:	Other Ground Water
Record ID:	RO0000920

Region:	ORANGE
Facility Id:	97UT003
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	06/05/1998
Case Type:	Other Ground Water
Record ID:	RO0000920

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083002970T
Local Case Num:	97UT003
Case Type:	Other ground water affected
Substance:	12034,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605902033
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/27/1997
Enforcement Date:	Not reported
Close Date:	6/5/1998
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6887871
Longitude:	-117.9081267
MTBE Date:	Not reported
Max MTBE GW:	Not reported

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	VJJ
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CA FID UST:

Facility ID:	30000171
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7148505034
Mail To:	Not reported
Mailing Address:	2601 S FIGUEROA ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92626
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	Active
Comp Number:	5305
Number:	9
Board Of Equalization:	44-016356
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-005305-000001
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Active
Comp Number:	5305
Number:	9

AUTOMOBILE CLUB OF SO CALIFORN (Continued) **S101609497**

Board Of Equalization:	44-016356
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-005305-000002
Tank Status:	A
Capacity:	12000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

HAZNET:

envid:	S101609497
Year:	2013
GEPAID:	CAC002735435
Contact:	STEVE EVANS
Telephone:	9516846006
Mailing Name:	Not reported
Mailing Address:	3333 FAIRVIEW RD
Mailing City,St,Zip:	COSTA MESA, CA 926261610
Gen County:	Orange
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	5.0568
Facility County:	Not reported

G39 **SHELL SERVICE STATION** **RCRA-SQG** **1001967437**
ENE **3820 S FAIRVIEW / SUNFLOWER** **LUST** **CAR000069021**
1/4-1/2 **SANTA ANA, CA 92704**
0.445 mi.
2347 ft. **Site 2 of 5 in cluster G**

Relative:
Lower

Actual:
25 ft.

RCRA-SQG:

Date form received by agency:	02/26/2004
Facility name:	SHELL SERVICE STATION
Facility address:	3820 S FAIRVIEW / SUNFLOWER SAP #136060 SANTA ANA, CA 92704
EPA ID:	CAR000069021
Mailing address:	SHELL OIL PRODUCTS US 12700 NORTHBOROUGH DR MFT240G HOUSTON, TX 770672508
Contact:	GARY V WING
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	(714) 731-8337
Contact email:	GVWING@SHELLOPUS.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous

SHELL SERVICE STATION (Continued) **1001967437**

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	EQUILON ENTERPRISES LLC
Owner/operator address:	P O BOX 2099 RM 1241 HOUSTON, TX 77252
Owner/operator country:	Not reported
Owner/operator telephone:	(713) 241-2258
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	SHELL OIL PRODUCTS US
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported

Owner/operator name:	EQUILON ENTERPRISES LLC DBA SHELL OIL PR
Owner/operator address:	PO BOX 2648 HOUSTON, TX 77252
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	02/26/2004
Site name:	SHELL SERVICE STATION

SHELL SERVICE STATION (Continued) **1001967437**

Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 03/30/2000
Site name: SHELL SERVICE STATION
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

LUST:

Region:	STATE
Global Id:	T0605902158
Latitude:	33.69595539
Longitude:	-117.9080182
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	12/27/2005
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	CAB
Local Agency:	SANTA ANA, CITY OF
RB Case Number:	083003174T
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605902158
Contact Type:	Local Agency Caseworker
Contact Name:	CHRISTOPHER CIRAULO
Organization Name:	SANTA ANA, CITY OF
Address:	1439 S. BROADWAY
City:	SANTA ANA
Email:	cciraulo@santa-ana.org
Phone Number:	Not reported

Global Id:	T0605902158
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500

SHELL SERVICE STATION (Continued) **1001967437**

City: RIVERSIDE
Email: cbernhardt@waterboards.ca.gov
Phone Number: 9517824495

Status History:

Global Id: T0605902158
Status: Open - Case Begin Date
Status Date: 04/29/1998

Global Id: T0605902158
Status: Open - Remediation
Status Date: 12/23/2005

Global Id: T0605902158
Status: Open - Remediation
Status Date: 12/27/2005

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 04/29/1998

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 10/29/1999

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 03/23/2000

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 01/20/2002

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 01/22/2002

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 06/19/2003

Global Id: T0605902158
Status: Open - Site Assessment
Status Date: 07/09/2004

Regulatory Activities:

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 01/12/2015
Action: Technical Correspondence / Assistance / Other

Global Id: T0605902158
Action Type: RESPONSE
Date: 11/02/2002
Action: Monitoring Report - Quarterly

SHELL SERVICE STATION (Continued) **1001967437**

Global Id: T0605902158
Action Type: RESPONSE
Date: 05/10/2004
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/21/2003
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 11/04/2002
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 03/06/2003
Action: Interim Remedial Action Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 09/30/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/21/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/28/2005
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2004
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 06/19/2003
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 12/01/2014
Action: Email Correspondence - Regulator Responded

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 07/08/2003
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT

SHELL SERVICE STATION (Continued) **1001967437**

Date: 09/15/2004
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 04/13/2005
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 05/19/2005
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 10/07/2011
Action: Staff Letter

Global Id: T0605902158
Action Type: Other
Date: 04/29/1998
Action: Leak Discovery

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/14/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 05/15/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: REMEDIATION
Date: 08/08/2008
Action: In Situ Biological Treatment

SHELL SERVICE STATION (Continued) **1001967437**

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2004
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: REMEDIATION
Date: 02/09/2012
Action: Monitored Natural Attenuation

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 01/10/2008
Action: Staff Letter

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/29/2005
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1001967437**

Date: 12/31/2005
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0605902158
Action Type: RESPONSE
Date: 08/01/2005
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 08/01/2005
Action: Soil and Water Investigation Workplan

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 02/09/2012
Action: Staff Letter

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 12/14/2007
Action: Unknown

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 11/21/2002
Action: * Verbal Communication

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 11/20/2002
Action: Staff Letter

Global Id: T0605902158
Action Type: Other
Date: 05/06/1998
Action: Leak Reported

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2007
Action: Monitoring Report - Quarterly

SHELL SERVICE STATION (Continued) **1001967437**

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/24/2012
Action: Request for Closure

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 02/04/2013
Action: Verbal Enforcement

Global Id: T0605902158
Action Type: RESPONSE
Date: 04/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 02/04/2008
Action: Other Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1001967437**

Date: 04/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 07/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/20/2002
Action: Preliminary Site Assessment Workplan

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/06/2003
Action: Soil and Water Investigation Report

Global Id: T0605902158
Action Type: RESPONSE
Date: 10/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 01/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0605902158
Action Type: RESPONSE
Date: 06/11/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 01/22/2002
Action: Staff Letter

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 08/30/2002
Action: Site Visit / Inspection / Sampling

Global Id: T0605902158
Action Type: ENFORCEMENT
Date: 09/20/2002
Action: Staff Letter

SHELL SERVICE STATION (Continued) **1001967437**

Global Id:	T0605902158
Action Type:	ENFORCEMENT
Date:	01/28/2003
Action:	Staff Letter
Global Id:	T0605902158
Action Type:	ENFORCEMENT
Date:	07/29/2009
Action:	Staff Letter
Global Id:	T0605902158
Action Type:	RESPONSE
Date:	12/30/2009
Action:	Other Report / Document
Global Id:	T0605902158
Action Type:	RESPONSE
Date:	06/30/2002
Action:	Soil and Water Investigation Report
Global Id:	T0605902158
Action Type:	RESPONSE
Date:	04/30/2010
Action:	Monitoring Report - Quarterly
Global Id:	T0605902158
Action Type:	RESPONSE
Date:	12/30/2013
Action:	Monitoring Report - Semi-Annually

G40 **SHELL #3820** **LUST** **S104791867**
ENE **3820 FAIRVIEW AVE** **N/A**
1/4-1/2 **SANTA ANA, CA 92704**
0.445 mi.
2347 ft. **Site 3 of 5 in cluster G**

Relative:
Lower

Actual:
25 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083003174T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	SUNFLOWERE
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0605902158
How Stopped Date:	Not reported
Enter Date:	6/29/1998

SHELL #3820 (Continued) **S104791867**

Date Confirmation of Leak Began:	4/29/1998
Date Preliminary Assessment Began:	1/22/2002
Discover Date:	4/29/1998
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	1/20/2002
Date Pollution Characterization Began:	7/9/2004
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	6/29/1998
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.69595539
Longitude:	-117.9080182
MTBE Date:	5/22/2002
Max MTBE GW:	11000
MTBE Concentration:	1
Max MTBE Soil:	1300
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	A
Staff:	CAB
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

41
ESE
1/4-1/2
0.446 mi.
2356 ft.

C J SEGERSTROM & SONS
3315 FAIRVIEW RD
COSTA MESA, CA 92626

HIST CORTESE **S101631288**
LUST **N/A**
CA FID UST
CHMIRS

Relative:
Higher

Actual:
31 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002787T

LUST:

Region:	STATE
Global Id:	T0605901920
Latitude:	33.6882811
Longitude:	-117.9081407
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/19/1997

C J SEGERSTROM & SONS (Continued) **S101631288**

Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002787T
LOC Case Number:	95UT073
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901920
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	vjahn-bull@waterboards.ca.gov
Phone Number:	9517824903

Global Id:	T0605901920
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605901920
Status:	Completed - Case Closed
Status Date:	06/19/1997

Global Id:	T0605901920
Status:	Open - Case Begin Date
Status Date:	12/06/1995

Regulatory Activities:

Global Id:	T0605901920
Action Type:	Other
Date:	12/06/1995
Action:	Leak Discovery

Global Id:	T0605901920
Action Type:	Other
Date:	12/06/1995
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	95UT073
Current Status:	Certification (Case Closed)

C J SEGERSTROM & SONS (Continued) **S101631288**

Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/19/1997
Case Type: Other Ground Water
Record ID: RO0002763

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083002787T
Local Case Num:	95UT073
Case Type:	Other ground water affected
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901920
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/6/1995
Enforcement Date:	Not reported
Close Date:	6/19/1997
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6882811
Longitude:	-117.9081407
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	VJJ
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported

C J SEGERSTROM & SONS (Continued) **S101631288**

Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30005405
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7145460110
Mail To: Not reported
Mailing Address: 3315 FAIRVIEW RD
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CHMIRS:
OES Incident Number: '12-5273
OES notification: 09/03/2012
OES Date: Not reported
OES Time: Not reported
Incident Date: Not reported
Date Completed: Not reported
Property Use: Not reported
Agency Id Number: Not reported
Agency Incident Number: Not reported
Time Notified: Not reported
Time Completed: Not reported
Surrounding Area: Not reported
Estimated Temperature: Not reported
Property Management: Not reported
More Than Two Substances Involved?: Not reported
Resp Agncy Personel # Of Decontaminated: Not reported
Responding Agency Personel # Of Injuries: Not reported
Responding Agency Personel # Of Fatalities: Not reported
Others Number Of Decontaminated: Not reported
Others Number Of Injuries: Not reported
Others Number Of Fatalities: Not reported
Vehicle Make/year: Not reported
Vehicle License Number: Not reported
Vehicle State: Not reported
Vehicle Id Number: Not reported
CA DOT PUC/ICC Number: Not reported
Company Name: Not reported
Reporting Officer Name/ID: Not reported
Report Date: Not reported
Facility Telephone: Not reported

C J SEGERSTROM & SONS (Continued) **S101631288**

Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business,Residence
Cleanup By:	Unrecoverable
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Unknown
Other:	Not reported
Date/Time:	1904
Year:	2012
Agency:	Southern California Gas Company
Incident Date:	9/2/2012
Admin Agency:	Orange County Emergency Management Division
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Natural Gas
Quantity Released:	Unkown
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller states: A vehicle accident damaged a 1" plastic service line causing the release. The release was securred shortly after the accident at 2140.

G42 **ARCO #3083** **HIST CORTESE** **S102433835**
ENE **3470 FAIRVIEW** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.453 mi.
2393 ft. **Site 4 of 5 in cluster G**

Relative:
Lower

Actual:
25 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000049T

G43 ENE 1/4-1/2 0.453 mi. 2393 ft. | **MOBIL #18-JMY**
3470 FAIRVIEW RD
COSTA MESA, CA 92626

Site 5 of 5 in cluster G

HIST CORTESE
LUST
CA FID UST
SWEEPS UST

U002096210
N/A

Relative: Lower

Actual: 25 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002609T

LUST:

Region:	STATE
Global Id:	T0605900040
Latitude:	33.695891828
Longitude:	-117.9074977
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	03/07/2000
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000049T
LOC Case Number:	94UT055
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900040
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Global Id:	T0605900040
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605900040
Status:	Open - Case Begin Date
Status Date:	04/21/1993

MOBIL #18-JMY (Continued) **U002096210**

Global Id: T0605900040
Status: Open - Remediation
Status Date: 03/07/2000

Regulatory Activities:

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 04/28/2010
Action: Staff Letter

Global Id: T0605900040
Action Type: RESPONSE
Date: 02/08/2013
Action: Other Workplan - Regulator Responded

Global Id: T0605900040
Action Type: RESPONSE
Date: 10/21/2014
Action: Interim Remedial Action Plan - Regulator Responded

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 01/20/2011
Action: File review

Global Id: T0605900040
Action Type: Other
Date: 04/21/1993
Action: Leak Discovery

Global Id: T0605900040
Action Type: REMEDIATION
Date: 03/07/2000
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 04/05/2011
Action: File review

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 07/12/2010
Action: File review

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 09/23/2010
Action: File review

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 11/07/1994
Action: Notice of Responsibility

Global Id: T0605900040
Action Type: ENFORCEMENT

MOBIL #18-JMY (Continued) **U002096210**

Date: 03/03/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 05/30/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 08/07/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/01/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/17/2003
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 01/23/2004
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 06/02/2004
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 09/25/2007
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 12/03/2007
Action: Staff Letter

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 11/14/2011
Action: Notice of Responsibility

Global Id: T0605900040
Action Type: ENFORCEMENT
Date: 04/25/2012
Action: Staff Letter

Global Id: T0605900040
Action Type: Other
Date: 04/21/1993
Action: Leak Reported

MOBIL #18-JMY (Continued) **U002096210**

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	11/02/2012
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	04/20/2009
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	07/13/2009
Action:	Staff Letter

Global Id:	T0605900040
Action Type:	ENFORCEMENT
Date:	09/21/2009
Action:	Staff Letter

Region:	STATE
Global Id:	T0605901818
Latitude:	33.6960369
Longitude:	-117.907253
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/28/1994
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002609T
LOC Case Number:	86UT174
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901818
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Global Id:	T0605901818
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

MOBIL #18-JMY (Continued) **U002096210**

Status History:

Global Id:	T0605901818
Status:	Open - Case Begin Date
Status Date:	10/08/1986
Global Id:	T0605901818
Status:	Completed - Case Closed
Status Date:	12/28/1994

Regulatory Activities:

Global Id:	T0605901818
Action Type:	Other
Date:	10/08/1986
Action:	Leak Discovery
Global Id:	T0605901818
Action Type:	REMEDIATION
Date:	10/08/1986
Action:	Excavation
Global Id:	T0605901818
Action Type:	Other
Date:	10/08/1986
Action:	Leak Reported
Global Id:	T0605901818
Action Type:	ENFORCEMENT
Date:	12/28/1994
Action:	Closure/No Further Action Letter

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	94UT055
Current Status:	Remedial Action
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	Not reported
Case Type:	Other Ground Water
Record ID:	RO0002329
Region:	ORANGE
Facility Id:	86UT174
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	12/28/1994
Case Type:	Other Ground Water
Record ID:	RO0002594

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083000049T
Local Case Num:	94UT055

MOBIL #18-JMY (Continued) **U002096210**

Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	OM
How Stopped:	Other Means
Leak Cause:	Unknown
Leak Source:	D
Global ID:	T0605900040
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	4/21/1993
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	3/7/2000
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6932099
Longitude:	-117.9075477
MTBE Date:	6/13/2002
Max MTBE GW:	354000
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083002609T
Local Case Num:	86UT174

MOBIL #18-JMY (Continued) **U002096210**

Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901818
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	10/8/1986
Enforcement Date:	Not reported
Close Date:	12/28/1994
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.69595297
Longitude:	-117.9074727
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CA FID UST:

Facility ID:	30000423
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported

MOBIL #18-JMY (Continued) **U002096210**

Facility Phone: 7149797118
Mail To: Not reported
Mailing Address: 3225 GALLOWS RD ATTN: EAR
Mailing Address 2: Not reported
Mailing City,St,Zip: COSTA MESA 92626
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 2078
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002078-000001
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Status: Active
Comp Number: 2078
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002078-000002
Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2078
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 30-000-002078-000003

MOBIL #18-JMY (Continued) **U002096210**

Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	2078
Number:	9
Board Of Equalization:	Not reported
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	30-000-002078-000004
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

H44 **UNOCAL #5404** **HIST CORTESE** **S103065416**
NNW **3599 HARBOR BLVD** **LUST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.459 mi.
2425 ft. **Site 1 of 2 in cluster H**

Relative:
Higher

Actual:
37 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001957T

LUST:

Region:	STATE
Global Id:	T0605901461
Latitude:	33.701893548
Longitude:	-117.919946928
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	11/01/2004
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001957T
LOC Case Number:	91UT134
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

UNOCAL #5404 (Continued) **S103065416**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901461
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605901461
Contact Type:	Local Agency Caseworker
Contact Name:	DENAMARIE BAKER
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E. DYER ROAD, STE. 120
City:	SANTA ANA
Email:	dbaker@ochca.com
Phone Number:	7144336255

Status History:

Global Id:	T0605901461
Status:	Open - Verification Monitoring
Status Date:	12/22/1995

Global Id:	T0605901461
Status:	Open - Case Begin Date
Status Date:	10/31/1991

Global Id:	T0605901461
Status:	Open - Remediation
Status Date:	11/01/2004

Regulatory Activities:

Global Id:	T0605901461
Action Type:	ENFORCEMENT
Date:	12/30/2010
Action:	File review

Global Id:	T0605901461
Action Type:	Other
Date:	10/31/1991
Action:	Leak Discovery

Global Id:	T0605901461
Action Type:	REMEDIATION
Date:	11/28/1995
Action:	Excavation

Global Id:	T0605901461
Action Type:	REMEDIATION
Date:	11/28/1995
Action:	Pump & Treat (P&T) Groundwater

Global Id:	T0605901461

UNOCAL #5404 (Continued) **S103065416**

Action Type: REMEDIATION
Date: 11/01/2004
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 01/07/2011
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 08/11/2010
Action: File review

Global Id: T0605901461
Action Type: REMEDIATION
Date: 10/29/1991
Action: Excavation

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 09/21/2010
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 10/13/2010
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 04/06/2011
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 06/04/2011
Action: File review

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 10/17/2003
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/09/2004
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/14/2005
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 06/05/2007

UNOCAL #5404 (Continued) **S103065416**

Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 03/05/2008
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 10/24/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 04/27/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 05/08/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 01/05/2006
Action: Staff Letter

Global Id: T0605901461
Action Type: Other
Date: 10/31/1991
Action: Leak Reported

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 11/21/1991
Action: Notice of Responsibility

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 05/26/2004
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 08/20/2007
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 07/11/2008
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 09/04/2008
Action: Staff Letter

UNOCAL #5404 (Continued) **S103065416**

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 04/17/2012
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 02/11/2009
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 09/26/2012
Action: Staff Letter

Global Id: T0605901461
Action Type: ENFORCEMENT
Date: 07/13/2009
Action: Staff Letter

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 91UT134
Current Status: Post Remedial Action
Released Substance: Waste oil/Used oil
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0002801

Region: ORANGE
Facility Id: 91UT134
Current Status: Post Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0002801

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Post remedial action monitoring
Case Number: 083001957T
Local Case Num: 91UT134
Case Type: Other ground water affected
Substance: 12035,800661
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: SEL
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Tank

UNOCAL #5404 (Continued) **S103065416**

Global ID:	T0605901461
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	10/31/1991
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	12/22/1995
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6956138
Longitude:	-117.919625
MTBE Date:	10/18/2001
Max MTBE GW:	430
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	NOM
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

H45
NNW
1/4-1/2
0.464 mi.
2452 ft.

UNION CAR WASH/BEACON BAY **LUST** **S106784800**
1501 MACARTHUR BLVD **N/A**
SANTA ANA, CA 92704

Site 2 of 2 in cluster H

Relative:
Higher

Actual:
37 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000572T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	EDFPGT
Cross Street:	BRISTOL

UNION CAR WASH/BEACON BAY (Continued) **S106784800**

Enf Type:	CLOS
Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	Overfill
Leak Source:	Other Source
Global ID:	T0605900458
How Stopped Date:	11/29/1983
Enter Date:	7/20/1987
Date Confirmation of Leak Began:	11/29/1983
Date Preliminary Assessment Began:	Not reported
Discover Date:	11/29/1983
Enforcement Date:	6/16/2000
Close Date:	2/11/2004
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	9/1/1987
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	1/11/2002
Date Post Remedial Action Monitoring:	6/29/2001
Enter Date:	7/20/1987
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Yes
Oversite Program:	LUST
Latitude:	33.70038461
Longitude:	-117.8884491
MTBE Date:	1/9/1997
Max MTBE GW:	51000
MTBE Concentration:	8
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	Not reported
Staff:	NOM
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: SINCE SIGNIFICANT DISSOLVED PHASE CONTAM IS PRESENT, FURTHER INVEST (RESAMPLING, GRADIENT) IS REQ'D. HOWEVER, FP WAS REMOVED FROM 1983-1985. A REPORT SAMPLING RESULTS PENDING. VES ACTIVATED ON 8/19/96. ALSO, GW TREAT SYS OPERATING @ SITE.

46 NNW 1/4-1/2 0.496 mi. 2618 ft.

AVIATION EQUIPMENT
1571 MACARTHUR BLVD
COSTA MESA, CA 92626

NPDES **S110493658**
Orange Co. Industrial Site **N/A**
ENVIROSTOR

Relative: Higher

Actual: 36 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	8
Regulatory Measure Id:	406827
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30I022813
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/01/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Aviation Equipment Processing
Discharge Address:	1571 MacArthur Blvd
Discharge City:	Costa Mesa
Discharge State:	California
Discharge Zip:	92626
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	8
Regulatory Measure Id:	406827
Order No:	Not reported
Regulatory Measure Type:	Industrial
Place Id:	Not reported
WDID:	8 30I022813
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	09/01/2010
PROCESSED DATE:	09/01/2010
STATUS CODE NAME:	Active
STATUS DATE:	09/01/2010
PLACE SIZE:	4000
PLACE SIZE UNIT:	SqFt
FACILITY CONTACT NAME:	Dennis Heider
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	714-850-2080
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	dennis@aveprocessing.com
OPERATOR NAME:	Aviation Equipment Processing
OPERATOR ADDRESS:	1571 MacArthur Blvd
OPERATOR CITY:	Costa Mesa

AVIATION EQUIPMENT (Continued) **S110493658**

OPERATOR STATE:	California
OPERATOR ZIP:	92626
OPERATOR CONTACT NAME:	Dennis Heider
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	714-850-2080
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	dennis@aveprocessing.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Pacific Ocean
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	347-Metal Services, nec
SECONDARY SIC:	3728-Aircraft Parts and Auxiliary Equipment, NEC
TERTIARY SIC:	Not reported

Orange Co. Industrial Site:

Case ID:	01IC037
Region:	ORANGE
Record ID:	RO0003019
Current Status:	CLOSED 2/18/2009
Closure Type:	Closure certification issued
Released Chemical:	SOLVENTS-HALOGENATED; ORGANIC COMPOUNDS

ENVIROSTOR:

Facility ID:	71003283
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported

AVIATION EQUIPMENT (Continued) **S110493658**

Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 69
Senate: 34
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.70011
Longitude: -117.8885
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAR000046433
Alias Type: EPA Identification Number
Alias Name: 110002925452
Alias Type: EPA (FRS #)
Alias Name: 71003283
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Non-Submittal
Completed Date: 01/11/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Facility ID: 30370195
Status: Refer: 1248 Local Agency
Status Date: 12/21/2001
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned

AVIATION EQUIPMENT (Continued) **S110493658**

Division Branch: Cleanup Cypress
Assembly: 68
Senate: Not reported
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 0
Longitude: 0
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 30370195
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

47
NE
1/2-1
0.742 mi.
3918 ft.

ARMSTRONG RANCH HIGH SCHOOL
3529 SOUTH GREENVILLE STREET
SANTA ANA, CA 92704

SCH **S101300007**
HIST CORTESE **N/A**
LUST
ENVIROSTOR

Relative:
Higher

Actual:
36 ft.

SCH:

Facility ID: 30010009
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 40
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404203
Assembly: 69
Senate: 34
Special Program Status: Not reported

ARMSTRONG RANCH HIGH SCHOOL (Continued) **S101300007**

Status:	No Further Action
Status Date:	02/04/2002
Restricted Use:	NO
Funding:	School District
Latitude:	33.70222
Longitude:	-117.8997
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	NONE SPECIFIED, No Contaminants found
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	ARMSTRONG RANCH HIGH SCHOOL #6
Alias Type:	Alternate Name
Alias Name:	SANTA ANA UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	SANTA ANA USD-NEW H.S. #6 @ARMSTRONG RCH
Alias Type:	Alternate Name
Alias Name:	404203
Alias Type:	Project Code (Site Code)
Alias Name:	30010009
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	02/15/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	03/15/2001
Comments:	Environmental Oversight Agreement

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/04/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	01/22/2001
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	07/16/2001
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	04/10/2001
Comments:	Not reported

ARMSTRONG RANCH HIGH SCHOOL (Continued) **S101300007**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002421T

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083002421T
Local Case Num:	Not reported
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street:	MACARTHUR
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0605901732
How Stopped Date:	Not reported
Enter Date:	4/13/1994
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	3/7/1994
Enforcement Date:	Not reported
Close Date:	7/5/1995
Date Prelim Assessment Workplan Submitted:	3/7/1994
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	4/13/1994
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7014987

ARMSTRONG RANCH HIGH SCHOOL (Continued) **S101300007**

Longitude:	-117.9037516
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	JB
Lead Agency:	Regional Board
Local Agency:	Santa Ana, Orange County
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	WILL INVESTIGATE GROUNDWATER

ENVIROSTOR:

Facility ID:	30010009
Status:	No Further Action
Status Date:	02/04/2002
Site Code:	404203
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	40
NPL:	NO
Regulatory Agencies:	DTSC
Lead Agency:	DTSC
Program Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	69
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	33.70222
Longitude:	-117.8997
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	NONE SPECIFIED No Contaminants found
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	ARMSTRONG RANCH HIGH SCHOOL #6
Alias Type:	Alternate Name
Alias Name:	SANTA ANA UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	SANTA ANA USD-NEW H.S. #6 @ARMSTRONG RCH
Alias Type:	Alternate Name
Alias Name:	404203
Alias Type:	Project Code (Site Code)
Alias Name:	30010009
Alias Type:	Envirostor ID Number

ARMSTRONG RANCH HIGH SCHOOL (Continued) **S101300007**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	02/15/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	03/15/2001
Comments:	Environmental Oversight Agreement

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/04/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	01/22/2001
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	07/16/2001
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	04/10/2001
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

48
NNW
1/2-1
0.875 mi.
4619 ft.

PIONEER CIRCUITS INCORPORATED **RCRA-LQG** **1000886191**
3000 SOUTH SHANNON STREET **ENVIROSTOR** **CA0000132613**
SANTA ANA, CA 92704

Relative:
Higher

Actual:
40 ft.

RCRA-LQG:

Date form received by agency:	03/01/2014
Facility name:	PIONEER CIRCUITS INCORPORATED
Facility address:	3000 SOUTH SHANNON STREET

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

	SANTA ANA, CA 927046387
EPA ID:	CA0000132613
Mailing address:	SOUTH SHANNON STREET SANTA ANA, CA 927046387
Contact:	BYUNG PARK
Contact address:	SOUTH SHANNON STREET SANTA ANA, CA 927046387
Contact country:	Not reported
Contact telephone:	(714) 641-3132
Contact email:	BPARK@PIONEERCIRCUITS.COM
EPA Region:	09
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	JAMES LEE
Owner/operator address:	SOUTH SHANNON STREET SANTA ANA, CA 92704
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 641-3132
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1988
Owner/Op end date:	Not reported
Owner/operator name:	JAME LEE
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1988
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 132
. Waste name: 132

. Waste code: 141
. Waste name: 141

. Waste code: 171
. Waste name: 171

. Waste code: 221
. Waste name: 221

. Waste code: 331
. Waste name: 331

. Waste code: 792
. Waste name: 792

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Historical Generators:
Date form received by agency: 03/14/2012
Site name: PIONEER CIRCUITS, INC
Classification: Large Quantity Generator

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

. Waste code: 132
. Waste name: 132

. Waste code: 171
. Waste name: 171

. Waste code: 181
. Waste name: 181

. Waste code: 214
. Waste name: 214

. Waste code: 221
. Waste name: 221

. Waste code: 791
. Waste name: 791

. Waste code: 792
. Waste name: 792

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 06/01/2010
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/21/2008
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/21/2005
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

. Waste code: 131
. Waste name: 131

. Waste code: 132
. Waste name: 132

. Waste code: 171

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

. Waste name: 171

. Waste code: 181
. Waste name: 181

. Waste code: 214
. Waste name: 214

. Waste code: 791
. Waste name: 791

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/20/2004
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Date form received by agency: 02/22/2002
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

. Waste code: F007
. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.

Date form received by agency: 10/12/2000
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Site name: PIONEER CIRCUITS, INC.
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: PIONEER CIRCUITS INC
Classification: Small Quantity Generator

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 412.8

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 216325.3

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 185612.2

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 135200.2

Waste code: D008
Waste name: LEAD
Amount (Lbs): 137723.1

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
Amount (Lbs): 47475

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/14/2010
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/28/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/28/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/26/2006
Date achieved compliance: 07/14/2006
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/26/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 06/06/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/11/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

PIONEER CIRCUITS INCORPORATED (Continued) **1000886191**

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/14/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/21/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/28/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 06/26/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/14/2006
Evaluation lead agency: Local

Evaluation date: 01/10/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/14/2006
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 08/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

ENVIROSTOR:
Facility ID: 71003564
Status: Inactive - Needs Evaluation
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 69
Senate: 34
Special Program: Not reported
Restricted Use: NO

Appendix E

Resumes of Environmental Professionals

KRISTEN M. MAGEE
PRINCIPAL CONSULTANT
CHICAGO, ILLINOIS

SUMMARY

- 9+ years due diligence experience
- Completed or managed 500+ Phase I ESAs and compliance audits for commercial, residential, and industrial sites
- Coordinated and managed multi-site industrial portfolios throughout the US, Asia, Europe and South America
- Performed Corporate Environmental Reviews

EDUCATION

Bachelor of Science in Biology, Secondary Major in Art History, University of Notre Dame, Notre Dame, Indiana, 2005

PROFILE

Ms. Magee is a Principal Environmental Consultant and a member of the Transaction Advisory Service group in RPS GaiaTech's Chicago office. In this role, she is responsible for coordinating environmental due diligence efforts in association with global transactions for a variety of clients. She objectively evaluates, prioritizes and estimates environmental liabilities and provides technical support for managing liabilities.

Ms. Magee is also responsible for completing and reviewing Phase I Environmental Site Assessments (ESAs) and regulatory compliance audits for transactions involving refinancing, insurance, property transfers, and mergers and acquisitions. She has prepared operating budgets to address the compliance or remedial concerns identified during the assessment or audit process. Ms. Magee subjectively evaluates and estimates environmental liabilities, and provides recommendations for managing these risks. She is experienced in determining the site's compliance status with applicable federal, state, and local regulations. Ms. Magee completes risk-based analyses, identifies areas of concern, prioritizes potential liabilities, and provides Phase II recommendations.

EXAMPLE PROJECT EXPERIENCE

Phase I ESAs and Compliance Audits

- Performed and managed Phase I ESAs and environmental compliance audits throughout the United States, Europe, South America, and Asia in fields including, but not limited to: plastics manufacturing, bulk petroleum, metal foundries, printing, industrial cleaning, packaging, aerospace engineering, and food manufacturing.
- Completed environmental regulatory compliance reviews and environmental permitting requirements.

Deal Coordination

- Coordinated the day-to-day activities involved in running multi-site or multi-phase projects.
- Ensured consistency of approach and format between various offices or various Project Managers (PMs) and Technical Leaders (TLs) on a multi-project deal.

Transaction Advisory Services

- Performed Corporate Environmental Reviews that included analyzing and estimating the financial implications of environmental liabilities associated with current and historical operations.
- Completed desktop reviews of large portfolio companies to provide high-level environmental risk analysis for clients without conducting site inspections.

JENNIFER XAVIER
SENIOR PROJECT MANAGER, TRANSACTION ADVISORY SERVICES
DALLAS, TEXAS

SUMMARY

- Conducted 120+ Phase I ESAs in accordance with ASTM E1527-05, All Appropriate Inquiry (AAI) and compliance guidelines.

EDUCATION

Bachelor of Applied Arts and Sciences in Public Affairs and Community Service, University of North Texas, Denton, Texas, 2007.

ADDITIONAL TRAINING

40-Hour HAZWOPER

Field and in-house industry related training

PROFILE

Mrs. Xavier is an Environmental Consultant in the Transaction Advisory Services Group in RPS GaiaTech's Dallas office. In this role, she completes and reviews Phase I Environmental Site Assessments (ESAs), Phase II Site Investigations, regulatory compliance audits, corporate reviews and desktop audits for transactions involving refinancing, insurance, property transfers, and mergers and acquisitions. She conducts site inspections, compliance reviews, historical research, liability reviews, and completes reports for clients. In addition, Mrs. Xavier completes risk-based analyses, identifies areas of concern, prioritizes potential liabilities, and provides risk management recommendations.

EXAMPLE PROJECT EXPERIENCE

Phase I ESAs, Phase II Investigations and Compliance Audits

- Conducted over one hundred Phase I ESAs in accordance with ASTM E1527-05, All Appropriate Inquiry (AAI) guidelines and compliance elements for commercial and industrial facilities in the United Stated.
- Conducted international Phase I ESAs in accordance with applicable regional standards which included international compliance evaluations per applicable regulations.
- Managed and performed Phase II subsurface investigations at commercial, industrial, and manufacturing facilities for source area assessment, delineation, and characterization.
- Conducted air quality and soil vapor sampling at residential and commercial facilities.
- Conducted evaluations as part of a Phase I ESA to determine a facility's compliance with hazardous materials, solid waste, hazardous waste, PCB-containing equipment, storm water, waste water, wetlands, radon gas, air emissions, dry cleaning operations and mold regulations.
- Conducted limited health and safety evaluations for commercial and industrial facilities.
- Researched environmental claims or enforcement actions formerly or currently filed against the company or its facilities.
- Researched and reviewed State and Federal environmental databases for former and current facilities to identify environmental impact or compliance concerns.
- Identified and assessed liabilities and allocated costs of meeting environmental obligations.
- Considered requirements for financial reporting and liability disclosure.

Eco & Associates, Inc. ▪ 1855 W. Katella Ave. ▪ Suite 340 ▪ Orange ▪ CA ▪ 92867 ▪ phone (714) 289-0995 ▪ fax (714) 289-0965

June 30, 2016 via FedEx

Ms. Denamarie Baker
Orange County Health Care Agency
Hazardous Materials Management Section
1241 E. Dyer Road, #120
Santa Ana, California 92705

Subject: Submittal of Final 2nd Quarter 2016 – Groundwater Monitoring and Remedial Progress Report for the Los Angeles Times, Costa Mesa Facility, North Tanks Site, Costa Mesa, CA

Dear Ms. Baker:

Please find enclosed one hard copy and one copy in PDF on CD-ROM of the Final 2nd Quarter 2016 – Groundwater Monitoring and Remedial Progress Report for the subject site located at the Los Angeles Times Costa Mesa Facility, North Tanks Site, Costa Mesa, CA. This report was prepared by Eco & Associates, Inc. for your records.

We appreciate the opportunity to work with you and your colleagues on this project. If you have any questions, please do not hesitate to contact us at (714) 289-0995.

Sincerely,
Eco & Associates, Inc.

Mohammad Estiri, Ph.D.
Project Director

cc: Ms. Racine Watts, LA Times Environmental Affairs (1 HC with CD)
Mr. Carl Bernhardt, SARWQCB (1 HC with CD)
Ms. Jennifer Ruddy, ACSC (1 HC with CD)
Mr. Jon Lovegreen, TetraTech (1 HC with CD)
Mr. Brian Benoit, Brinderson Holdings Co. (1 HC with CD)
Mr. Carl Cade, Tribune Real Estate Holdings (1 HC with CD)
Mr. Hoonie Kang, Kearny Real Estate Co. (1 HC with CD)

Enclosure

2ND QUARTER 2016 – QUARTERLY GROUNDWATER MONITORING

AND

REMEDIAL PROGRESS REPORT

June 29, 2016

Los Angeles Times, Costa Mesa Facility
North Tanks Site
1375 Sunflower Avenue
Costa Mesa, California

Prepared for:
Los Angeles Times
Environmental Affairs
2000 East 8th Street
Los Angeles, California 90021

Prepared by:
Eco & Associates, Inc.
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Orange, California 92867
Phone: (714) 289-0995
Fax: (714) 289-0965

Environmental Excellence

2ND QUARTER 2016 – QUARTERLY GROUNDWATER MONITORING

AND

REMEDIAL PROGRESS REPORT

Los Angeles Times, Costa Mesa Facility
North Tanks Site
1375 Sunflower Avenue
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Prepared for:

Los Angeles Times
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2000 East 8th Street
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June 29, 2016

Project No. Eco-12-516

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ABBREVIATIONS, ACRONYMS, & SYMBOLS

µg/L	micrograms per liter
ACSC	Automobile Club of Southern California
AMEC	AMEC, Plc
BTEX	benzene, toluene, ethylbenzene, and xylenes
bgs	below ground surface
DO	dissolved oxygen
DPVE	dual-phase vapor extraction
EC	electrical conductivity
Eco	Eco & Associates, Inc.
EPA	United States Environmental Protection Agency
ETBE	ethyl tertiary butyl ether
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptance limits.
GAC	granular activated carbon
GC/MS	gas chromatograph/mass spectrometer
ICE	Internal Combustion Engine
ID	Analyte identified by RT and presence of single mass ion.
LA	Los Angeles
LCS	laboratory control sample
LOP	Local Oversight Program
MDL	method detection limit
mg/L	milligrams per liter
mL	milliliter
MS	matrix spike
msl	mean sea level
MS/MSD	matrix spike/matrix spike duplicate
MTBE	methyl tertiary butyl ether
NFA	no further action
NPDES	National Pollutant Discharge Elimination System
OCHCA	Orange County Health Care Agency
ORP	oxidation-reduction potential
PID	photoionization detector
Q1	first quarter
QC	quality control
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District

scfm	standard cubic feet per minute
TAME	tertiary amyl methyl ether
TBA	tertiary butyl alcohol
TestAmerica	TestAmerica Laboratories, Inc.
TPH	total petroleum hydrocarbons
TVPH	total volatile petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

EXECUTIVE SUMMARY

Eco & Associates, Inc. (Eco) was contracted to provide environmental services at the Los Angeles (LA) Times Facility, North Tanks Site, in Costa Mesa, Orange County, California (hereafter, the "Site"). This document describes the groundwater monitoring and remediation activities (i.e., monitoring, operation, and maintenance) performed during the second quarter (Q2) of 2016 (April 1 through June 31, 2016).

ACTIVITIES

During 2016-Q2, 21 wells were monitored for groundwater levels and sampled based on current Orange County Health Care Agency (OCHCA) monitoring requirements. Collected groundwater samples were submitted to a State of California certified laboratory and analyzed for total volatile petroleum hydrocarbons (TVPH) and volatile organic compounds (VOCs). The remedial extraction system has been nonoperational since April, 2014. The on-site groundwater treatment system was last turned on during 2016-Q1 (March 22, 2016) to discharge rainwater accumulation in the secondary containment area.

FINDINGS

Groundwater Level Measurement

The depth to groundwater was measured at all 21 wells within a 24-hour period on May 26, 2016. The depths to groundwater in the wells ranged from 15.20 to 20.60 feet below the top of the well casings. Groundwater elevations range from 12.95 to 15.07 feet above mean sea level.

Groundwater elevations have decreased by an average of 0.10 feet with respect to measurements made in 2016-Q1.

Based on data collected during this quarter, the groundwater flows toward the southwest with a gradient of approximately 0.003 feet per foot, consistent with previously interpreted groundwater gradients at the Site.

Groundwater Sampling and Analysis

Twenty-one groundwater monitoring wells were sampled during this groundwater monitoring period. The collected samples were sent to TestAmerica Laboratories, Inc. (TestAmerica) and analyzed for TVPH and VOCs.

Total Volatile Petroleum Hydrocarbons

Groundwater samples collected from 13 of the 21 wells sampled this quarter were reported with TVPH concentrations above the method detection limit (MDL). TVPH concentrations have decreased in five of the ten wells with respect to the 2016-Q1 sampling event. TVPH concentrations have increased in the remaining eight wells with respect to the 2016-Q1 sampling event. The largest increase in TVPH concentration (from 2,100 micrograms per liter

(µg/L) to 4,000 µg/L) was measured in well MW-33. The highest concentration of TVPH during this sampling event was detected in well MW-33 (4,000 µg/L). The largest decrease in TVPH concentration (from 3,400 µg/L to 2,400 µg/L) was in well MW-28.

TVPH concentrations in well MW-29 have increased since the 2016-Q1 sampling. Historically, TVPH concentrations in well MW-29 have fluctuated between <25 and 2,900 µg/L over the previous two years. The recent increase is considered to be attributed to this recurring fluctuation.

Benzene

Benzene was detected above the MDL in eight of the 21 sampled wells. Benzene concentrations have decreased in four wells (MW-18, MW-27, MW-28, and MW-38) compared to the 2016-Q1 sampling event. The benzene concentration has increased in wells MW-24, MW-25R, MW-29, MW-33, and MW-35. The greatest increase in benzene concentrations was in MW-33, from 430 µg/L (2016-Q1) to 610 µg/L. The sample collected from well MW-38 was reported with the highest concentration of benzene (1,600 µg/L). Benzene was detected at concentrations greater than 100 µg/L in wells MW-28, MW-29, MW-33, and MW-38.

Benzene concentrations in well MW-29 have increased compared to the 2016-Q1 sampling and have fluctuated between 0.46J and 570 µg/L over the previous two years. The recent increase is considered to be attributed to this recurring fluctuation (Appendix D).

Methyl Tertiary Butyl Ether

Groundwater samples collected from seven wells this quarter were reported with methyl tertiary butyl ether (MTBE) concentrations above the MDL, ranging from 1.1 µg/L to 34 µg/L. The sample collected from well MW-17 was reported with the highest concentration of MTBE (34 µg/L).

Historically, MTBE concentrations continue to appear in the same five to seven wells at similar concentrations.

In comparison to the 2016-Q1 sampling, MTBE concentrations have increased in wells MW-17, MW-18, MW-21, and MW-24. The concentration of MTBE in well MW-17 (previously 26 µg/L in 2015-Q4 and 31 µg/L in 2016-Q1) has increased to 34 µg/L in 2016-Q2. However, the MTBE concentration in well MW-17 has maintained a value between 26 and 35 µg/L over the previous two years. Isoconcentration contours for MTBE are shown in Figure 6. Historical concentrations of MTBE in each well are presented in Appendix C.

Tertiary Butyl Alcohol

Samples collected from four wells (MW-18, MW-24, MW-27, and MW-38) this quarter were reported to contain tertiary butyl alcohol (TBA) concentrations above the MDL. The sample collected from MW-38 was reported with the highest TBA concentration (150 µg/L). During 2016-Q1 sampling event, the highest concentration was reported in well MW-27 (27 µg/L). This value has since increased to 35 µg/L during the 2016-Q2 sampling event.

Historical Analytical Results

Historical data for benzene and TVPH concentrations in sampled wells over the previous five years are presented graphically in Appendix D. Sampled wells generally exhibit relatively high concentrations of benzene and TVPH from the period of June 2010 through January 2012. Concentrations of these contaminants generally decrease, or stabilize at lower values, from January 2012 through to the present day. Two exceptions are the TVPH concentration in MW-27 and MW-28, which have been on an increasing trend from February 2014 to August 2015. This increasing trend continued at MW-28 until 2016-Q1. The most recent data (2016-Q2) have revealed significantly lower concentrations of benzene and TVPH with respect to the previous three sampling events. Benzene and TVPH concentrations have decreased in well MW-38 with respect to the 2016-Q1 sampling event, after a small increase in concentration from the 2015-Q4 event to the 2016-Q1 event.

Shutdown of the remedial extraction system on April 21, 2014 coincides with minor TVPH concentration increases in wells MW-17, MW-19, MW-23, MW-24, MW-25/MW-25R, MW-27, MW-28, MW-29, and MW-36. TVPH concentrations in seven of these nine wells are currently on a downward trend, or have stabilized at lower concentrations with respect to historical data presented in Appendices C and D.

All other benzene concentrations in sampled wells are currently on a decreasing trend, or have stabilized at relatively low values. Benzene concentrations in MW-29 have increased from the 2016-Q1 sampling event (ND<0.5 µg/L) to the Q2-2016 sampling event (120 µg/L). The 2016-Q2 data also show that benzene concentration has decreased from 2,600 µg/L (2016-Q1) to 950 µg/L in well MW-28.

Site Closure

OCHCA is reviewing the data collected to date in order to determine if the site meets the criteria for site closure. Groundwater sampling will continue until the OCHCA finds that the site meets the requirements for no further action (NFA).

2ND QUARTER 2016 – QUARTERLY GROUNDWATER MONITORING *AND* REMEDIAL PROGRESS REPORT

Los Angeles Times, Costa Mesa Facility
North Tanks Site
1375 Sunflower Avenue
Costa Mesa, California

1.0 INTRODUCTION

In April 2012, Eco & Associates, Inc. (Eco) was contracted to provide environmental services at the Los Angeles (LA) Times, Costa Mesa Facility, North Tanks Site, located at 1375 Sunflower Avenue in Costa Mesa, Orange County, California (hereafter, referred to as the "Site") (Figures 1 and 2). The Site remediation and monitoring activities were previously administered by AMEC, Plc (AMEC). This report describes monitoring and remediation activities performed during the second quarter (Q2) of 2016 (April 1 through June 1, 2016), and contains the following sections:

- Site Description and Background
- Summary of Field Activities
- Current Quarterly Monitoring Results
- Data Evaluation and Recommendations

The purpose of the monitoring and remediation program is to operate, maintain, and modify the existing remediation systems, as well as to provide chemical data useful for contaminant concentration trend analysis to be utilized in the evaluation of site closure.

2.0 SITE DESCRIPTION

The Site is located on approximately 31 acres of flat land comprised of buildings and asphalt parking areas. It is located approximately 0.23 mile north of the San Diego Freeway (Interstate 405) and approximately 1 mile east of the Santa Ana River Trail (Figure 1).

2.1 SITE HISTORY

The Site's subsurface soil and groundwater were impacted by gasoline that leaked from underground storage tanks (USTs). The gasoline contamination was detected in September 1990, and a case was opened with the Regional Water Quality Control Board (RWQCB) at that time. In 1992, three USTs in the northern portion of the Site were removed and the LA Times was directed by the Orange County Health Care Agency (OCHCA) Local Oversight Program (LOP) to initiate a subsurface investigation adjacent to the USTs.

ENSR Consulting and Engineering conducted on-site investigations between 1992 and 1995 that included the installation of 29 groundwater monitoring wells. Soil and groundwater within the vicinity of the tank areas were noted to contain elevated concentrations of total petroleum hydrocarbons (TPH) and benzene. The concentration of benzene exceeded 3,000 micrograms per liter (µg/L). As part of the corrective action, a vapor extraction system and an Internal Combustion Engine (ICE) system were used to remediate the Site.

Groundwater Technology, Inc. reported in March 1996 that almost 27,000 pounds of hydrocarbons had been removed by the remedial system between August 1994 and July 1995. In October 1995, three USTs in the southern portion of the Site and the ICE system were removed.

Impacts at the Site have been separated into two separate cases by the RWQCB and OCHCA: The North Tank Site and the South Tank Site. The South Tank Site was determined to be eligible for case closure on September 17, 2012. All wells in the South Tank Area were abandoned on November 21, 2012. The South Tank Site case has been closed as of February 11, 2013.

2.2 REMEDIATION SYSTEM HISTORY

The construction of the first on-site Dual-Phase Vapor Extraction (DPVE) system, identified as the 'Stealth' system, was initiated in October 1997 in accordance with the Remedial Action Plan approved by the OCHCA on May 21, 1997. The system was constructed and connected to the North Tank area wells and began operation in February 1998. In 2003, additional wells were installed; those wells were also connected to the Stealth DPVE system. In 2005, another DPVE system, the 'Baker' system, was added next to the existing system and connected to the newly installed wells on the nearby Automobile Club of Southern California (ACSC) property.

2.3 SITE GEOLOGY

The hydrogeology information in this report was taken from the 1996 report by Groundwater Technology, Inc. The Site is located in the southernmost coastal plain physiographic province of Orange County, approximately 1 mile north of Newport Mesa. The freshwater-bearing materials within the coastal plain consist of unconsolidated sand, gravel, and conglomerates with some silt and clay. Geologic and geophysical logging indicates this freshwater-bearing stratum occurs in three separate groundwater systems. These systems are referred to as the upper, middle, and lower aquifer systems.

The Upper Aquifer System consists of all water-bearing strata above the main aquifer (the uppermost aquifer of the Middle Aquifer System) and has an average thickness of 800 feet. The principal shallow aquifers in this zone are the Talbert Aquifer and the 80-foot gravel aquifer. In addition, numerous semi-perched aquifers of limited extent are also present in the shallow portion of the Upper Aquifer System. The Upper Aquifer System occurs in recent alluvial deposits and the semi-consolidated gravels, sands, and silts of the Upper Pleistocene Lakewood and La Habra formations.

Aquifers of the Middle Aquifer System are of greater thickness and areal extent than those of the upper and lower systems. The total thickness of the Middle Aquifer System ranges from a maximum of 1,600 feet in the center of the plain to less than 50 feet in the Coyote Hills. The uppermost aquifer of the Middle Aquifer System occurs in the lower Pleistocene sands, gravels, and silts of the Coyote Hills and San Pedro Formations.

The Lower Aquifer System consists of numerous interconnected aquifers of varying thickness. This system was declined on the basis of an extensive low permeability cap. The thickest aquifer in the Orange County Coastal Plain occurs at the base of the Lower Aquifer System and ranges in thickness from 350 to greater than 500 feet. Geologic data suggests that the Lower Aquifer System occurs within the semi-consolidated gravels and sands of the upper member of the Late Pliocene Fernando Group.

The soils beneath the LA Times facility consist of fluvial deposits composed of interbedded clay, silt, and sand with minor gravel. The fine-grained clays and silts typically occur from approximately 10 to 25 feet below ground surface (bgs). Stringers of sandy material occur within the clay/silt at depths ranging from 10 to 20 feet bgs. The clays and silts occur directly above a reddish-brown silty sand at approximately 25 feet bgs. This silty sand is typically saturated and grades into a medium-grained sand at approximately 30 feet bgs. The sand/silty sand is usually underlain by a silt layer that occurs between 30 to 35 feet bgs.

3.0 SUMMARY OF GROUNDWATER MONITORING ACTIVITIES

The 2016-Q2 sampling event included the collection of groundwater samples from 21 wells. Field documents related to this activity are presented in Appendix A. A summary of the field activities are described in the following sections.

3.1 GROUNDWATER MONITORING

The following groundwater monitoring activities were conducted in accordance with a memorandum prepared by Eco and sent to LA Times and OCHCA describing the planned low-flow sampling procedures and in accordance with the RWQCB and OCHCA groundwater monitoring requirements. The following activities were performed in addition to the activities described in the above-referenced documents:

- Each monitoring well was inspected for integrity and deficiencies before sampling.

- All wells were sounded for depth to water from the top of the casing with a precision of ±0.01 foot using a Geotech Environmental Services brand interface probe.
- Samples from groundwater wells were obtained and sent to a State of California certified laboratory for analysis.
- Field parameters (pH, temperature, electrical conductivity [EC], oxidation-reduction potential [ORP], dissolved oxygen [DO], and turbidity) were measured (using a Horiba U-5000 Water Quality Monitor) and recorded on sampling logs for sampled wells.
- The sampling flow rate was maintained at or less than 500 milliliters (mL) per minute for samples to be analyzed for VOCs to minimize volatilization.
- One laboratory-supplied trip blank was carried in the ice chest throughout the day and submitted with the field samples from each area for analysis.
- Decontamination of sampling equipment was conducted in accordance with the United States Environmental Protection Agency (USEPA) and approved Work Plan standards to ensure the quality of samples collected.
- Disposable equipment intended for one-time use was packaged for appropriate disposal.
- The sample bottles were kept on ice and transferred to the lab for analysis immediately upon collection of each sample.
- The generated data was utilized to create contaminant concentration trends and to evaluate if site closure could be granted, or if additional remedial actions were necessary.
- Per discussion with the OCHCA on March 6, 2014, there is no longer a requirement to collect duplicate samples during groundwater monitoring activities.

3.2 INVESTIGATION-DERIVED WASTE

Groundwater purge water and decontamination wastewater was placed in the water storage tank associated with the dual-phase extraction system at the Site for subsequent treatment and discharge.

3.3 GROUNDWATER MONITORING RESULTS

Groundwater sampling for the 2016-Q2 groundwater monitoring period was conducted during a 24-hour period on May 26, 2016. During this event, groundwater samples were collected from 21 monitoring wells.

The samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica), a State of California certified laboratory for analysis. The following subsections summarize the groundwater monitoring results.

3.3.1 DEPTH TO GROUNDWATER

The depth to groundwater was measured at all 21 wells on May 26, 2016. The depths to groundwater in the wells ranged from 15.20 to 20.60 feet below the top of the well casings.

Groundwater elevations have decreased by an average of 0.10 feet with respect to measurements made in 2016-Q1.

Groundwater elevations were calculated to be between 12.95 to 15.07 feet above mean sea level (msl) with a general flow toward the southwest with a gradient of approximately 0.003 feet per foot. This is consistent with the previously interpreted groundwater gradient of the Site.

Details and the depth to groundwater measured during this sampling event are provided in Table 1. Groundwater elevation contours are shown in Figure 3. These contours are based on elevations calculated from monitoring wells with available survey data.

3.3.2 GROUNDWATER ANALYTICAL RESULTS AND FINDINGS

Twenty-one groundwater monitoring wells were sampled and analyzed during this groundwater monitoring event. One qualifier noted in the laboratory report from TestAmerica is described below:

- ID – Analyte identified by RT and presence of single mass ion.

According to the TestAmerica project manager for LA Times groundwater samples, the ID qualifier on sample results for small compounds detected in low concentrations (e.g., tertiary butyl alcohol [TBA]) is used. The gas chromatograph/mass spectrometer (GC/MS) instruments separate the compounds and then use the matrix spike (MS) detector to see at least two ions per compound in order to confirm we are reporting the correct compound. When there are small compounds and low concentrations, the MS detector sometimes only sees one ion instead of two. This adds a small level of uncertainty to the compound identification. Although TestAmerica is confident enough of the compound identification to report it, they suggest that the end user understands there is a small chance the analyte was mis-identified.

A summary of groundwater analytical results from all sampled monitoring wells is provided in Table 2. The laboratory analytical results for groundwater are provided in Appendix B.

3.3.2.1 Total Volatile Petroleum Hydrocarbons

Groundwater samples collected from 13 of the 21 wells sampled this quarter were reported with TVPH concentrations above the method detection limit (MDL). TVPH concentrations have decreased in five of the ten wells with respect to the 2016-Q1 sampling event. TVPH concentrations have increased in the remaining eight wells with respect to the 2016-Q1 sampling event. The largest increase in TVPH concentration (from 2,100 micrograms per liter (µg/L) to 4,000 µg/L) was measured in well MW-33. The highest concentration of TVPH during this sampling event was detected in well MW-33 (4,000 µg/L). The largest decrease in TVPH concentration (from 3,400 µg/L to 2,400 µg/L) was in well MW-28. Concentrations for TVPH

are depicted on Figure 4. Historical concentrations of TVPH in each well are presented in Appendix C and graphically in Appendix D.

TVPH concentrations in well MW-29 have been increasing since sampling occurred in Q1 of 2016. Historically, TVPH concentrations in well MW-29 have fluctuated between <25 and 2,900 µg/L over the previous two years. The recent increase is considered to be attributed to this recurring fluctuation. TVPH isoconcentration contours are shown in Figure 4. Historical concentrations of benzene in each well are presented in Appendix C and graphically in Appendix D.

3.3.2.2 Benzene

Benzene was detected above the MDL in eight of the 21 sampled wells.

- Benzene concentrations have decreased in four wells (MW-18, MW-27, MW-28, and MW-38) with respect to the 2016-Q1 sampling event.
- The benzene concentration has increased in wells MW-24, MW-25R, MW-29, MW-33, and MW-35.
- The greatest increase in benzene concentrations was in MW-33, from 430 µg/L (2016-Q1) to 610 µg/L.
- The sample collected from well MW-38 was reported with the highest concentration of benzene (1,600 µg/L).
- Benzene was detected at concentrations greater than 100 µg/L in wells MW-28, MW-29, MW-33, and MW-38.

Benzene concentrations in well MW-29 have been increasing since 2016-Q1. Historically, benzene concentrations in well MW-29 have fluctuated between 0.46J and 570 µg/L over the previous two years. The recent increase is considered to be attributed to this recurring fluctuation (Appendix D). The reason for this fluctuation is unclear. Benzene isoconcentration contours are shown in Figure 5. Historical concentrations of benzene in each well are presented in Appendix C and graphically in Appendix D.

3.3.2.3 Methyl Tertiary Butyl Ether

Groundwater samples collected from seven wells this quarter were reported with methyl tertiary butyl ether (MTBE) concentrations above the MDL, ranging from 1.1 µg/L to 34 µg/L. The sample collected from well MW-17 was reported with the highest concentration of MTBE (34 µg/L).

Historically, MTBE concentrations continue to appear in the same five to seven wells at similar concentrations.

In comparison to the 2016-Q1 sampling, MTBE concentrations have increased in wells MW-17, MW-18, MW-21, and MW-24. The concentration of MTBE in well MW-17 (previously 26 µg/L in 2015-Q4 and 31 µg/L in Q1-2016) has increased to 34 µg/L in 2016-Q2. However, the MTBE concentration in well MW-17 has maintained a value between 26 and 35 µg/L over the previous two years. Isoconcentration contours for MTBE are shown in Figure 6. Historical concentrations of MTBE in each well are presented in Appendix C.

3.3.2.4 Tertiary Butyl Alcohol

Samples collected from four wells (MW-18, MW-24, MW-27, and MW-38) this quarter were reported to contain tertiary butyl alcohol (TBA) concentrations above the MDL. The sample from MW-38 was reported with the highest TBA concentration (150 µg/L). During the 2016-Q1 sampling event, the highest concentration was reported in well MW-27 (27 µg/L) compared to 35 µg/L during the Q2-2016 sampling event. Historical concentrations of TBA in each well are presented in Appendix C.

3.3.2.5 Historical Analytical Results

Historical data for benzene and TVPH concentrations in sampled wells over the previous five years are presented graphically in Appendix D. Sampled wells generally exhibit relatively high concentrations of benzene and TVPH from the period of June 2010 through January 2012. Concentrations of these contaminants generally decrease, or stabilize at lower values, from January 2012 through to the present day. Two exceptions are the TVPH concentration in MW-27 and MW-28, which have been on an increasing trend from February 2014 to August 2015. This increasing trend continued at MW-28 until 2016-Q1. The 2016-Q2 data have revealed significantly lower concentrations of benzene and TVPH with respect to the previous three sampling events. Benzene and TVPH concentrations have decreased in well MW-38 with respect to the 2016-Q1 sampling event.

Shutdown of the remedial extraction system on April 21, 2014 coincides with minor TVPH concentration increases in wells MW-17, MW-19, MW-23, MW-24, MW-25/MW-25R, MW-27, MW-28, MW-29, and MW-36. TVPH concentrations in seven of these nine wells are currently on a downward trend, or have stabilized at lower concentrations with respect to historical data presented in Appendices C and D.

Benzene concentration increases coincide with extraction system shutdown in wells MW-27, MW-28, and MW-29. All other benzene concentrations in sampled wells are currently on a decreasing trend, or have stabilized at relatively low values. Benzene concentrations in MW-29 have increased from the 2016-Q1 sampling event (ND<0.5 µg/L) to the 2016-Q2 sampling event (120 µg/L). The 2016-Q2 data show that benzene concentration has decreased from 2,600 µg/L (Q1-2016) to 950 µg/L in well MW-28.

4.0 SUMMARY OF REMEDIAL ACTIVITIES

4.1 DUAL-PHASE EXTRACTION SYSTEM

There are two extraction systems located in the central portion of the LA Times property that are secured with walls and fences, which have locked entry gates. One system, operating under catalytic oxidation conditions, is referred to as the “Baker” system; the other system operating under thermal oxidation conditions, is referred to as the “Stealth” system. Both systems have been named and are referred to by Eco after their respective manufacturers.

The remedial extraction system was shut down in April 2014 and has been non-operational since that time.

When in operation, each system generally runs 24 hours per day, 7 days per week. The two systems had previously been connected to separate wells: the Baker system connected to ACSC wells, and the Stealth system connected to Former Farm Property and North Tank wells.

However, during the fourth quarter of 2012, the systems were connected so that any well might be connected to either of the two systems in order to have more control over remedial activities, as well as to maintain backup in case of the shutdown of one of the systems.

The wells are connected to the systems via piping that can be opened or closed with in-line valves. This allows for sampling of individual wells, rebound testing, and the closing of certain wells to extraction. Wells chosen to be opened to extraction are typically chosen based on VOC readings collected using a photoionization detector (PID) as well as vapor sample analytical results, when applicable.

As is shown in the schematic (Figure 7), vapor extracted from each well enters into a 4-inch manifold and is sent to a phase separator (water knockout vessel) where the liquid and vapor is separated.

The liquid phase is treated with granular activated carbon (GAC) and released to the stormwater conveyance system under a National Pollutant Discharge Elimination System (NPDES) permit. The vapor is sent to a furnace for thermal or catalytic oxidation.

When in operation, the influent and effluent gas is monitored on a weekly basis with a PID. In addition, influent and effluent samples of water and vapor are collected monthly for laboratory analysis.

During system operation, the concentrations of VOCs at the inlet and outlet of the system are monitored on a weekly basis using a PID. Since the system was not operational during this reporting period, no influent or effluent vapor samples were collected from the systems.

Monthly sampling was also not conducted, as the system was not in operation during this reporting period. Tables 3A and 3B provide the contamination mass removal up to and including the date of system shut down in April 2014.

Remedial activities were not conducted at the Site during this quarter.

4.2 WEEKLY AND MONTHLY ACTIVITIES

4.2.1 WEEKLY ACTIVITIES

Each system is operated under a South Coast Air Quality Management District (SCAQMD) Permit to Operate. As per the requirements of the permit, weekly readings of the following parameters are collected for each system (when operating):

- Total flow rate, measured in standard cubic feet per minute (scfm)
- Temperature measured in degrees Fahrenheit at the outlet of the combustion chamber (for thermal oxidation mode) or at the inlet of the catalytic chamber (for catalytic oxidation mode)

- VOC influent and effluent concentrations, measured with a PID calibrated in parts per million by volume as isobutylene (corrected for hexane)

The Site is allowed to discharge up to 2,000 gallons of treated groundwater per day under Monitoring and Reporting Program No. R8-2012-0027 (Santa Ana Regional Water Quality Control Board [SARWQCB] 2012). This order will expire on July 1, 2017. The Dual Phase Vapor Extraction (DPVE) system was nonoperational for the three months of the quarter.

4.2.2 MONTHLY ACTIVITIES

4.2.2.1 Influent/Effluent Vapor Sampling

Vapor sampling did not take place in this quarter because the system was non-operational.

4.2.2.2 Influent/Effluent Water Sampling

When the groundwater treatment system is in operation, monthly groundwater samples are collected and tested by the following methods:

- Total petroleum hydrocarbons (TPH) by United States Environmental Protection Agency (EPA) Method 8015B
- Volatile organic compounds (VOCs), specifically: benzene, toluene, ethyl-benzene, and xylenes (BTEX); MTBE; tertiary amyl methyl ether (TAME); and TBA by EPA Method 8260B.

The groundwater treatment system was no turned on during 2016-Q2.

4.3 UPCOMING GROUNDWATER SAMPLING

The next quarterly groundwater sampling event is scheduled for the 3rd quarter of 2016 (2016-Q3).

5.0 RECOMMENDATIONS

The following recommendation is based on observed field conditions and measured contaminant concentrations during 2016-Q2 groundwater monitoring and remediation activities.

- Contaminant concentrations in monitoring wells sampled this quarter are generally on a decreasing trend, with the exception of TVPH and benzene in well MW-29, which is consistent with typical contaminant fluctuations in that well (noted in Sections 3.3.2.1 and 3.3.2.2). Groundwater monitoring will continue until OCHCA finds that the Site meets the criteria of the Low Threat UST Case Closure Policy.

6.0 BIBLIOGRAPHY

SARWQCB, 2012. *Discharge Authorization and Monitoring and Reporting Program No. R8-2012-0027-006, Under General Permit No. R8-2012-0027, NPDES No. CAG918001, Groundwater Cleanup Project,* Los Angeles Times, 1375 Sunflower Avenue, Costa Mesa; August 24, 2012.

AMEC, Plc, 2011. *Work Plan for In-Situ Chemical Oxidation and Enhanced Bioremediation at Building 244*. Joint Forces Training Base, Los Alamitos, CA, California Army National Guard; September 26, 2011.

Groundwater Technology, Inc., 1996. *Remediation Alternatives Evaluation.* For Los Angeles Times; March 1996.

FIGURES

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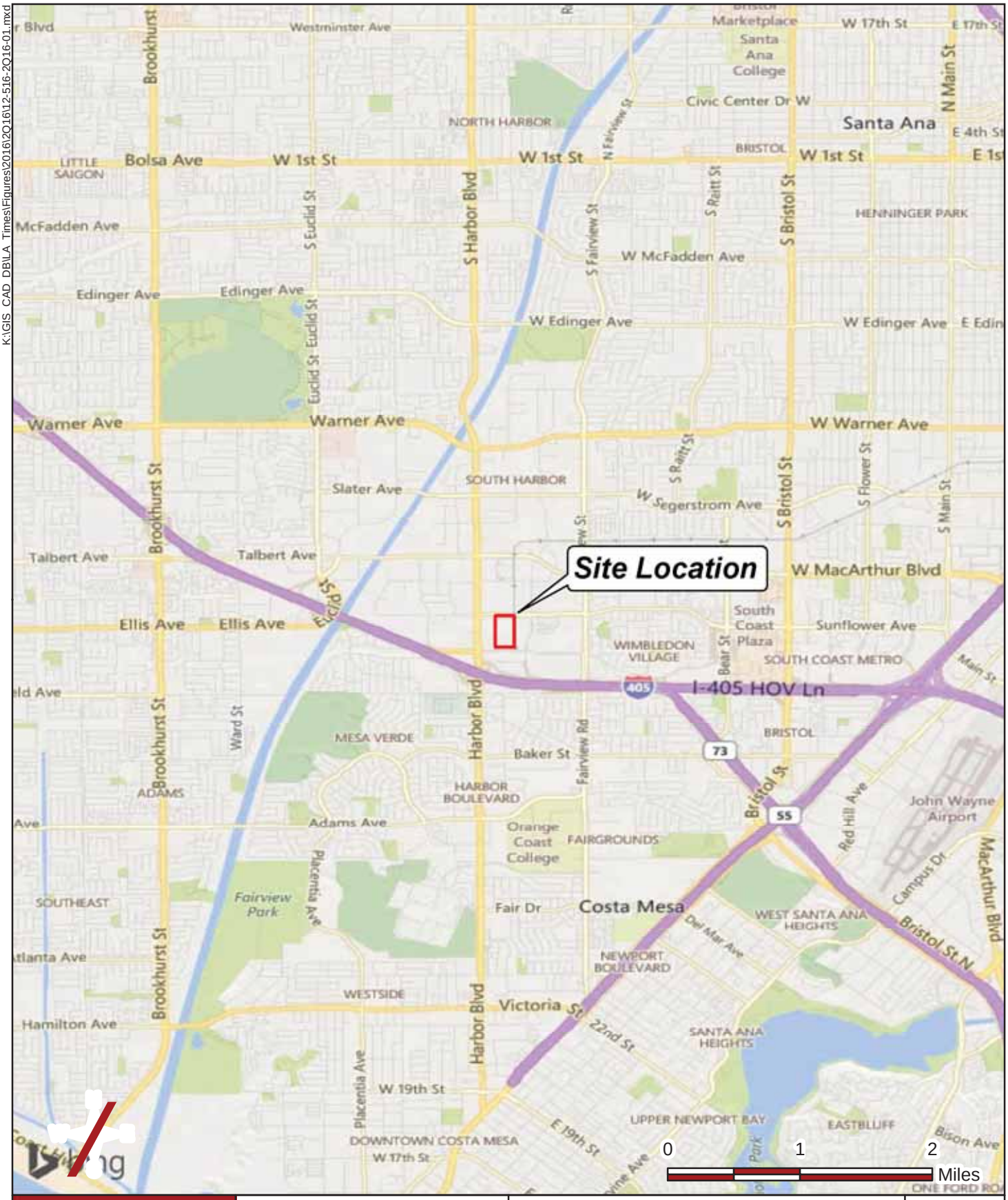

Environmental Excellence	Eco & Associates, Inc. 1855 W. Katella Avenue, Suite 340 Orange, California 92867 Phone: 714.289.0995 Fax: 714.289.0965	**REGIONAL LOCATION MAP** **Los Angeles Times Costa Mesa Facility** **1375 Sunflower Avenue** **Costa Mesa, California** Project No. Eco-12-516 / Dated June 2016	FIGURE 1

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SITE VICINITY

Los Angeles Times, Costa Mesa Facility
1375 Sunflower Avenue
Costa Mesa, California

Project No. Eco-12-516 | Dated June 2016

FIGURE

2

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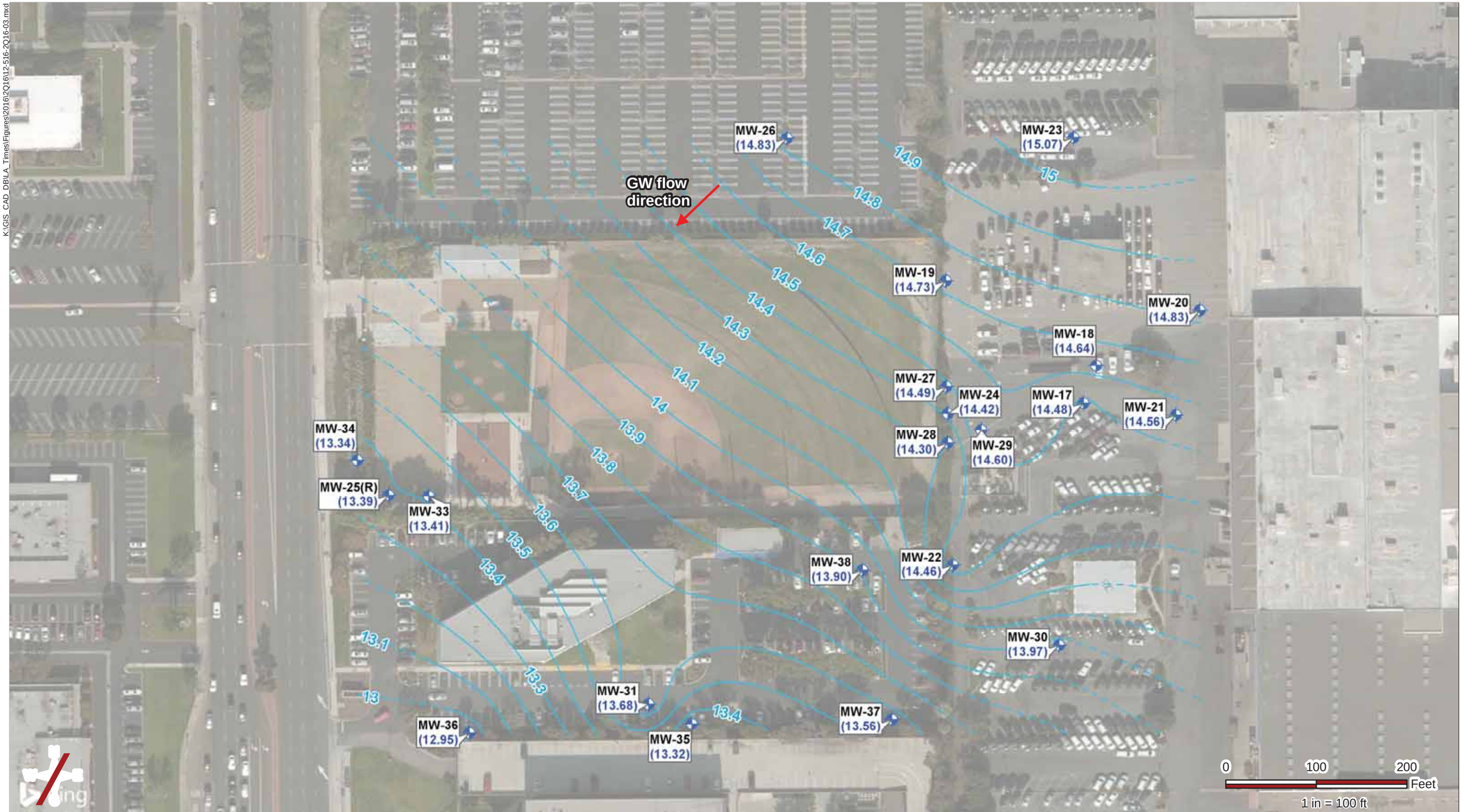

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LEGEND & NOTES:

A Groundwater Monitoring Well
Groundwater elevation contours (feet above mean sea level)
Dashed Where Inferred
Direction of groundwater flow

GROUNDWATER ELEVATION CONTOURS (2nd Quarter 2016)

Los Angeles Times Costa Mesa Facility
1375 Sunflower Avenue
Costa Mesa, CA 92626

Project No. Eco-12-516

Dated June 2016

FIGURE 3

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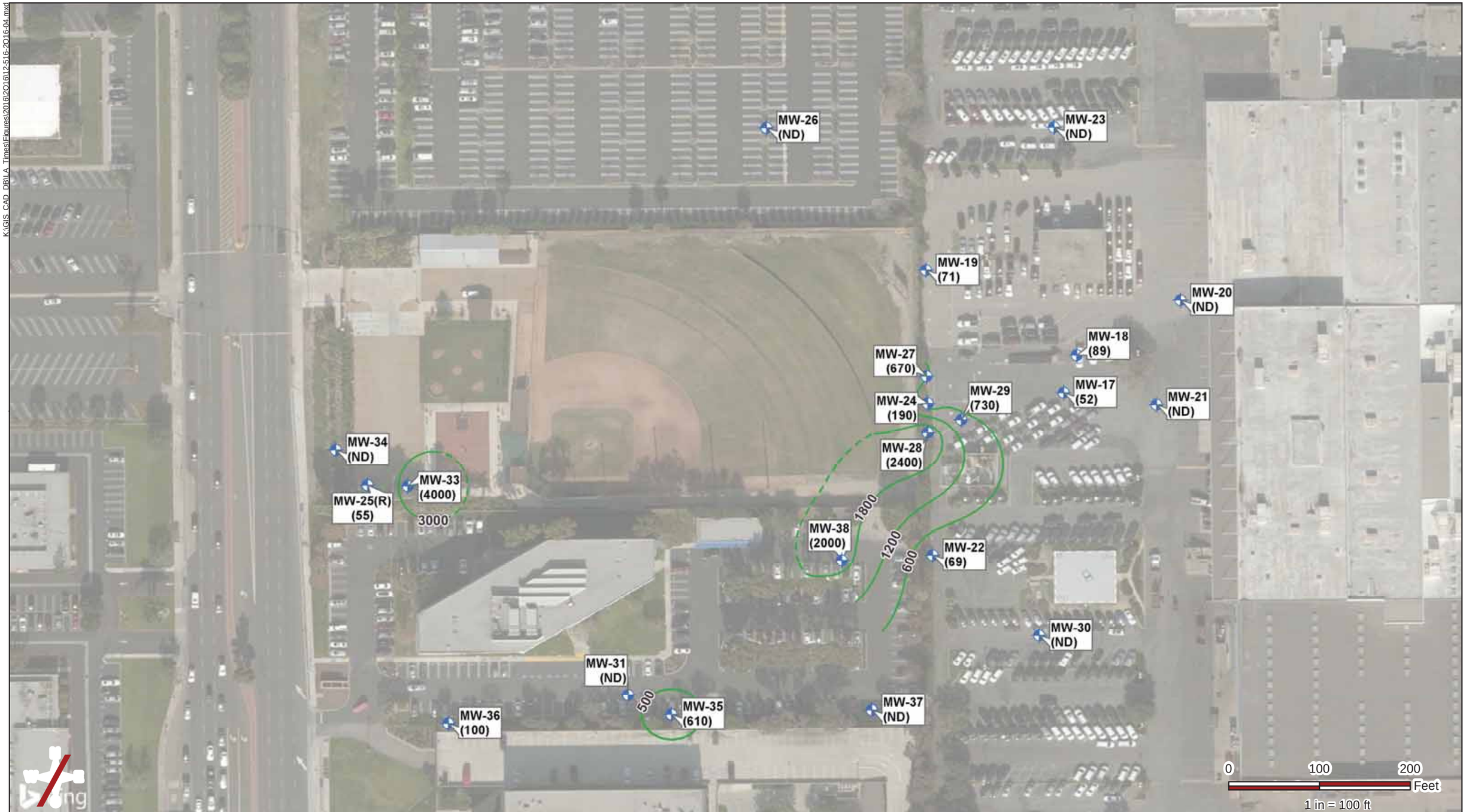

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LEGEND & NOTES:

A Groundwater Monitoring Well Sampled in Q2-2016

TVPH Isoconcentration Contours (ug/L) - Q2-2016 results
Dashed where inferred

TVPH CONCENTRATIONS IN GROUNDWATER (2nd Quarter 2016)

Los Angeles Times Costa Mesa Facility
1375 Sunflower Avenue
Costa Mesa, CA 92626

Project No. Eco-12-516

Dated June 2016

FIGURE
4

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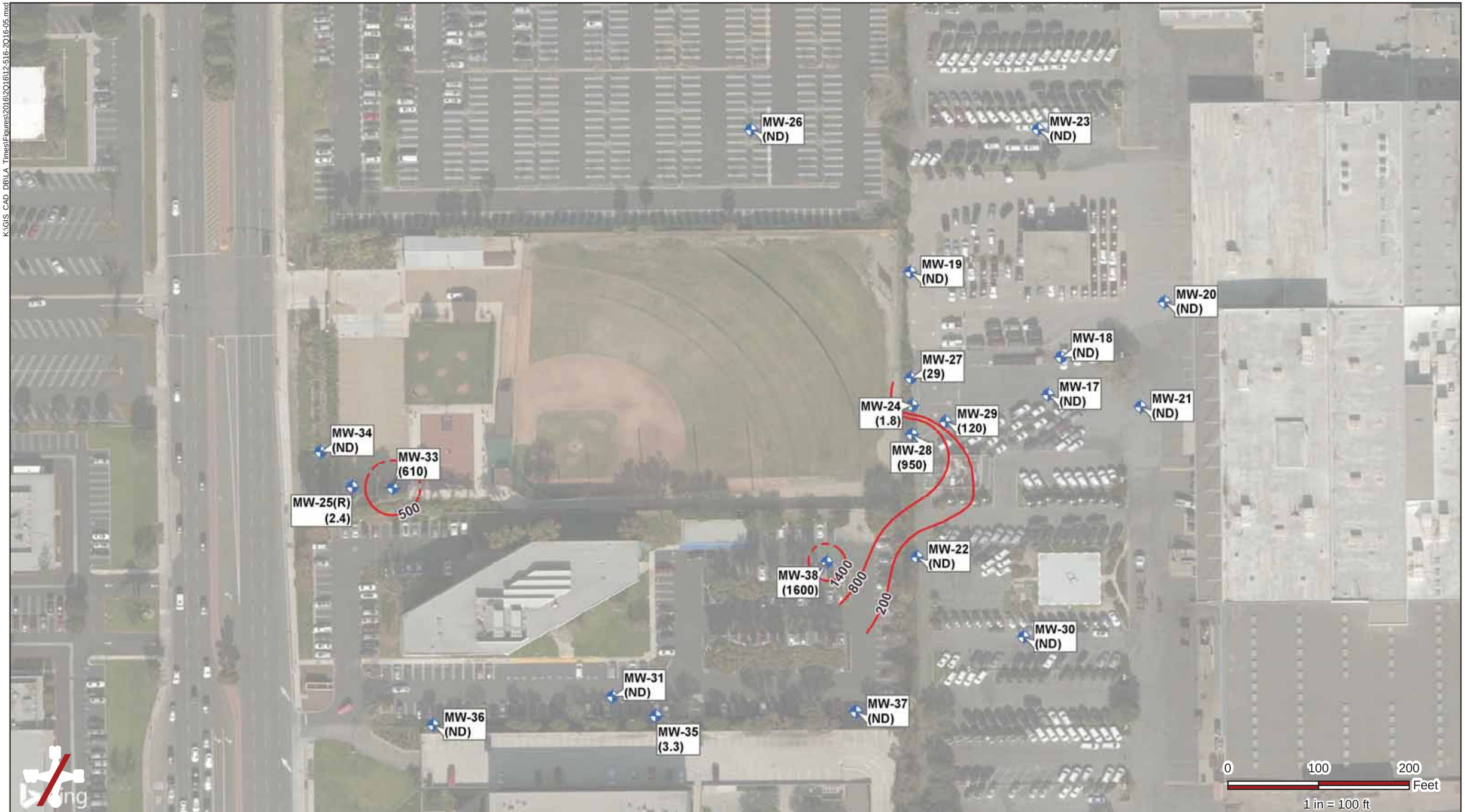

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Phone: 714.289.0995 Fax: 714.289.0965

LEGEND & NOTES:

A Groundwater Monitoring Well Sampled in Q2-2016

Benzene Isoconcentration Contours (ug/L) - Q2-2016 results
Dashed Where Inferred

BENZENE CONCENTRATIONS IN GROUNDWATER
(2nd Quarter 2016)
Los Angeles Times Costa Mesa Facility
1375 Sunflower Avenue
Costa Mesa, CA 92626

Project No. Eco-12-516

Dated June 2016

FIGURE
5

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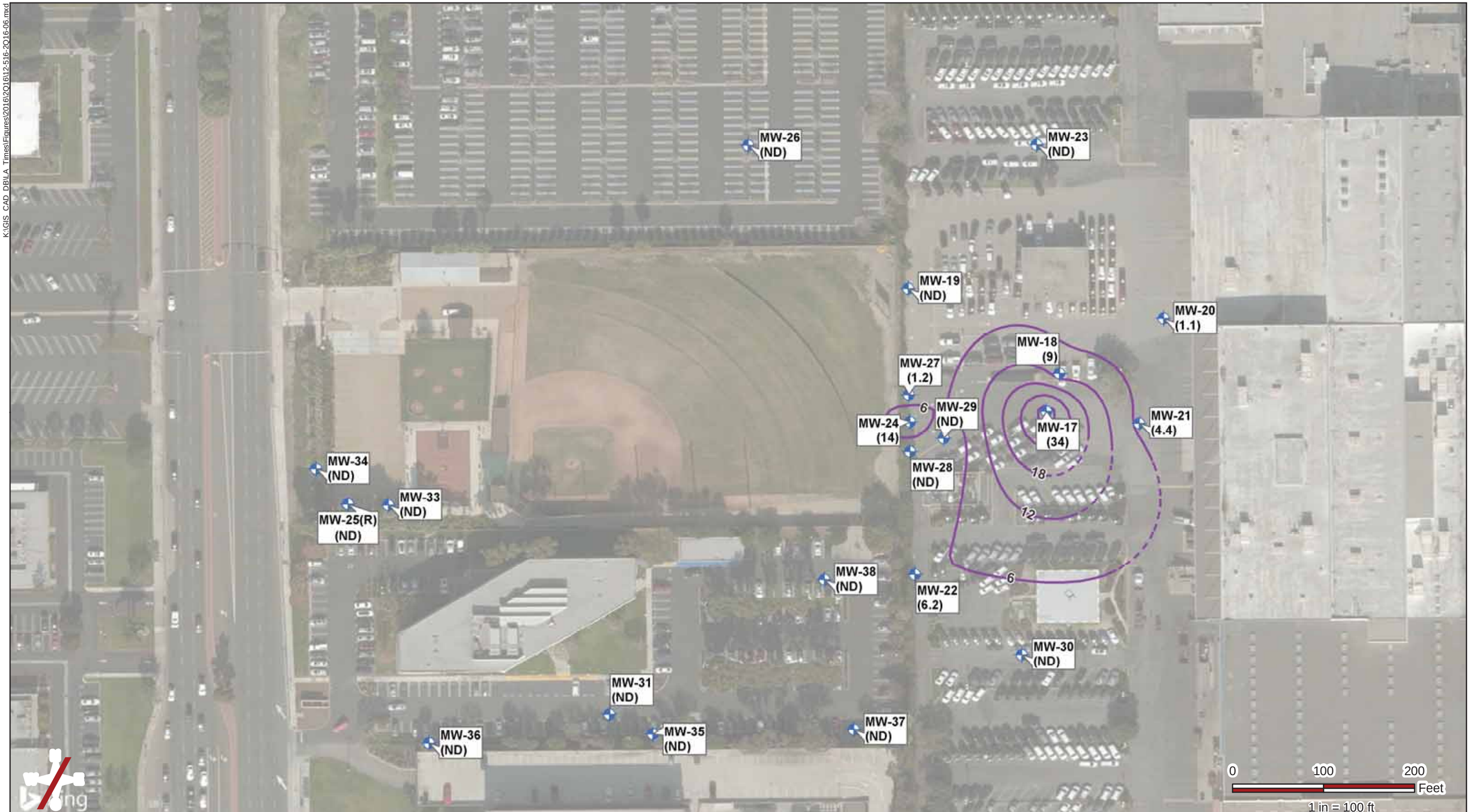

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LEGEND & NOTES:

A Groundwater Monitoring Well Sampled in Q2-2016

MTBE Isoconcentration Contours (ug/L) - Q2-2016
Dashed Where Inferred

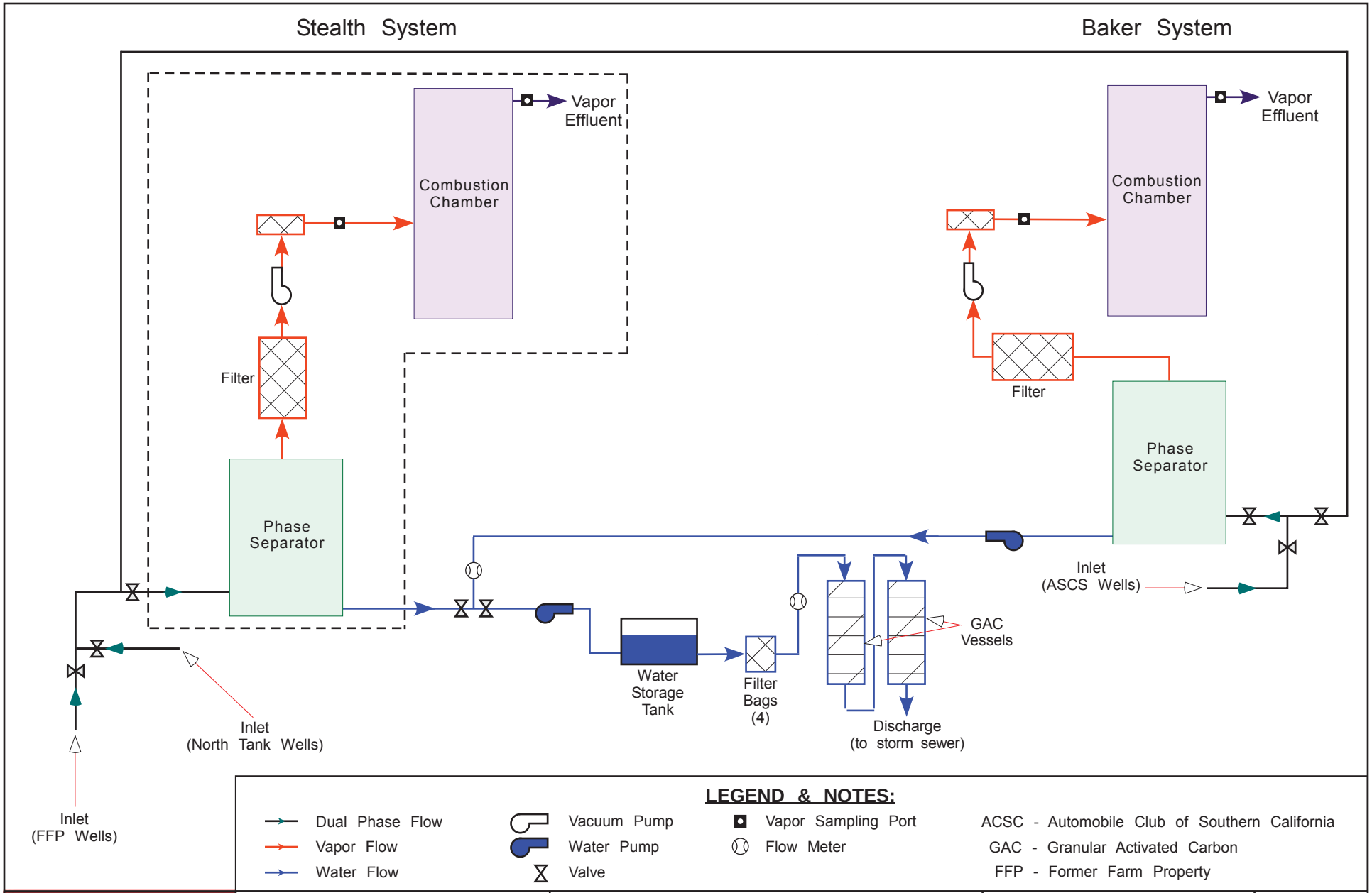
MTBE CONCENTRATIONS IN GROUNDWATER (2nd Quarter 2016)

Los Angeles Times Costa Mesa Facility
1375 Sunflower Avenue
Costa Mesa, CA 92626

Project No. Eco-12-516

Dated June 2016

FIGURE
6



LEGEND & NOTES:

- Dual Phase Flow
- Vapor Flow
- Water Flow
- Vacuum Pump
- Water Pump
- Valve
- Vapor Sampling Port
- Flow Meter

ACSC - Automobile Club of Southern California
GAC - Granular Activated Carbon
FFP - Former Farm Property

Environmental Excellence

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EXTRACTION SYSTEM SCHEMATIC

Los Angeles Times Costa Mesa Facility
1375 Sunflower Avenue
Costa Mesa, California

PROJECT NO. Eco-12-516

DATED June 2016

FIGURE 7

Tables

TABLE 1: SUMMARY OF GROUNDWATER ELEVATIONS
2016 - 2ND QUARTER

Los Angeles Times Costa Mesa Facility
North Tanks Site

Measurement Date: May 26, 2016

Well No.	Time	Well Elevation (feet msl)	Depth to Water (feet btoc)	Groundwater Elevation (feet msl)
MW-17	1506	32.60	18.12	14.48
MW-18	1510	32.77	18.13	14.64
MW-19	1400	33.84	19.11	14.73
MW-20	1519	31.58	16.75	14.83
MW-21	1536	31.41	16.85	14.56
MW-22	1405	34.41	19.95	14.46
MW-23	1541	32.75	17.68	15.07
MW-24	1420	33.92	19.50	14.42
MW-25R	0940	32.42	19.03	13.39
MW-26	1554	30.03	15.20	14.83
MW-27	1415	33.81	19.32	14.49
MW-28	1430	34.00	19.70	14.30
MW-29	1425	33.53	18.93	14.60
MW-30	1450	32.97	19.00	13.97
MW-31	0830	31.24	17.56	13.68
MW-33	0928	34.01	20.60	13.41
MW-34	0913	32.97	19.63	13.34
MW-35	0814	31.01	17.69	13.32
MW-36	0835	30.20	17.25	12.95
MW-37	0825	30.97	17.41	13.56
MW-38	0842	31.00	17.10	13.90

NOTES:
msl above mean sea level
(measured using Solinst Water Level Meter; Model: 101; Serial No.: 235973)
btoc below top of casing

TABLE 2: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
2016 - 2ND QUARTER

Los Angeles Times Costa Mesa Facility
North Tanks Site

Sample Date: May 26-27, 2016

Well No.	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
	µg/L									
MW-17	**52**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	**34**	ND < 10	**9.0**	ND < 1.0	ND < 1.0
MW-18	**89**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	**9.0**	**12 ID**	**3.6**	ND < 1.0	ND < 1.0
MW-19	**71**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	**46**	ND < 1.0	ND < 1.0
MW-20	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	**1.1**	ND < 10	**5.2**	ND < 1.0	ND < 1.0
MW-21	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	**4.4**	ND < 10	**8.6**	ND < 1.0	ND < 1.0
MW-22	**69**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	**6.2**	ND < 10	**45**	ND < 1.0	ND < 1.0
MW-23	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	**2.5**	ND < 1.0	ND < 1.0
MW-24	**190**	**1.8**	ND < 0.50	**0.51**	ND < 1.5	**14**	**11 ID**	**51**	ND < 1.0	ND < 1.0
MW-25R	**55**	**2.4**	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	ND < 10	ND < 1.0	ND < 1.0
MW-26	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	ND < 1.0	ND < 1.0	ND < 1.0
MW-27	**670**	**29**	ND < 1.3	**1.0**	ND < 3.8	**1.2**	**35**	**56**	ND < 2.5	ND < 2.5
MW-28	**2,400**	**950**	ND < 25	ND < 25	ND < 75	ND < 50	ND < 500	**36**	ND < 50	ND < 50
MW-29	**730**	**120**	**2.0**	**4.7**	**5.0**	ND < 1.0	ND < 10	**3.6**	ND < 1.0	ND < 1.0
MW-30	ND < 10	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	ND < 1.0	ND < 1.0	ND < 1.0
MW-31	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	ND < 1.0	ND < 1.0	ND < 1.0
MW-33	**4,000**	**610**	**99**	**320**	**18**	ND < 5.0	ND < 50	**66**	ND < 5.0	ND < 5.0
MW-34	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	ND < 1.0	ND < 1.0	ND < 1.0
MW-35	**610**	**3.3**	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	**2.7**	ND < 1.0	ND < 1.0
MW-36	**100**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	ND < 1.0	ND < 1.0	ND < 1.0
MW-37	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.5	ND < 1.0	ND < 10	**5.6**	ND < 1.0	ND < 1.0
MW-38	**2,000**	**1,600**	**2.2**	**4.3**	ND < 38	ND < 1.0	**150**	**110**	ND < 25	ND < 25

NOTES:

µg/L	micrograms per liter
ND <	indicates analyte was not detected above reporting limit (RL) indicated or method detection limit (MDL), if available.
DIPE	di-isopropyl ether
ETBE	ethyl tertiary butyl ether
MTBE	methyl tertiary butyl ether
TAME	tertiary-amyl methyl ether
TBA	tertiary butyl alcohol
TVPH	total volatile petroleum hydrocarbons. Analyzed using CA LUFT Method 8260B.
NS	Not sampled.
J	Result is less than the RL but greater than or equal to the MDL and the concetration is an approximate value.
ID	Analyte identified by RT and presence of single mass ion.
F1	MS and/or MSD recovery is outside acceptance limits.

TABLE 3A: BAKER SYSTEM MASS REMOVAL CALCULATIONS

2016 - 2ND QUARTER

LA Times Costa Mesa Facility
North Tanks Site

Month	Operational Mode (Catalytic/ Thermal)	Total Operating Time (hr)	Operating Time In Period (hr)	Flow Rate (cfm)	Contaminant Mass Removed * (lb)				
					TVPH	Benzene	Toluene	Ethyl-benzene	Xylenes
March 2012	Thermal	46,249.0	NA	126	NA	NA	NA	NA	NA
June 2012	Catalytic	47,119.5	871	138	NA	NA	NA	NA	NA
July 2012	Catalytic	47,507.0	388	141	0.00	0.17	0.00	0.00	0.00
August 2012	Catalytic	47,837.0	330	151	289.12	0.13	4.70	1.63	32.53
September 2012	Catalytic	48,133.0	296	151	0.00	0.00	0.00	0.00	0.00
October 2012	Catalytic	48,530.0	397	156	29.71	0.00	0.00	0.00	1.60
November 2012	Catalytic				NA	NA	NA	NA	NA
December 2012	Catalytic				NA	NA	NA	NA	NA
January 2013	Catalytic	49,075.0	545	147	NA	NA	NA	NA	NA
February 2013	Catalytic	49,396.0	321	143	7	0.1	0	0	0
March 2013	Catalytic	49,869.0	473	142	10	0.1	0	0	0
April 2013	Catalytic	49,922.7	54		NA	NA	NA	NA	NA
May 2013	Catalytic	50,782.5	860	158	10	0.1	0	0	0
June 2013	Catalytic	51,119.0	337	159	8	0.1	0	0	0
July 2013	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
August 2013	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
September 2013	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
October 2013	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
November 2013	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
December 2013	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
January 2014	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
February 2014	Catalytic	51,119.0	0		NA	NA	NA	NA	NA
March 2014	Catalytic	51,503.0	384	185	81	2.1	1	1	5
April 2014	Catalytic	51,741.9	239	182	147	4.2	3	1	7
May 2014	Catalytic	51,741.9	0		0	0.0	0	0	0

System shut down in April 2014

Totals removed by Baker System (March 2012 to current):	**647.06**
Totals removed by Stealth System, see Table 4b (March 2012 to current):	**24.52**
Total removed by previous contractors (Feb 1998 to Mar 2012):	**175,357**
Cumulative Total (February 1998 to current):	**176,029**

NOTES:

*	Mass removal calculated using influent concentrations from respective month.
TVPH	total volatile petroleum hydrocarbons
cfm	cubic feet per minute
NA	not available
lb	pounds
hr	hours

TABLE 3B - STEALTH SYSTEM MASS REMOVAL CALCULATIONS
2016 - 2ND QUARTER

LA Times Costa Mesa Facility
North Tanks Site

Month	Operational Mode (Catalytic/ Thermal)	Total Operating Time (hr)	Operating time in period (hr)	Flow Rate (cfm)	Contaminant Mass Removed * (lb)				
					TVPH	Benzene	Toluene	Ethyl-benzene	Xylenes
June 2012	Thermal	59,465.9	NA	138	NA	NA	NA	NA	NA
July 2012	Thermal	60,112.7	647	138	21.09	0.00	0.00	0.00	0.00
February 2013	Thermal	61,124.0	1,011	138	0.00	0.00	0.00	0.00	0.00
July 2013	Thermal	61,180.0	56	138	0.00	0.00	0.00	0.01	0.03
October 2013	Thermal	61,565.7	386	155	3.39	0.00	0.00	0.00	0.00
November 2013	Thermal	61,565.7	0	-	-	-	-	-	-
December 2013	Thermal	61,565.7	0	-	-	-	-	-	-
January 2014	Thermal	61,565.7	0	-	-	-	-	-	-
February 2014	Thermal	61,565.7	0	-	-	-	-	-	-
March 2014	Thermal	61,565.7	0	-	-	-	-	-	-
April 2014	Thermal	61,565.7	0	-	-	-	-	-	-
May 2014	Thermal	61,565.7	0	-	-	-	-	-	-
June 2014	Thermal	61,565.7	0	-	-	-	-	-	-
July 2014	Thermal	61,565.7	0	-	-	-	-	-	-
August 2014	Thermal	61,565.7	0	-	-	-	-	-	-
September 2014	Thermal	61,565.7	0	-	-	-	-	-	-
October 2014	Thermal	61,565.7	0	-	-	-	-	-	-
November 2014	Thermal	61,565.7	0	-	-	-	-	-	-
December 2014	Thermal	61,565.7	0	-	-	-	-	-	-

System shut down in April 2014

Totals removed by Stealth System (March 2012 to current): 24.52

NOTES:

cfm	cubic feet per minute
TVPH	total volatile petroleum hydrocarbons
lb	pounds
hr	hours
*	Mass removal calculated using influent concentrations from respective month.
NA	not available

Appendix A

Field Documents

ECO & ASSOCIATES, INC. – QUALITY CONTROL REPORT

DAILY LOG OF PROJECT ACTIVITIES

ECO PROJECT:	Eco-12-516	**REPORT NO.:**	
PROJECT LOCATION:	LA Times, North Tanks, Costa Mesa, CA	**DATE:**	05 - 26 - 16
DESCRIPTION:	GW Sampling 2Q-2016	**CONTRACT NO.:** -	
ONSITE PERSONNEL:	HT ~~DM~~ FT	**TASK ORDER NO.:** -	
SIGNATURE:	Helen R Thomas	**WEATHER CONDITION:**	cloudy 70° F

1. ANY DELAYS IN WORK PROGRESS TODAY? ☒ No ☐ Yes If yes, explain:

2. ANY VERBAL INSTRUCTION GIVEN BY THE GOVERNMENT, REGULATOR, OR CLIENT? ☒ No ☐ Yes If yes, to whom and explain:

3. ANY CONDITION DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM OR FINDINGS OF FACTS?

☒ No ☐ Yes If yes, explain:

ANY POTENTIAL CHANGE ORDER OR CLAIM MUST BE REPORTED TO THE PROJECT DIRECTOR/MANAGER.

4. ANY DEFICIENCIES, ACTIONS TAKEN TO CORRECT THE DEFICIENCIES? ☒ No ☐ Yes If yes, explain:

5. SAFETY MEETING/TAILGATE MEETING HELD TODAY? ☐ No ☒ Yes

ANY LOST TIME ACCIDENT TODAY? ☒ No ☐ Yes If yes, attach an accident report.

6. PRIME CONTRACTOR AND SUBCONTRACTOR WORK FORCE SIGN IN AND OUT IN THE SPACE BELOW.

NAME	INITIAL	COMPANY	TRADE	IN	OUT	IN	OUT	TOTAL HOURS
Helen Thomas	HT	Eco & Associates	Geology	0745	1400			
~~David Manoukian~~	~~DM~~	~~Eco & Associates~~	~~Geology~~ HT					
Filmon Tesfaslasie	FT	Eco + Assoc.	Geology	0745	1600			
Taylor Waters	TW	Eco + Assoc.	Manager	0645	0950			

7A. CUMULATIVE HOURS WORKED PREVIOUSLY: N/A	**7B. TOTAL HOURS WORKED TODAY: N/A**	**TOTAL HOURS WORKED TO DATE (7A+7B): N/A**

ECO & ASSOCIATES, INC. – QUALITY CONTROL REPORT

DAILY LOG OF PROJECT ACTIVITIES

8. VISITOR'S LOG

NAME	INITIAL	COMPANY	IN	OUT	IN	OUT	IN	OUT

9. MAJOR ITEMS OF EQUIPMENT.

TYPE / CAPACITY	NUMBER	STANDBY HOURS	OPERATING HOURS
~~Ho~~			

10. INSTRUMENT CALIBRATION

INSTRUMENT	DATE/TIME	METHOD	CALIBRATED?
Horiba U5000	5/26 @ 0800	autocal soln	yes
PID	5/26 @ 0800	hexane gas	yes

11. TIME AND ACTIVITY LOG

TIME	DESCRIPTION
0745	HT + FT arrive on site after getting ice and loading truck @ office
	TW is on site observing sampling methods. → Make Trip Blank @ 0830
0815	Begin GW sampling at wells in AAA parking lot. Start @ MW-35.
0820	TW begins measuring depths to GW in AAA parking lot wells
0900	TW goes to baseball field area to measure depths to GW in that area.
	HT + FT continue sampling AAA parking lot wells. TW leaves site @
1130	Complete sampling AAA parking lot. Break for lunch.
1200	Return from lunch. Begin sampling wells in Baseball field area:
	(MW-25R, MW-33, and MW-34)
1330	Go to LA Times facility parking lot to measure all depths to GW. All
	depths are measured within one 24 hour period
1340	Talk with Bita Klein on phone regarding new entry status of baseball
	field area. The fence we used to go through is now closed off and
	access is only possible through Harbor Blvd. In the future, we need
	to call Bita Klein @ 949-945-8083 a few days before sampling and
	arrange to have somebody come to open the gate for us.
1400	While sampling well MW-19 → try to measure wells (MW-24-29-28)
	These wells ~~are~~ have trucks parked over them. The trucks are being worked
	on, have dead batteries. We are told by workers on the site that they cannot be started.

(Use additional sheets as needed.)

11. TIME AND ACTIVITY LOG (Continued)

TIME	DESCRIPTION
1415	We got around the car problem by maneuvering tubing down well. The wells were measured and are also going to be able to be sampled.
1450	Sample last well of day (MW-27) and proceed to complete measurement to GW of all wells on site.
1550	Complete measurement of wells, final one is MW-26. Pack up and clean up.
1600	Leave site. Go to Test America to drop off samples. Drive back to office.

ECO & ASSOCIATES, INC. – QUALITY CONTROL REPORT

DAILY LOG OF PROJECT ACTIVITIES

ECO PROJECT:	Eco-12-516	**REPORT NO.:**	
PROJECT LOCATION:	LA Times, North Tanks, Costa Mesa, CA	**DATE:**	05 - 27 - 16
DESCRIPTION:	GW Sampling 2Q-2016	**CONTRACT NO.:** -	
ONSITE PERSONNEL:	HT ~~DM~~ FT	**TASK ORDER NO.:** -	
SIGNATURE:	Helen R Thomas	**WEATHER CONDITION:**	Overcast 70°F

1. ANY DELAYS IN WORK PROGRESS TODAY? ☒ No ☐ Yes If yes, explain:

2. ANY VERBAL INSTRUCTION GIVEN BY THE GOVERNMENT, REGULATOR, OR CLIENT? ☒ No ☐ Yes If yes, to whom and explain:

3. ANY CONDITION DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM OR FINDINGS OF FACTS?

☒ No ☐ Yes If yes, explain:

ANY POTENTIAL CHANGE ORDER OR CLAIM MUST BE REPORTED TO THE PROJECT DIRECTOR/MANAGER.

4. ANY DEFICIENCIES, ACTIONS TAKEN TO CORRECT THE DEFICIENCIES? ☒ No ☐ Yes If yes, explain:

5. SAFETY MEETING/TAILGATE MEETING HELD TODAY? ☐ No ☒ Yes

ANY LOST TIME ACCIDENT TODAY? ☒ No ☐ Yes If yes, attach an accident report.

6. PRIME CONTRACTOR AND SUBCONTRACTOR WORK FORCE SIGN IN AND OUT IN THE SPACE BELOW.

NAME	INITIAL	COMPANY	TRADE	IN	OUT	IN	OUT	TOTAL HOURS
Helen Thomas	HT	Eco & Associates	Geology	0730	1345			
~~David Manoukian~~	~~DM~~	~~Eco & Associates~~	~~Geology~~					
Filmon Tesfaslasie	FT	Eco + Associates	Geology	0730	1345			

7A. CUMULATIVE HOURS WORKED PREVIOUSLY: N/A	**7B. TOTAL HOURS WORKED TODAY: N/A**	**TOTAL HOURS WORKED TO DATE (7A+7B): N/A**

ECO & ASSOCIATES, INC. – QUALITY CONTROL REPORT

DAILY LOG OF PROJECT ACTIVITIES

8. VISITOR'S LOG

NAME	INITIAL	COMPANY	IN	OUT	IN	OUT	IN	OUT

9. MAJOR ITEMS OF EQUIPMENT.

TYPE / CAPACITY	NUMBER	STANDBY HOURS	OPERATING HOURS

10. INSTRUMENT CALIBRATION

INSTRUMENT	DATE/TIME	METHOD	CALIBRATED?
Horiba U5000	5/27 @ 0800	autocal/soln	yes
PID	5/27 @ 0800	methane	yes

11. TIME AND ACTIVITY LOG

TIME	DESCRIPTION
0730	HT / FT arrive on site after packing up truck @ office and buying ice
0745	HT makes trip blank for day. Begin sampling wells in LA Times parking lot
	starting w/ Northern (Low contaminant) wells. MW-30, then southward.
1230	Complete wells in LA Times lot. All wells sampled. Move on to well located
	across Sunflower Ave (MW-26)
1240	Sample well MW-23 in Northern parking lot
1300	Return to LA times parking lot and sample final well, MW-26,
	b/c it was forgotten
1315	Well is very turbid - need to have extended purge time
1330	~~tea~~ HT / FT dump purge water + trash @ storage pen
1345	Leave site to drop off samples @ lab and unpack trucks @ office
1400	Drop samples (1 cooler w/ 11 samples + 1 trip blank) off @ Test America w/ no issues
1430	Return to office to unload truck

(Use additional sheets as needed.)

MONITORING WELL NO: **MW-17**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 72°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 18.12 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

PiD= 0.7 ppm

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1046	BEGIN	PURGE							
1050	23.30	7.24	-116	10.1	0.2	2.36	100		
1054	23.74	7.26	-138	10.5	0.2	1.04	100		
1058	23.95	7.25	-145	10.6	0.0	0.73	100		
1102	23.93	7.25	-144	10.5	0.0	0.71	100		
1103	Collect	Sample							

Sampler Initials: HT DM

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-17		5 X 40 mL VOA	HCL	1103	20.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-18**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 72°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 18.13 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1106	BEGIN	PURGE							
1110	24.14	7.19	-190	6.67	1.7	3.16	100		
1114	23.98	7.17	-215	4.43	1.7	3.27	100		
1118	23.96	7.17	-224	4.40	1.8	3.02	100		
1119	Collect	sample						PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-18		5 X 40 mL VOA	HCL	1119	20.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-19**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: SUNNY

Sampling Crew: HT FT

Amb. Temp.: 75°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.11 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1405	BEGIN	PURGE							
1409	26.09	6.98	-96	3.25	0.0	10.33	100		
1413	25.70	6.99	-101	3.30	0.0	6.20	100		
1417	25.40	7.00	-106	3.36	0.0	5.19	100		
1421	25.28	7.00	-111	3.38	0.0	5.18	100		
1423	Collect	Sample							
								PID = 0.7 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-19		5 X 40 mL VOA	HCL	1423	21.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-20**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 16.75 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 2/24/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1022	BEGIN	PURGE							
1026	22.81	7.14	-125	5.49	0.0	3.83	100		
1030	22.86	7.15	-127	5.46	0.0	3.67	100		
1034	22.87	7.15	-128	5.45	0.0	3.37	100		
1035	Collect	Sample						PID = 0.5 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-20		5 X 40 mL VOA	HCL	1222	1035	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-21**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 16.85 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): _____

Method of measurement: _____

Product Appearance: _____

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0946	BEGIN	PURGE							
0950	22.11	6.97	-249	4.74	0.2	1.91	100		
0954	22.60	7.14	-205	5.91	6.2	1.19	100		
0958	22.67	7.15	-195	5.91	6.3	1.07	100		
1002	22.67	7.15	-195	5.91	6.1	1.07	100	PID = 0.0 ppm	
1003	Collect	Sample							

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-21		5 X 40 mL VOA	HCL	1003	19.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-22**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.95 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): _____

Method of measurement: N/A

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0812	BEGIN	PURGE							
0816	21.20	7.06	-131	3.00	0.0	4.14	100		
0820	21.79	6.94	-189	2.68	0.0	1.32	100		
0824	21.78	6.94	-190	2.68	0.0	1.31	100		
0825	Collect	Sample							
								PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-22		5 X 40 mL VOA	HCL	0825	22.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-23**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: SUNNY

Sampling Crew: HT FT

Amb. Temp.: 75°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 17.68 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1258	BEGIN	PURGE							
1302	26.07	6.86	46	3.48	0.0	6.19	100		
1306	25.82	6.86	89	3.57	0.0	3.98	100		
1310	25.79	6.86	77	3.59	0.0	3.75	100		
1314	25.77	6.86	72	3.58	0.0	3.55	100	PID = 0.0 ppm	
1315	Collect	Sample						No interior well cap	
								Reading not	
								Representative of	
								headspace	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-23		5 X 40 mL VOA	HCL	1315	19.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-24**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.50 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0920	BEGIN	PURGE							
0924	21.82	6.82	-225	2.10	0.6	1.78	100		
0928	22.01	6.90	-262	2.27	0.4	1.87	100		
0932	22.18	6.92	-271	2.29	0.0	1.85	100		
0933	Collect	Sample							
								PID = 0.1 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-24		5 X 40 mL VOA	HCL	0933	21.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-25R**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: SUNNY

Sampling Crew: HT FT

Amb. Temp.: 72°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.03 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1246	BEGIN	PURGE							
1250	24.09	6.63	-284	2.66	1.2	6.11	100		
1254	24.21	6.63	-258	2.88	1.5	5.65	100		
1258	24.27	6.63	-242	2.97	1.5	4.93	100		
1302	24.25	6.63	-240	2.98	1.5	4.91	100		
1303	Collect	Sample							
								PID = 0.3 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-25R		5 X 40 mL VOA	HCL	1303	21.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-26**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: SUNNY

Sampling Crew: HT FT

Amb. Temp.: 72°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 15.20 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1227	BEGIN	PURGE							
1231	25.53	7.03	-162	2.79	0.2	1.90	100		
1235	25.87	6.90	-132	2.16	0.0	1.08	100		
1239	25.94	6.87	-119	2.04	0.0	1.06	100		
1240	Collect	Sample							
								PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-26		5 X 40 mL VOA	HCL	1240	17.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-27**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Sunny

Sampling Crew: HT FT

Amb. Temp.: 75°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.32 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1438	BEGIN	PURGE							
1442	25.29	7.07	-188	2.62	0.1	5.37	100		
1446	24.89	7.10	-213	2.19	0.1	4.56	100		
1450	24.75	7.08	-212	2.18	0.0	4.21	100		
1451	Collect	Sample							
								PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-27		5 X 40 mL VOA	HCL	1451	21.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-28**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.70 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0903	BEGIN	PURGE							
0907	22.36	6.78	-115	1.17	1.2	9.40	100		
0911	22.17	6.75	-158	1.50	0.0	8.29	100		
0915	22.15	6.74	-156	1.51	0.0	8.27	100		
0916	Collect	Sample							
								PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-28		5 X 40 mL VOA	HCL	0916	22.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-29**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 18.93 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0842	BEGIN	PURGE							
0846	22.03	6.92	-165	1.77	0.4	1.48	100		
0850	22.70	6.85	-148	1.08	0.0	1.03	100		
0854	22.71	6.84	-148	1.06	0.0	1.04	100		
0855	Collect	Sample							
								PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-29		5 X 40 mL VOA	HCL	0855	19.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-30**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/27/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.00 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/27/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0748	BEGIN	PURGE							
0752	19.97	6.08	41	3.60	0.1	3.63	100		
0756	20.87	6.76	-30	3.60	0.0	1.67	100		
0800	20.89	6.78	-32	3.60	0.0	1.64	100		
0801	Collect	Sample							
								PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/27/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-30		5 X 40 mL VOA	HCL	0801	21.50	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/27/16

MONITORING WELL NO: **MW-31**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 17.56 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0917	BEGIN	PURGE							
0921	22.97	6.59	-173	1.50	3.2	6.27	100		
0925	23.04	6.52	-150	1.40	3.5	4.25	100		
0929	23.13	6.45	-125	1.36	0.3	2.90	100		
0930	Collect	Sample							
								PID = 0.4 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-31		5 X 40 mL VOA	HCL	0930	20.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-33**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Sunny

Sampling Crew: HT FT

Amb. Temp.: 72°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 20.60 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): _____

Method of measurement: N/A

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1219	BEGIN	PURGE							
1223	24.84	6.74	-172	1.99	2.6	4.13	100		
1227	24.84	6.60	-263	1.95	0.7	2.36	100		
1231	24.82	6.59	-264	2.00	0.4	2.01	100		
1232	Collect	Sample						PID = 0.0 ppm	
								No interior well	
								Cover. Reading not	
								Representative of	
								headspace	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-33		5 X 40 mL VOA	HCL	1232	21.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-34**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Sunny

Sampling Crew: HT FT

Amb. Temp.: 72°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 19.63 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1304	BEGIN	PURGE							
1308	24.79	6.79	-195	2.63	0.2	7.21	100		
1312	24.85	6.80	-196	2.51	0.1	6.81	100		
1316	24.80	6.83	-206	2.01	0.0	5.49	100		
1320	24.81	6.83	-202	2.0	0.0	4.77	100		
1321	Collect	Sample						PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-34		5 X 40 mL VOA	HCL	1321	21.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-35**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Cloudy

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 17.69 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0834	BEGIN	PURGE							
0838	20.92	6.49	-189	1.86	1.3	1.28	100		
0842	20.83	6.84	-179	1.83	1.5	2.68	100		
0846	22.15	6.63	-203	1.78	1.3	0.67	100		
0849	22.25	6.62	-209	1.78	0.3	1.01	100		
0852	22.27	6.63	-208	1.78	0.2	1.03	100		
0859	Collect	sample						PID = 0.0 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-35		5 X 40 mL VOA	HCL	0849	19.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-36**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 17.25 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
0944	BEGIN	PURGE							
0948	23.71	6.39	-66	1.38	0.1	8.31	100		
0952	23.71	6.37	-77	1.38	0.1	5.33	100		
0956	23.72	6.35	-97	1.40	0.2	3.64	100		
1000	23.73	6.35	-99	1.40	0.2	3.68	100		
1001	Collect	Sample						PID = 0.0 ppm	
								No interior well cover.	
								Reading not	
								Representative of	
								headspace	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 2/24/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-36		5 X 40 mL VOA	HCL	1001	19.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-37**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 17.41 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1017	BEGIN	PURGE							
1021	24.01	6.35	-56	1.94	0.0	7.94	100		
1025	23.96	6.36	-24	2.34	0.0	5.68	100		
1029	23.87	6.36	12	2.36	0.0	5.07	100		
1033	23.81	6.36	33	2.37	0.0	4.45	100		
1035	Collect	Sample						PID = 2.8 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-37		5 X 40 mL VOA	HCL	1035	19.5	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

MONITORING WELL NO: **MW-38**

GROUNDWATER SAMPLING LOG

FIELD DATA

Date: **5/26/16**

Weather: Overcast

Sampling Crew: HT FT

Amb. Temp.: 70°F

WATER ELEVATION DATA

1) Well Reference Elevation: _____ ft. (above MSL)

2) Depth to Water Surface: 17.10 ft.

3) Static Water Elevation: _____ ft. (#1-#2)

4) Depth to Well Bottom: _____ ft.

5) Height of Water Column _____ ft. (#4-#2)

6) 80% ReQKarge _____ ft.

7) Water Volume in Well= _____ gal.

(__2" : h × 0.163 gal/ft, __ 4" : h × 653 gal/ft)

Total Water Volume = _____ gal. (#7×3)

Well Reference Point: BTOC

Well Sounding Method: SOLINST GW METER

PRODUCT OBSERVATION

Product observed: Yes: _____ No: X

Product Thickness (in): N/A

Method of measurement: _____

Product Appearance: N/A

WELL PURGE DATA

Purge Method: PERISTALTIC PUMP / LOW FLOW / FLOW THROUGH CELL

Date: 5/26/16

Total Volume Purged (gallons): _____

Time	Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Rate (mL/min)	Comments	Depth to water (ft.)
1046	BEGIN	PURGE							
1050	24.73	6.56	-177	2.19	0.0	6.67	100		
1054	24.83	6.64	-210	2.11	11.5	5.20	100		
1058	24.93	6.65	-213	2.10	0.0	5.02	100		
1102	24.94	6.65	-214	2.10	0.0	4.98	100		
1103	Collect	Sample						PID = 324 ppm	

Sampler Initials: HT FT

WATER SAMPLE DATA

Date: 5/26/16

Sample ID	Analysis	Container(s)	Preservative	Time	Depth (ft.)	Physical Appearance	Comments
MW-38		5 X 40 mL VOA	HCL	1103	20.0	CLEAR	

QUALITY CONTROL SAMPLE

Duplicate Samples		Blank Samples		Other Samples	
Original Sample ID	Duplicate Sample ID	Type	Sample ID	Type	Sample ID
	N/A		N/A		N/A

Eco & Associates, Inc. Project No: **Eco-12-516** Date: 5/26/16

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

079686

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Taylor Waters	Site Contact:	Date: 5/27/2016	COC No:
Company Name: Eco & Associates	Tel/Fax: 714.289.0995	Lab Contact:	Carrier:	1 of 1 COCs
Address: 1855 W Katella Ave Ste 340	Analysis Turnaround Time			Sampler:
City/State/Zip: Orange CA 92867	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 714.289.0995	TAT if different from Below STD			Walk-in Client:
Fax: 714.289.0965	☐ 2 weeks			Lab Sampling:
Project Name: LA TIMES QUARTERLY GW MON	☐ 1 week			
Site: LA TIMES FACILITY	☐ 2 days			Job / SDG No.:
PO# Eco-12-516	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Full VOCs + OXY (8260B)	TPHg (CA LUFT) (8260B)	Sample Specific Notes:
MW-30	5.27.16	0801	G	GW	5	N	N	X	X	
MW-22	"	0825	G	GW	5	N	N	X	X	
MW-29	"	0855	G	GW	5	N	N	X	X	
MW-28	"	0916	G	GW	5	N	N	X	X	
MW-24	"	0933	G	GW	5	N	N	X	X	
MW-21	"	1003	G	GW	5	N	N	X	X	
MW-20	"	1035	G	GW	5	N	N	X	X	
MW-17	"	1103	G	GW	5	N	N	X	X	
MW-18	"	1119	G	GW	5	N	N	X	X	
~~MW-23~~ MW-26	"	1240	G	GW	5	N	N	X	X	
~~MW-26~~ MW-23	"	1315	G	GW	5	N	N	X	X	
TB-2	"	0745	G	W	5	N	N	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 6.3 Corr'd: 6.0 | Therm ID No.: 77

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Helen Thomas	Eco + Associates	5/27/16 12:43			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[illegible]	TAI	05/27/16 12:43

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

079687

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Taylor Waters	Site Contact:	Date: 5/26/2016	COC No:
Company Name: Eco & Associates, Inc	Tel/Fax: 714-289-0995	Lab Contact:	Carrier:	1 of 1 COCs
Address: 1855 W Katella Ave Ste 340	Analysis Turnaround Time			Sampler:
City/State/Zip: Orange CA 92867	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 714-289-0995	TAT if different from Below STD			Walk-in Client:
Fax: 714-289-0965	☐ 2 weeks			Lab Sampling:
Project Name: LA Times Quarterly GW Mon	☐ 1 week			
Site: LA Times Facility	☐ 2 days			Job / SDG No.:
PO# ECO-12-516	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Full VOCs + OXY (8260B)	TPH-G (CA LUFT) (8260B)	Sample Specific Notes:
MW-35	5-26-16	0859	G	GW	5	N	N	X	X	
MW-31	"	0930	G	GW	5	N	N	X	X	
MW-36	"	1001	G	GW	5	N	N	X	X	
MW-37	"	1035	G	GW	5	N	N	X	X	
MW-38	"	1103	G	GW	5	N	N	X	X	
MW-33	"	1232	G	GW	5	N	N	X	X	
MW-25R	"	1303	G	GW	5	N	N	X	X	
MW-34	"	1321	G	GW	5	N	N	X	X	
MW-19	"	1423	G	GW	5	N	N	X	X	
MW-27	"	1451	G	GW	5	N	N	X	X	
TB-1	"	0830	G	W	5	N	N	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2, 1

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Helen Thomas	Eco & Associates	May 26, 2016 1620			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[illegible]	TAI	5/26/16 16:20

4.1/4.3.9 J2+8

Appendix B

Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-148520-1
Client Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

For:
Eco & Associates, Inc
1855 W. Katella Avenue
Suite 340
Orange, California 92867

Attn: David Manoukian

Authorized for release by:
6/8/2016 9:58:48 PM
Urvashi Patel, Manager of Project Management
urvashi.patel@testamericainc.com

Designee for

Patty Mata, Senior Project Manager
(949)261-1022
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-148520-1	MW-35	Water	05/26/16 08:59	05/26/16 16:20
440-148520-2	MW-31	Water	05/26/16 09:30	05/26/16 16:20
440-148520-3	MW-36	Water	05/26/16 10:01	05/26/16 16:20
440-148520-4	MW-37	Water	05/26/16 10:35	05/26/16 16:20
440-148520-5	MW-38	Water	05/26/16 11:03	05/26/16 16:20
440-148520-6	MW-33	Water	05/26/16 12:32	05/26/16 16:20
440-148520-7	MW-25R	Water	05/26/16 13:03	05/26/16 16:20
440-148520-8	MW-34	Water	05/26/16 13:21	05/26/16 16:20
440-148520-9	MW-19	Water	05/26/16 14:23	05/26/16 16:20
440-148520-10	MW-27	Water	05/26/16 14:51	05/26/16 16:20
440-148520-11	TB-1	Water	05/26/16 08:30	05/26/16 16:20

Job ID: 440-148520-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-148520-1

Comments
No additional comments.

Receipt
The samples were received on 5/26/2016 4:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 440-333663 recovered above the upper control limit for Isopropyl Ether (DIPE), Tert-amyl-methyl ether (TAME) and Tert-butyl ethyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-35 (440-148520-1), MW-31 (440-148520-2), MW-36 (440-148520-3), MW-37 (440-148520-4), MW-38 (440-148520-5), MW-33 (440-148520-6), MW-25R (440-148520-7), MW-34 (440-148520-8), MW-19 (440-148520-9), MW-27 (440-148520-10), TB-1 (440-148520-11).

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 440-333663 recovered outside control limits for the following analytes: Isopropyl Ether (DIPE) and Tert-butyl ethyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: MW-35

Date Collected: 05/26/16 08:59
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-1

Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**610**		50		ug/L			05/31/16 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*76 - 132*		*05/31/16 21:33*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/31/16 21:33*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*05/31/16 21:33*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			05/31/16 21:33	1
Benzene	**3.3**		0.50		ug/L			05/31/16 21:33	1
Bromobenzene	ND		1.0		ug/L			05/31/16 21:33	1
Bromochloromethane	ND		1.0		ug/L			05/31/16 21:33	1
Bromodichloromethane	ND		1.0		ug/L			05/31/16 21:33	1
Bromoform	ND		1.0		ug/L			05/31/16 21:33	1
Bromomethane	ND		1.0		ug/L			05/31/16 21:33	1
2-Butanone (MEK)	ND		10		ug/L			05/31/16 21:33	1
Carbon tetrachloride	ND		0.50		ug/L			05/31/16 21:33	1
Chlorobenzene	ND		1.0		ug/L			05/31/16 21:33	1
Chloroethane	ND		1.0		ug/L			05/31/16 21:33	1
Chloroform	ND		1.0		ug/L			05/31/16 21:33	1
Chloromethane	ND		1.0		ug/L			05/31/16 21:33	1
2-Chlorotoluene	ND		1.0		ug/L			05/31/16 21:33	1
4-Chlorotoluene	ND		1.0		ug/L			05/31/16 21:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/31/16 21:33	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/31/16 21:33	1
Dibromochloromethane	ND		1.0		ug/L			05/31/16 21:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/31/16 21:33	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			05/31/16 21:33	1
Dibromomethane	ND		1.0		ug/L			05/31/16 21:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/31/16 21:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/31/16 21:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/31/16 21:33	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/31/16 21:33	1
1,1-Dichloroethane	ND		1.0		ug/L			05/31/16 21:33	1
1,2-Dichloroethane	ND		0.50		ug/L			05/31/16 21:33	1
1,1-Dichloroethene	ND		1.0		ug/L			05/31/16 21:33	1
1,2-Dichloropropane	ND		1.0		ug/L			05/31/16 21:33	1
1,3-Dichloropropane	ND		1.0		ug/L			05/31/16 21:33	1
2,2-Dichloropropane	ND		1.0		ug/L			05/31/16 21:33	1
1,1-Dichloropropene	ND		1.0		ug/L			05/31/16 21:33	1
Ethylbenzene	ND		0.50		ug/L			05/31/16 21:33	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0		ug/L			05/31/16 21:33	1
Hexachlorobutadiene	ND		1.0		ug/L			05/31/16 21:33	1
2-Hexanone	ND		10		ug/L			05/31/16 21:33	1
Isopropylbenzene	**4.5**		1.0		ug/L			05/31/16 21:33	1
Methylene Chloride	ND		5.0		ug/L			05/31/16 21:33	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			05/31/16 21:33	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/31/16 21:33	1

Client Sample ID: MW-35

Lab Sample ID: 440-148520-1
Date Collected: 05/26/16 08:59
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		1.0	ug/L			05/31/16 21:33	1
Naphthalene	ND		1.0	ug/L			05/31/16 21:33	1
n-Butylbenzene	ND		1.0	ug/L			05/31/16 21:33	1
N-Propylbenzene	ND		1.0	ug/L			05/31/16 21:33	1
o-Xylene	ND		0.50	ug/L			05/31/16 21:33	1
p-Isopropyltoluene	ND		1.0	ug/L			05/31/16 21:33	1
sec-Butylbenzene	**4.0**		1.0	ug/L			05/31/16 21:33	1
Styrene	ND		1.0	ug/L			05/31/16 21:33	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			05/31/16 21:33	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			05/31/16 21:33	1
tert-Butylbenzene	ND		1.0	ug/L			05/31/16 21:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			05/31/16 21:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			05/31/16 21:33	1
Tetrachloroethene	ND		1.0	ug/L			05/31/16 21:33	1
Toluene	ND		0.50	ug/L			05/31/16 21:33	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			05/31/16 21:33	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			05/31/16 21:33	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			05/31/16 21:33	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			05/31/16 21:33	1
1,1,1-Trichloroethane	ND		1.0	ug/L			05/31/16 21:33	1
1,1,2-Trichloroethane	ND		1.0	ug/L			05/31/16 21:33	1
Trichloroethene	ND		1.0	ug/L			05/31/16 21:33	1
Trichlorofluoromethane	ND		1.0	ug/L			05/31/16 21:33	1
1,2,3-Trichloropropane	ND		1.0	ug/L			05/31/16 21:33	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			05/31/16 21:33	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			05/31/16 21:33	1
Vinyl chloride	ND		0.50	ug/L			05/31/16 21:33	1
Xylenes, Total	ND		1.5	ug/L			05/31/16 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/31/16 21:33*	*1*
Dibromofluoromethane (Surr)	*96*		*76 - 132*		*05/31/16 21:33*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*05/31/16 21:33*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	**2.7**		1.0	ug/L			06/01/16 08:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/01/16 08:58*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*06/01/16 08:58*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*06/01/16 08:58*	*1*

Client Sample ID: MW-31

Lab Sample ID: 440-148520-2
Date Collected: 05/26/16 09:30
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	ug/L			05/31/16 23:04	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: MW-31

Date Collected: 05/26/16 09:30
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*05/31/16 23:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*05/31/16 23:04*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*05/31/16 23:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			05/31/16 23:04	1
Benzene	ND		0.50	ug/L			05/31/16 23:04	1
Bromobenzene	ND		1.0	ug/L			05/31/16 23:04	1
Bromochloromethane	ND		1.0	ug/L			05/31/16 23:04	1
Bromodichloromethane	ND		1.0	ug/L			05/31/16 23:04	1
Bromoform	ND		1.0	ug/L			05/31/16 23:04	1
Bromomethane	ND		1.0	ug/L			05/31/16 23:04	1
2-Butanone (MEK)	ND		10	ug/L			05/31/16 23:04	1
Carbon tetrachloride	ND		0.50	ug/L			05/31/16 23:04	1
Chlorobenzene	ND		1.0	ug/L			05/31/16 23:04	1
Chloroethane	ND		1.0	ug/L			05/31/16 23:04	1
Chloroform	ND		1.0	ug/L			05/31/16 23:04	1
Chloromethane	ND		1.0	ug/L			05/31/16 23:04	1
2-Chlorotoluene	ND		1.0	ug/L			05/31/16 23:04	1
4-Chlorotoluene	ND		1.0	ug/L			05/31/16 23:04	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			05/31/16 23:04	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			05/31/16 23:04	1
Dibromochloromethane	ND		1.0	ug/L			05/31/16 23:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			05/31/16 23:04	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			05/31/16 23:04	1
Dibromomethane	ND		1.0	ug/L			05/31/16 23:04	1
1,2-Dichlorobenzene	ND		1.0	ug/L			05/31/16 23:04	1
1,3-Dichlorobenzene	ND		1.0	ug/L			05/31/16 23:04	1
1,4-Dichlorobenzene	ND		1.0	ug/L			05/31/16 23:04	1
Dichlorodifluoromethane	ND		2.0	ug/L			05/31/16 23:04	1
1,1-Dichloroethane	ND		1.0	ug/L			05/31/16 23:04	1
1,2-Dichloroethane	ND		0.50	ug/L			05/31/16 23:04	1
1,1-Dichloroethene	ND		1.0	ug/L			05/31/16 23:04	1
1,2-Dichloropropane	ND		1.0	ug/L			05/31/16 23:04	1
1,3-Dichloropropane	ND		1.0	ug/L			05/31/16 23:04	1
2,2-Dichloropropane	ND		1.0	ug/L			05/31/16 23:04	1
1,1-Dichloropropene	ND		1.0	ug/L			05/31/16 23:04	1
Ethylbenzene	ND		0.50	ug/L			05/31/16 23:04	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			05/31/16 23:04	1
Hexachlorobutadiene	ND		1.0	ug/L			05/31/16 23:04	1
2-Hexanone	ND		10	ug/L			05/31/16 23:04	1
Isopropylbenzene	ND		1.0	ug/L			05/31/16 23:04	1
Isopropyl Ether (DIPE)	ND	*	1.0	ug/L			05/31/16 23:04	1
Methylene Chloride	ND		5.0	ug/L			05/31/16 23:04	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			05/31/16 23:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			05/31/16 23:04	1
m,p-Xylene	ND		1.0	ug/L			05/31/16 23:04	1
Naphthalene	ND		1.0	ug/L			05/31/16 23:04	1
n-Butylbenzene	ND		1.0	ug/L			05/31/16 23:04	1

Client Sample ID: MW-31

Lab Sample ID: 440-148520-2
Date Collected: 05/26/16 09:30
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0	ug/L			05/31/16 23:04	1
o-Xylene	ND		0.50	ug/L			05/31/16 23:04	1
p-Isopropyltoluene	ND		1.0	ug/L			05/31/16 23:04	1
sec-Butylbenzene	ND		1.0	ug/L			05/31/16 23:04	1
Styrene	ND		1.0	ug/L			05/31/16 23:04	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			05/31/16 23:04	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			05/31/16 23:04	1
tert-Butylbenzene	ND		1.0	ug/L			05/31/16 23:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			05/31/16 23:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			05/31/16 23:04	1
Tetrachloroethene	ND		1.0	ug/L			05/31/16 23:04	1
Toluene	ND		0.50	ug/L			05/31/16 23:04	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			05/31/16 23:04	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			05/31/16 23:04	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			05/31/16 23:04	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			05/31/16 23:04	1
1,1,1-Trichloroethane	ND		1.0	ug/L			05/31/16 23:04	1
1,1,2-Trichloroethane	ND		1.0	ug/L			05/31/16 23:04	1
Trichloroethene	ND		1.0	ug/L			05/31/16 23:04	1
Trichlorofluoromethane	ND		1.0	ug/L			05/31/16 23:04	1
1,2,3-Trichloropropane	ND		1.0	ug/L			05/31/16 23:04	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			05/31/16 23:04	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			05/31/16 23:04	1
Vinyl chloride	ND		0.50	ug/L			05/31/16 23:04	1
Xylenes, Total	ND		1.5	ug/L			05/31/16 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*05/31/16 23:04*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*05/31/16 23:04*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*05/31/16 23:04*	*1*

Client Sample ID: MW-36

Lab Sample ID: 440-148520-3
Date Collected: 05/26/16 10:01
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**100**		50	ug/L			05/31/16 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*76 - 132*		*05/31/16 23:34*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*05/31/16 23:34*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*05/31/16 23:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			05/31/16 23:34	1
Benzene	ND		0.50	ug/L			05/31/16 23:34	1
Bromobenzene	ND		1.0	ug/L			05/31/16 23:34	1
Bromochloromethane	ND		1.0	ug/L			05/31/16 23:34	1

Client Sample ID: MW-36

Date Collected: 05/26/16 10:01
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	ug/L			05/31/16 23:34	1
Bromoform	ND		1.0	ug/L			05/31/16 23:34	1
Bromomethane	ND		1.0	ug/L			05/31/16 23:34	1
2-Butanone (MEK)	ND		10	ug/L			05/31/16 23:34	1
Carbon tetrachloride	ND		0.50	ug/L			05/31/16 23:34	1
Chlorobenzene	ND		1.0	ug/L			05/31/16 23:34	1
Chloroethane	ND		1.0	ug/L			05/31/16 23:34	1
Chloroform	ND		1.0	ug/L			05/31/16 23:34	1
Chloromethane	ND		1.0	ug/L			05/31/16 23:34	1
2-Chlorotoluene	ND		1.0	ug/L			05/31/16 23:34	1
4-Chlorotoluene	ND		1.0	ug/L			05/31/16 23:34	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			05/31/16 23:34	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			05/31/16 23:34	1
Dibromochloromethane	ND		1.0	ug/L			05/31/16 23:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			05/31/16 23:34	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			05/31/16 23:34	1
Dibromomethane	ND		1.0	ug/L			05/31/16 23:34	1
1,2-Dichlorobenzene	ND		1.0	ug/L			05/31/16 23:34	1
1,3-Dichlorobenzene	ND		1.0	ug/L			05/31/16 23:34	1
1,4-Dichlorobenzene	ND		1.0	ug/L			05/31/16 23:34	1
Dichlorodifluoromethane	ND		2.0	ug/L			05/31/16 23:34	1
1,1-Dichloroethane	ND		1.0	ug/L			05/31/16 23:34	1
1,2-Dichloroethane	ND		0.50	ug/L			05/31/16 23:34	1
1,1-Dichloroethene	ND		1.0	ug/L			05/31/16 23:34	1
1,2-Dichloropropane	ND		1.0	ug/L			05/31/16 23:34	1
1,3-Dichloropropane	ND		1.0	ug/L			05/31/16 23:34	1
2,2-Dichloropropane	ND		1.0	ug/L			05/31/16 23:34	1
1,1-Dichloropropene	ND		1.0	ug/L			05/31/16 23:34	1
Ethylbenzene	ND		0.50	ug/L			05/31/16 23:34	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			05/31/16 23:34	1
Hexachlorobutadiene	ND		1.0	ug/L			05/31/16 23:34	1
2-Hexanone	ND		10	ug/L			05/31/16 23:34	1
Isopropylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
Isopropyl Ether (DIPE)	ND	*	1.0	ug/L			05/31/16 23:34	1
Methylene Chloride	ND		5.0	ug/L			05/31/16 23:34	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			05/31/16 23:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			05/31/16 23:34	1
m,p-Xylene	ND		1.0	ug/L			05/31/16 23:34	1
Naphthalene	ND		1.0	ug/L			05/31/16 23:34	1
n-Butylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
N-Propylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
o-Xylene	ND		0.50	ug/L			05/31/16 23:34	1
p-Isopropyltoluene	ND		1.0	ug/L			05/31/16 23:34	1
sec-Butylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
Styrene	ND		1.0	ug/L			05/31/16 23:34	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			05/31/16 23:34	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			05/31/16 23:34	1
tert-Butylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			05/31/16 23:34	1

Client Sample ID: MW-36

Lab Sample ID: 440-148520-3
Date Collected: 05/26/16 10:01
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			05/31/16 23:34	1
Tetrachloroethene	ND		1.0	ug/L			05/31/16 23:34	1
Toluene	ND		0.50	ug/L			05/31/16 23:34	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			05/31/16 23:34	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			05/31/16 23:34	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			05/31/16 23:34	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			05/31/16 23:34	1
1,1,1-Trichloroethane	ND		1.0	ug/L			05/31/16 23:34	1
1,1,2-Trichloroethane	ND		1.0	ug/L			05/31/16 23:34	1
Trichloroethene	ND		1.0	ug/L			05/31/16 23:34	1
Trichlorofluoromethane	ND		1.0	ug/L			05/31/16 23:34	1
1,2,3-Trichloropropane	ND		1.0	ug/L			05/31/16 23:34	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			05/31/16 23:34	1
Vinyl chloride	ND		0.50	ug/L			05/31/16 23:34	1
Xylenes, Total	ND		1.5	ug/L			05/31/16 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*05/31/16 23:34*	*1*
Dibromofluoromethane (Surr)	*96*		*76 - 132*		*05/31/16 23:34*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*05/31/16 23:34*	*1*

Client Sample ID: MW-37

Lab Sample ID: 440-148520-4
Date Collected: 05/26/16 10:35
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	ug/L			06/01/16 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/01/16 00:04*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/01/16 00:04*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*06/01/16 00:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/01/16 00:04	1
Benzene	ND		0.50	ug/L			06/01/16 00:04	1
Bromobenzene	ND		1.0	ug/L			06/01/16 00:04	1
Bromochloromethane	ND		1.0	ug/L			06/01/16 00:04	1
Bromodichloromethane	ND		1.0	ug/L			06/01/16 00:04	1
Bromoform	ND		1.0	ug/L			06/01/16 00:04	1
Bromomethane	ND		1.0	ug/L			06/01/16 00:04	1
2-Butanone (MEK)	ND		10	ug/L			06/01/16 00:04	1
Carbon tetrachloride	ND		0.50	ug/L			06/01/16 00:04	1
Chlorobenzene	ND		1.0	ug/L			06/01/16 00:04	1
Chloroethane	ND		1.0	ug/L			06/01/16 00:04	1
Chloroform	ND		1.0	ug/L			06/01/16 00:04	1
Chloromethane	ND		1.0	ug/L			06/01/16 00:04	1

Client Sample ID: MW-37

Date Collected: 05/26/16 10:35
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0		ug/L			06/01/16 00:04	1
4-Chlorotoluene	ND		1.0		ug/L			06/01/16 00:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/01/16 00:04	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/01/16 00:04	1
Dibromochloromethane	ND		1.0		ug/L			06/01/16 00:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/01/16 00:04	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/01/16 00:04	1
Dibromomethane	ND		1.0		ug/L			06/01/16 00:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/01/16 00:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/01/16 00:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/01/16 00:04	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/01/16 00:04	1
1,1-Dichloroethane	ND		1.0		ug/L			06/01/16 00:04	1
1,2-Dichloroethane	ND		0.50		ug/L			06/01/16 00:04	1
1,1-Dichloroethene	ND		1.0		ug/L			06/01/16 00:04	1
1,2-Dichloropropane	ND		1.0		ug/L			06/01/16 00:04	1
1,3-Dichloropropane	ND		1.0		ug/L			06/01/16 00:04	1
2,2-Dichloropropane	ND		1.0		ug/L			06/01/16 00:04	1
1,1-Dichloropropene	ND		1.0		ug/L			06/01/16 00:04	1
Ethylbenzene	ND		0.50		ug/L			06/01/16 00:04	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0		ug/L			06/01/16 00:04	1
Hexachlorobutadiene	ND		1.0		ug/L			06/01/16 00:04	1
2-Hexanone	ND		10		ug/L			06/01/16 00:04	1
Isopropylbenzene	ND		1.0		ug/L			06/01/16 00:04	1
Methylene Chloride	ND		5.0		ug/L			06/01/16 00:04	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/01/16 00:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/01/16 00:04	1
m,p-Xylene	ND		1.0		ug/L			06/01/16 00:04	1
Naphthalene	ND		1.0		ug/L			06/01/16 00:04	1
n-Butylbenzene	ND		1.0		ug/L			06/01/16 00:04	1
N-Propylbenzene	ND		1.0		ug/L			06/01/16 00:04	1
o-Xylene	ND		0.50		ug/L			06/01/16 00:04	1
p-Isopropyltoluene	ND		1.0		ug/L			06/01/16 00:04	1
sec-Butylbenzene	ND		1.0		ug/L			06/01/16 00:04	1
Styrene	ND		1.0		ug/L			06/01/16 00:04	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/01/16 00:04	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/01/16 00:04	1
tert-Butylbenzene	ND		1.0		ug/L			06/01/16 00:04	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/01/16 00:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/01/16 00:04	1
Tetrachloroethene	ND		1.0		ug/L			06/01/16 00:04	1
Toluene	ND		0.50		ug/L			06/01/16 00:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/01/16 00:04	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/01/16 00:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/01/16 00:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/01/16 00:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/01/16 00:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/01/16 00:04	1
Trichloroethene	ND		1.0		ug/L			06/01/16 00:04	1

Client Sample ID: MW-37

Lab Sample ID: 440-148520-4
Date Collected: 05/26/16 10:35
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 00:04	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 00:04	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 00:04	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 00:04	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 00:04	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/01/16 00:04*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/01/16 00:04*	*1*
Toluene-d8 (Surr)	*103*		*80 - 128*		*06/01/16 00:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	**5.6**		1.0	ug/L			06/01/16 10:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/01/16 10:20*	*1*
Dibromofluoromethane (Surr)	*107*		*76 - 132*		*06/01/16 10:20*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/01/16 10:20*	*1*

Client Sample ID: MW-38

Lab Sample ID: 440-148520-5
Date Collected: 05/26/16 11:03
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**2000**		130	ug/L			06/01/16 00:35	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*06/01/16 00:35*	*2.5*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/01/16 00:35*	*2.5*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/01/16 00:35*	*2.5*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	ug/L			06/01/16 00:35	2.5
Bromobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
Bromochloromethane	ND		2.5	ug/L			06/01/16 00:35	2.5
Bromodichloromethane	ND		2.5	ug/L			06/01/16 00:35	2.5
Bromoform	ND		2.5	ug/L			06/01/16 00:35	2.5
Bromomethane	ND		2.5	ug/L			06/01/16 00:35	2.5
2-Butanone (MEK)	ND		25	ug/L			06/01/16 00:35	2.5
Carbon tetrachloride	ND		1.3	ug/L			06/01/16 00:35	2.5
Chlorobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
Chloroethane	ND		2.5	ug/L			06/01/16 00:35	2.5
Chloroform	ND		2.5	ug/L			06/01/16 00:35	2.5
Chloromethane	ND		2.5	ug/L			06/01/16 00:35	2.5
2-Chlorotoluene	ND		2.5	ug/L			06/01/16 00:35	2.5
4-Chlorotoluene	ND		2.5	ug/L			06/01/16 00:35	2.5

Client Sample ID: MW-38

Date Collected: 05/26/16 11:03
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2.5	ug/L			06/01/16 00:35	2.5
cis-1,3-Dichloropropene	ND		1.3	ug/L			06/01/16 00:35	2.5
Dibromochloromethane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,2-Dibromo-3-Chloropropane	ND		13	ug/L			06/01/16 00:35	2.5
1,2-Dibromoethane (EDB)	ND		2.5	ug/L			06/01/16 00:35	2.5
Dibromomethane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,2-Dichlorobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,3-Dichlorobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,4-Dichlorobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
Dichlorodifluoromethane	ND		5.0	ug/L			06/01/16 00:35	2.5
1,1-Dichloroethane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,2-Dichloroethane	ND		1.3	ug/L			06/01/16 00:35	2.5
1,1-Dichloroethene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,2-Dichloropropane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,3-Dichloropropane	ND		2.5	ug/L			06/01/16 00:35	2.5
2,2-Dichloropropane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,1-Dichloropropene	ND		2.5	ug/L			06/01/16 00:35	2.5
Ethylbenzene	**4.3**		1.3	ug/L			06/01/16 00:35	2.5
Ethyl-t-butyl ether (ETBE)	ND	*	2.5	ug/L			06/01/16 00:35	2.5
Hexachlorobutadiene	ND		2.5	ug/L			06/01/16 00:35	2.5
2-Hexanone	ND		25	ug/L			06/01/16 00:35	2.5
Isopropylbenzene	**9.5**		2.5	ug/L			06/01/16 00:35	2.5
Methylene Chloride	ND		13	ug/L			06/01/16 00:35	2.5
4-Methyl-2-pentanone (MIBK)	ND		25	ug/L			06/01/16 00:35	2.5
Methyl-t-Butyl Ether (MTBE)	ND		2.5	ug/L			06/01/16 00:35	2.5
m,p-Xylene	ND		2.5	ug/L			06/01/16 00:35	2.5
Naphthalene	ND		2.5	ug/L			06/01/16 00:35	2.5
n-Butylbenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
N-Propylbenzene	**13**		2.5	ug/L			06/01/16 00:35	2.5
o-Xylene	ND		1.3	ug/L			06/01/16 00:35	2.5
p-Isopropyltoluene	ND		2.5	ug/L			06/01/16 00:35	2.5
sec-Butylbenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
Styrene	ND		2.5	ug/L			06/01/16 00:35	2.5
Tert-amyl-methyl ether (TAME)	ND		2.5	ug/L			06/01/16 00:35	2.5
tert-Butyl alcohol (TBA)	**150**		25	ug/L			06/01/16 00:35	2.5
tert-Butylbenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,1,1,2-Tetrachloroethane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,1,2,2-Tetrachloroethane	ND		2.5	ug/L			06/01/16 00:35	2.5
Tetrachloroethene	ND		2.5	ug/L			06/01/16 00:35	2.5
Toluene	**2.2**		1.3	ug/L			06/01/16 00:35	2.5
trans-1,2-Dichloroethene	ND		2.5	ug/L			06/01/16 00:35	2.5
trans-1,3-Dichloropropene	ND		1.3	ug/L			06/01/16 00:35	2.5
1,2,3-Trichlorobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,2,4-Trichlorobenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,1,1-Trichloroethane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,1,2-Trichloroethane	ND		2.5	ug/L			06/01/16 00:35	2.5
Trichloroethene	ND		2.5	ug/L			06/01/16 00:35	2.5
Trichlorofluoromethane	ND		2.5	ug/L			06/01/16 00:35	2.5
1,2,3-Trichloropropane	ND		2.5	ug/L			06/01/16 00:35	2.5

Client Sample ID: MW-38

Lab Sample ID: 440-148520-5
Date Collected: 05/26/16 11:03
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
1,3,5-Trimethylbenzene	ND		2.5	ug/L			06/01/16 00:35	2.5
Vinyl chloride	ND		1.3	ug/L			06/01/16 00:35	2.5
Xylenes, Total	ND		3.8	ug/L			06/01/16 00:35	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/01/16 00:35*	*2.5*
Dibromofluoromethane (Surr)	*97*		*76 - 132*		*06/01/16 00:35*	*2.5*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/01/16 00:35*	*2.5*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1600**		10	ug/L			06/01/16 11:15	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*06/01/16 11:15*	*20*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*06/01/16 11:15*	*20*
Toluene-d8 (Surr)	*111*		*80 - 128*		*06/01/16 11:15*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	**110**		2.5	ug/L			06/01/16 10:48	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/01/16 10:48*	*2.5*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*06/01/16 10:48*	*2.5*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/01/16 10:48*	*2.5*

Client Sample ID: MW-33

Lab Sample ID: 440-148520-6
Date Collected: 05/26/16 12:32
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**4000**		500	ug/L			06/01/16 01:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/01/16 01:05*	*10*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/01/16 01:05*	*10*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/01/16 01:05*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100	ug/L			06/01/16 01:05	10
Benzene	**610**		5.0	ug/L			06/01/16 01:05	10
Bromobenzene	ND		10	ug/L			06/01/16 01:05	10
Bromochloromethane	ND		10	ug/L			06/01/16 01:05	10
Bromodichloromethane	ND		10	ug/L			06/01/16 01:05	10
Bromoform	ND		10	ug/L			06/01/16 01:05	10
Bromomethane	ND		10	ug/L			06/01/16 01:05	10
2-Butanone (MEK)	ND		100	ug/L			06/01/16 01:05	10

Client Sample ID: MW-33

Date Collected: 05/26/16 12:32
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		5.0	ug/L			06/01/16 01:05	10
Chlorobenzene	ND		10	ug/L			06/01/16 01:05	10
Chloroethane	ND		10	ug/L			06/01/16 01:05	10
Chloroform	ND		10	ug/L			06/01/16 01:05	10
Chloromethane	ND		10	ug/L			06/01/16 01:05	10
2-Chlorotoluene	ND		10	ug/L			06/01/16 01:05	10
4-Chlorotoluene	ND		10	ug/L			06/01/16 01:05	10
cis-1,2-Dichloroethene	ND		10	ug/L			06/01/16 01:05	10
cis-1,3-Dichloropropene	ND		5.0	ug/L			06/01/16 01:05	10
Dibromochloromethane	ND		10	ug/L			06/01/16 01:05	10
1,2-Dibromo-3-Chloropropane	ND		50	ug/L			06/01/16 01:05	10
1,2-Dibromoethane (EDB)	ND		10	ug/L			06/01/16 01:05	10
Dibromomethane	ND		10	ug/L			06/01/16 01:05	10
1,2-Dichlorobenzene	ND		10	ug/L			06/01/16 01:05	10
1,3-Dichlorobenzene	ND		10	ug/L			06/01/16 01:05	10
1,4-Dichlorobenzene	ND		10	ug/L			06/01/16 01:05	10
Dichlorodifluoromethane	ND		20	ug/L			06/01/16 01:05	10
1,1-Dichloroethane	ND		10	ug/L			06/01/16 01:05	10
1,2-Dichloroethane	ND		5.0	ug/L			06/01/16 01:05	10
1,1-Dichloroethene	ND		10	ug/L			06/01/16 01:05	10
1,2-Dichloropropane	ND		10	ug/L			06/01/16 01:05	10
1,3-Dichloropropane	ND		10	ug/L			06/01/16 01:05	10
2,2-Dichloropropane	ND		10	ug/L			06/01/16 01:05	10
1,1-Dichloropropene	ND		10	ug/L			06/01/16 01:05	10
Ethylbenzene	**320**		5.0	ug/L			06/01/16 01:05	10
Ethyl-t-butyl ether (ETBE)	ND	*	10	ug/L			06/01/16 01:05	10
Hexachlorobutadiene	ND		10	ug/L			06/01/16 01:05	10
2-Hexanone	ND		100	ug/L			06/01/16 01:05	10
Isopropylbenzene	**15**		10	ug/L			06/01/16 01:05	10
Methylene Chloride	ND		50	ug/L			06/01/16 01:05	10
4-Methyl-2-pentanone (MIBK)	ND		100	ug/L			06/01/16 01:05	10
Methyl-t-Butyl Ether (MTBE)	ND		10	ug/L			06/01/16 01:05	10
m,p-Xylene	**18**		10	ug/L			06/01/16 01:05	10
Naphthalene	ND		10	ug/L			06/01/16 01:05	10
n-Butylbenzene	ND		10	ug/L			06/01/16 01:05	10
N-Propylbenzene	**48**		10	ug/L			06/01/16 01:05	10
o-Xylene	ND		5.0	ug/L			06/01/16 01:05	10
p-Isopropyltoluene	ND		10	ug/L			06/01/16 01:05	10
sec-Butylbenzene	ND		10	ug/L			06/01/16 01:05	10
Styrene	ND		10	ug/L			06/01/16 01:05	10
Tert-amyl-methyl ether (TAME)	ND		10	ug/L			06/01/16 01:05	10
tert-Butyl alcohol (TBA)	ND		100	ug/L			06/01/16 01:05	10
tert-Butylbenzene	ND		10	ug/L			06/01/16 01:05	10
1,1,1,2-Tetrachloroethane	ND		10	ug/L			06/01/16 01:05	10
1,1,2,2-Tetrachloroethane	ND		10	ug/L			06/01/16 01:05	10
Tetrachloroethene	ND		10	ug/L			06/01/16 01:05	10
Toluene	**99**		5.0	ug/L			06/01/16 01:05	10
trans-1,2-Dichloroethene	ND		10	ug/L			06/01/16 01:05	10
trans-1,3-Dichloropropene	ND		5.0	ug/L			06/01/16 01:05	10

Client Sample ID: MW-33

Lab Sample ID: 440-148520-6
Date Collected: 05/26/16 12:32
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		10	ug/L			06/01/16 01:05	10
1,2,4-Trichlorobenzene	ND		10	ug/L			06/01/16 01:05	10
1,1,1-Trichloroethane	ND		10	ug/L			06/01/16 01:05	10
1,1,2-Trichloroethane	ND		10	ug/L			06/01/16 01:05	10
Trichloroethene	ND		10	ug/L			06/01/16 01:05	10
Trichlorofluoromethane	ND		10	ug/L			06/01/16 01:05	10
1,2,3-Trichloropropane	ND		10	ug/L			06/01/16 01:05	10
1,2,4-Trimethylbenzene	**27**		10	ug/L			06/01/16 01:05	10
1,3,5-Trimethylbenzene	ND		10	ug/L			06/01/16 01:05	10
Vinyl chloride	ND		5.0	ug/L			06/01/16 01:05	10
Xylenes, Total	**18**		15	ug/L			06/01/16 01:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/01/16 01:05*	*10*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/01/16 01:05*	*10*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/01/16 01:05*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	**66**		10	ug/L			06/01/16 11:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/01/16 11:42*	*10*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*06/01/16 11:42*	*10*
Toluene-d8 (Surr)	*112*		*80 - 128*		*06/01/16 11:42*	*10*

Client Sample ID: MW-25R

Lab Sample ID: 440-148520-7
Date Collected: 05/26/16 13:03
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**55**		50	ug/L			06/01/16 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*06/01/16 01:36*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/01/16 01:36*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/01/16 01:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/01/16 01:36	1
Benzene	**2.4**		0.50	ug/L			06/01/16 01:36	1
Bromobenzene	ND		1.0	ug/L			06/01/16 01:36	1
Bromochloromethane	ND		1.0	ug/L			06/01/16 01:36	1
Bromodichloromethane	ND		1.0	ug/L			06/01/16 01:36	1
Bromoform	ND		1.0	ug/L			06/01/16 01:36	1
Bromomethane	ND		1.0	ug/L			06/01/16 01:36	1
2-Butanone (MEK)	ND		10	ug/L			06/01/16 01:36	1
Carbon tetrachloride	ND		0.50	ug/L			06/01/16 01:36	1

Client Sample ID: MW-25R

Lab Sample ID: 440-148520-7

Date Collected: 05/26/16 13:03

Matrix: Water

Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	ug/L			06/01/16 01:36	1
Chloroethane	ND		1.0	ug/L			06/01/16 01:36	1
Chloroform	ND		1.0	ug/L			06/01/16 01:36	1
Chloromethane	ND		1.0	ug/L			06/01/16 01:36	1
2-Chlorotoluene	ND		1.0	ug/L			06/01/16 01:36	1
4-Chlorotoluene	ND		1.0	ug/L			06/01/16 01:36	1
cis-1,2-Dichloroethene	**2.9**		1.0	ug/L			06/01/16 01:36	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 01:36	1
Dibromochloromethane	ND		1.0	ug/L			06/01/16 01:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			06/01/16 01:36	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			06/01/16 01:36	1
Dibromomethane	ND		1.0	ug/L			06/01/16 01:36	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/01/16 01:36	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/01/16 01:36	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/01/16 01:36	1
Dichlorodifluoromethane	ND		2.0	ug/L			06/01/16 01:36	1
1,1-Dichloroethane	ND		1.0	ug/L			06/01/16 01:36	1
1,2-Dichloroethane	ND		0.50	ug/L			06/01/16 01:36	1
1,1-Dichloroethene	ND		1.0	ug/L			06/01/16 01:36	1
1,2-Dichloropropane	ND		1.0	ug/L			06/01/16 01:36	1
1,3-Dichloropropane	ND		1.0	ug/L			06/01/16 01:36	1
2,2-Dichloropropane	ND		1.0	ug/L			06/01/16 01:36	1
1,1-Dichloropropene	ND		1.0	ug/L			06/01/16 01:36	1
Ethylbenzene	ND		0.50	ug/L			06/01/16 01:36	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			06/01/16 01:36	1
Hexachlorobutadiene	ND		1.0	ug/L			06/01/16 01:36	1
2-Hexanone	ND		10	ug/L			06/01/16 01:36	1
Isopropylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
Methylene Chloride	ND		5.0	ug/L			06/01/16 01:36	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/01/16 01:36	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/01/16 01:36	1
m,p-Xylene	ND		1.0	ug/L			06/01/16 01:36	1
Naphthalene	ND		1.0	ug/L			06/01/16 01:36	1
n-Butylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
N-Propylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
o-Xylene	ND		0.50	ug/L			06/01/16 01:36	1
p-Isopropyltoluene	ND		1.0	ug/L			06/01/16 01:36	1
sec-Butylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
Styrene	ND		1.0	ug/L			06/01/16 01:36	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			06/01/16 01:36	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			06/01/16 01:36	1
tert-Butylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 01:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 01:36	1
Tetrachloroethene	ND		1.0	ug/L			06/01/16 01:36	1
Toluene	ND		0.50	ug/L			06/01/16 01:36	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 01:36	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 01:36	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/01/16 01:36	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: MW-25R

Lab Sample ID: 440-148520-7
Date Collected: 05/26/16 13:03
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/01/16 01:36	1
1,1,1-Trichloroethane	ND		1.0	ug/L			06/01/16 01:36	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/01/16 01:36	1
Trichloroethene	ND		1.0	ug/L			06/01/16 01:36	1
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 01:36	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 01:36	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 01:36	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 01:36	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/01/16 01:36*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 132*		*06/01/16 01:36*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/01/16 01:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	ND		10	ug/L			06/01/16 12:10	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/01/16 12:10*	*10*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*06/01/16 12:10*	*10*
Toluene-d8 (Surr)	*111*		*80 - 128*		*06/01/16 12:10*	*10*

Client Sample ID: MW-34

Lab Sample ID: 440-148520-8
Date Collected: 05/26/16 13:21
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	ug/L			06/01/16 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/01/16 02:06*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/01/16 02:06*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*06/01/16 02:06*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/01/16 02:06	1
Benzene	ND		0.50	ug/L			06/01/16 02:06	1
Bromobenzene	ND		1.0	ug/L			06/01/16 02:06	1
Bromochloromethane	ND		1.0	ug/L			06/01/16 02:06	1
Bromodichloromethane	ND		1.0	ug/L			06/01/16 02:06	1
Bromoform	ND		1.0	ug/L			06/01/16 02:06	1
Bromomethane	ND		1.0	ug/L			06/01/16 02:06	1
2-Butanone (MEK)	ND		10	ug/L			06/01/16 02:06	1
Carbon tetrachloride	ND		0.50	ug/L			06/01/16 02:06	1
Chlorobenzene	ND		1.0	ug/L			06/01/16 02:06	1
Chloroethane	ND		1.0	ug/L			06/01/16 02:06	1

Client Sample ID: MW-34

Date Collected: 05/26/16 13:21
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	ug/L			06/01/16 02:06	1
Chloromethane	ND		1.0	ug/L			06/01/16 02:06	1
2-Chlorotoluene	ND		1.0	ug/L			06/01/16 02:06	1
4-Chlorotoluene	ND		1.0	ug/L			06/01/16 02:06	1
cis-1,2-Dichloroethene	**4.3**		1.0	ug/L			06/01/16 02:06	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 02:06	1
Dibromochloromethane	ND		1.0	ug/L			06/01/16 02:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			06/01/16 02:06	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			06/01/16 02:06	1
Dibromomethane	ND		1.0	ug/L			06/01/16 02:06	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/01/16 02:06	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/01/16 02:06	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/01/16 02:06	1
Dichlorodifluoromethane	ND		2.0	ug/L			06/01/16 02:06	1
1,1-Dichloroethane	ND		1.0	ug/L			06/01/16 02:06	1
1,2-Dichloroethane	ND		0.50	ug/L			06/01/16 02:06	1
1,1-Dichloroethene	ND		1.0	ug/L			06/01/16 02:06	1
1,2-Dichloropropane	ND		1.0	ug/L			06/01/16 02:06	1
1,3-Dichloropropane	ND		1.0	ug/L			06/01/16 02:06	1
2,2-Dichloropropane	ND		1.0	ug/L			06/01/16 02:06	1
1,1-Dichloropropene	ND		1.0	ug/L			06/01/16 02:06	1
Ethylbenzene	ND		0.50	ug/L			06/01/16 02:06	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			06/01/16 02:06	1
Hexachlorobutadiene	ND		1.0	ug/L			06/01/16 02:06	1
2-Hexanone	ND		10	ug/L			06/01/16 02:06	1
Isopropylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
Isopropyl Ether (DIPE)	ND	*	1.0	ug/L			06/01/16 02:06	1
Methylene Chloride	ND		5.0	ug/L			06/01/16 02:06	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/01/16 02:06	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/01/16 02:06	1
m,p-Xylene	ND		1.0	ug/L			06/01/16 02:06	1
Naphthalene	ND		1.0	ug/L			06/01/16 02:06	1
n-Butylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
N-Propylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
o-Xylene	ND		0.50	ug/L			06/01/16 02:06	1
p-Isopropyltoluene	ND		1.0	ug/L			06/01/16 02:06	1
sec-Butylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
Styrene	ND		1.0	ug/L			06/01/16 02:06	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			06/01/16 02:06	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			06/01/16 02:06	1
tert-Butylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 02:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 02:06	1
Tetrachloroethene	ND		1.0	ug/L			06/01/16 02:06	1
Toluene	ND		0.50	ug/L			06/01/16 02:06	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 02:06	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 02:06	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/01/16 02:06	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/01/16 02:06	1

Client Sample ID: MW-34

Lab Sample ID: 440-148520-8
Date Collected: 05/26/16 13:21
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			06/01/16 02:06	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/01/16 02:06	1
Trichloroethene	ND		1.0	ug/L			06/01/16 02:06	1
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 02:06	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 02:06	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 02:06	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 02:06	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/01/16 02:06*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*06/01/16 02:06*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*06/01/16 02:06*	*1*

Client Sample ID: MW-19

Lab Sample ID: 440-148520-9
Date Collected: 05/26/16 14:23
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**71**		50	ug/L			06/01/16 02:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*06/01/16 02:37*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/01/16 02:37*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/01/16 02:37*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/01/16 02:37	1
Benzene	ND		0.50	ug/L			06/01/16 02:37	1
Bromobenzene	ND		1.0	ug/L			06/01/16 02:37	1
Bromochloromethane	ND		1.0	ug/L			06/01/16 02:37	1
Bromodichloromethane	ND		1.0	ug/L			06/01/16 02:37	1
Bromoform	ND		1.0	ug/L			06/01/16 02:37	1
Bromomethane	ND		1.0	ug/L			06/01/16 02:37	1
2-Butanone (MEK)	ND		10	ug/L			06/01/16 02:37	1
Carbon tetrachloride	ND		0.50	ug/L			06/01/16 02:37	1
Chlorobenzene	ND		1.0	ug/L			06/01/16 02:37	1
Chloroethane	ND		1.0	ug/L			06/01/16 02:37	1
Chloroform	ND		1.0	ug/L			06/01/16 02:37	1
Chloromethane	ND		1.0	ug/L			06/01/16 02:37	1
2-Chlorotoluene	ND		1.0	ug/L			06/01/16 02:37	1
4-Chlorotoluene	ND		1.0	ug/L			06/01/16 02:37	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 02:37	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 02:37	1
Dibromochloromethane	ND		1.0	ug/L			06/01/16 02:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			06/01/16 02:37	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			06/01/16 02:37	1

Client Sample ID: MW-19

Date Collected: 05/26/16 14:23
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		1.0	ug/L			06/01/16 02:37	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/01/16 02:37	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/01/16 02:37	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/01/16 02:37	1
Dichlorodifluoromethane	ND		2.0	ug/L			06/01/16 02:37	1
1,1-Dichloroethane	ND		1.0	ug/L			06/01/16 02:37	1
1,2-Dichloroethane	ND		0.50	ug/L			06/01/16 02:37	1
1,1-Dichloroethene	ND		1.0	ug/L			06/01/16 02:37	1
1,2-Dichloropropane	ND		1.0	ug/L			06/01/16 02:37	1
1,3-Dichloropropane	ND		1.0	ug/L			06/01/16 02:37	1
2,2-Dichloropropane	ND		1.0	ug/L			06/01/16 02:37	1
1,1-Dichloropropene	ND		1.0	ug/L			06/01/16 02:37	1
Ethylbenzene	ND		0.50	ug/L			06/01/16 02:37	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			06/01/16 02:37	1
Hexachlorobutadiene	ND		1.0	ug/L			06/01/16 02:37	1
2-Hexanone	ND		10	ug/L			06/01/16 02:37	1
Isopropylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
Methylene Chloride	ND		5.0	ug/L			06/01/16 02:37	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/01/16 02:37	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/01/16 02:37	1
m,p-Xylene	ND		1.0	ug/L			06/01/16 02:37	1
Naphthalene	ND		1.0	ug/L			06/01/16 02:37	1
n-Butylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
N-Propylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
o-Xylene	ND		0.50	ug/L			06/01/16 02:37	1
p-Isopropyltoluene	ND		1.0	ug/L			06/01/16 02:37	1
sec-Butylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
Styrene	ND		1.0	ug/L			06/01/16 02:37	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			06/01/16 02:37	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			06/01/16 02:37	1
tert-Butylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 02:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 02:37	1
Tetrachloroethene	ND		1.0	ug/L			06/01/16 02:37	1
Toluene	ND		0.50	ug/L			06/01/16 02:37	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 02:37	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 02:37	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/01/16 02:37	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/01/16 02:37	1
1,1,1-Trichloroethane	ND		1.0	ug/L			06/01/16 02:37	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/01/16 02:37	1
Trichloroethene	ND		1.0	ug/L			06/01/16 02:37	1
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 02:37	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 02:37	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 02:37	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 02:37	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 02:37	1

Client Sample ID: MW-19

Lab Sample ID: 440-148520-9
Date Collected: 05/26/16 14:23
Matrix: Water
Date Received: 05/26/16 16:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		06/01/16 02:37	1
Dibromofluoromethane (Surr)	103		76 - 132		06/01/16 02:37	1
Toluene-d8 (Surr)	104		80 - 128		06/01/16 02:37	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	**46**		1.0	ug/L			06/01/16 12:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/01/16 12:37	1
Dibromofluoromethane (Surr)	107		76 - 132		06/01/16 12:37	1
Toluene-d8 (Surr)	110		80 - 128		06/01/16 12:37	1

Client Sample ID: MW-27

Lab Sample ID: 440-148520-10
Date Collected: 05/26/16 14:51
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	**670**		50	ug/L			06/01/16 03:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		76 - 132		06/01/16 03:07	1
4-Bromofluorobenzene (Surr)	107		80 - 120		06/01/16 03:07	1
Toluene-d8 (Surr)	104		80 - 128		06/01/16 03:07	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/01/16 03:07	1
Benzene	**29**		0.50	ug/L			06/01/16 03:07	1
Bromobenzene	ND		1.0	ug/L			06/01/16 03:07	1
Bromochloromethane	ND		1.0	ug/L			06/01/16 03:07	1
Bromodichloromethane	ND		1.0	ug/L			06/01/16 03:07	1
Bromoform	ND		1.0	ug/L			06/01/16 03:07	1
Bromomethane	ND		1.0	ug/L			06/01/16 03:07	1
2-Butanone (MEK)	ND		10	ug/L			06/01/16 03:07	1
Carbon tetrachloride	ND		0.50	ug/L			06/01/16 03:07	1
Chlorobenzene	ND		1.0	ug/L			06/01/16 03:07	1
Chloroethane	ND		1.0	ug/L			06/01/16 03:07	1
Chloroform	ND		1.0	ug/L			06/01/16 03:07	1
Chloromethane	ND		1.0	ug/L			06/01/16 03:07	1
2-Chlorotoluene	ND		1.0	ug/L			06/01/16 03:07	1
4-Chlorotoluene	ND		1.0	ug/L			06/01/16 03:07	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 03:07	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 03:07	1
Dibromochloromethane	ND		1.0	ug/L			06/01/16 03:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			06/01/16 03:07	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			06/01/16 03:07	1
Dibromomethane	ND		1.0	ug/L			06/01/16 03:07	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/01/16 03:07	1

Client Sample ID: MW-27

Date Collected: 05/26/16 14:51
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	ug/L			06/01/16 03:07	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/01/16 03:07	1
Dichlorodifluoromethane	ND		2.0	ug/L			06/01/16 03:07	1
1,1-Dichloroethane	ND		1.0	ug/L			06/01/16 03:07	1
1,2-Dichloroethane	ND		0.50	ug/L			06/01/16 03:07	1
1,1-Dichloroethene	ND		1.0	ug/L			06/01/16 03:07	1
1,2-Dichloropropane	ND		1.0	ug/L			06/01/16 03:07	1
1,3-Dichloropropane	ND		1.0	ug/L			06/01/16 03:07	1
2,2-Dichloropropane	ND		1.0	ug/L			06/01/16 03:07	1
1,1-Dichloropropene	ND		1.0	ug/L			06/01/16 03:07	1
Ethylbenzene	**1.0**		0.50	ug/L			06/01/16 03:07	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			06/01/16 03:07	1
Hexachlorobutadiene	ND		1.0	ug/L			06/01/16 03:07	1
2-Hexanone	ND		10	ug/L			06/01/16 03:07	1
Isopropylbenzene	**10**		1.0	ug/L			06/01/16 03:07	1
Methylene Chloride	ND		5.0	ug/L			06/01/16 03:07	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/01/16 03:07	1
Methyl-t-Butyl Ether (MTBE)	**1.2**		1.0	ug/L			06/01/16 03:07	1
m,p-Xylene	ND		1.0	ug/L			06/01/16 03:07	1
Naphthalene	ND		1.0	ug/L			06/01/16 03:07	1
n-Butylbenzene	**1.1**		1.0	ug/L			06/01/16 03:07	1
N-Propylbenzene	**5.3**		1.0	ug/L			06/01/16 03:07	1
o-Xylene	ND		0.50	ug/L			06/01/16 03:07	1
p-Isopropyltoluene	ND		1.0	ug/L			06/01/16 03:07	1
sec-Butylbenzene	**2.2**		1.0	ug/L			06/01/16 03:07	1
Styrene	ND		1.0	ug/L			06/01/16 03:07	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			06/01/16 03:07	1
tert-Butyl alcohol (TBA)	**35**		10	ug/L			06/01/16 03:07	1
tert-Butylbenzene	ND		1.0	ug/L			06/01/16 03:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 03:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 03:07	1
Tetrachloroethene	ND		1.0	ug/L			06/01/16 03:07	1
Toluene	ND		0.50	ug/L			06/01/16 03:07	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 03:07	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 03:07	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/01/16 03:07	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/01/16 03:07	1
1,1,1-Trichloroethane	ND		1.0	ug/L			06/01/16 03:07	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/01/16 03:07	1
Trichloroethene	ND		1.0	ug/L			06/01/16 03:07	1
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 03:07	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 03:07	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 03:07	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 03:07	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 03:07	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*06/01/16 03:07*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*06/01/16 03:07*	*1*

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: MW-27

Lab Sample ID: 440-148520-10
Date Collected: 05/26/16 14:51
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/01/16 03:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl Ether (DIPE)	**56**		1.0	ug/L			06/01/16 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*06/01/16 13:05*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*06/01/16 13:05*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/01/16 13:05*	*1*

Client Sample ID: TB-1

Lab Sample ID: 440-148520-11
Date Collected: 05/26/16 08:30
Matrix: Water
Date Received: 05/26/16 16:20

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50	ug/L			06/01/16 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*76 - 132*		*06/01/16 03:38*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/01/16 03:38*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/01/16 03:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/01/16 03:38	1
Benzene	ND		0.50	ug/L			06/01/16 03:38	1
Bromobenzene	ND		1.0	ug/L			06/01/16 03:38	1
Bromochloromethane	ND		1.0	ug/L			06/01/16 03:38	1
Bromodichloromethane	ND		1.0	ug/L			06/01/16 03:38	1
Bromoform	ND		1.0	ug/L			06/01/16 03:38	1
Bromomethane	ND		1.0	ug/L			06/01/16 03:38	1
2-Butanone (MEK)	ND		10	ug/L			06/01/16 03:38	1
Carbon tetrachloride	ND		0.50	ug/L			06/01/16 03:38	1
Chlorobenzene	ND		1.0	ug/L			06/01/16 03:38	1
Chloroethane	ND		1.0	ug/L			06/01/16 03:38	1
Chloroform	ND		1.0	ug/L			06/01/16 03:38	1
Chloromethane	ND		1.0	ug/L			06/01/16 03:38	1
2-Chlorotoluene	ND		1.0	ug/L			06/01/16 03:38	1
4-Chlorotoluene	ND		1.0	ug/L			06/01/16 03:38	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 03:38	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 03:38	1
Dibromochloromethane	ND		1.0	ug/L			06/01/16 03:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			06/01/16 03:38	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			06/01/16 03:38	1
Dibromomethane	ND		1.0	ug/L			06/01/16 03:38	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/01/16 03:38	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/01/16 03:38	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/01/16 03:38	1

Client Sample ID: TB-1

Date Collected: 05/26/16 08:30
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	ug/L			06/01/16 03:38	1
1,1-Dichloroethane	ND		1.0	ug/L			06/01/16 03:38	1
1,2-Dichloroethane	ND		0.50	ug/L			06/01/16 03:38	1
1,1-Dichloroethene	ND		1.0	ug/L			06/01/16 03:38	1
1,2-Dichloropropane	ND		1.0	ug/L			06/01/16 03:38	1
1,3-Dichloropropane	ND		1.0	ug/L			06/01/16 03:38	1
2,2-Dichloropropane	ND		1.0	ug/L			06/01/16 03:38	1
1,1-Dichloropropene	ND		1.0	ug/L			06/01/16 03:38	1
Ethylbenzene	ND		0.50	ug/L			06/01/16 03:38	1
Ethyl-t-butyl ether (ETBE)	ND	*	1.0	ug/L			06/01/16 03:38	1
Hexachlorobutadiene	ND		1.0	ug/L			06/01/16 03:38	1
2-Hexanone	ND		10	ug/L			06/01/16 03:38	1
Isopropylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
Isopropyl Ether (DIPE)	ND	*	1.0	ug/L			06/01/16 03:38	1
Methylene Chloride	ND		5.0	ug/L			06/01/16 03:38	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/01/16 03:38	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			06/01/16 03:38	1
m,p-Xylene	ND		1.0	ug/L			06/01/16 03:38	1
Naphthalene	ND		1.0	ug/L			06/01/16 03:38	1
n-Butylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
N-Propylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
o-Xylene	ND		0.50	ug/L			06/01/16 03:38	1
p-Isopropyltoluene	ND		1.0	ug/L			06/01/16 03:38	1
sec-Butylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
Styrene	ND		1.0	ug/L			06/01/16 03:38	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			06/01/16 03:38	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			06/01/16 03:38	1
tert-Butylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 03:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 03:38	1
Tetrachloroethene	ND		1.0	ug/L			06/01/16 03:38	1
Toluene	ND		0.50	ug/L			06/01/16 03:38	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 03:38	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 03:38	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/01/16 03:38	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/01/16 03:38	1
1,1,1-Trichloroethane	ND		1.0	ug/L			06/01/16 03:38	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/01/16 03:38	1
Trichloroethene	ND		1.0	ug/L			06/01/16 03:38	1
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 03:38	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 03:38	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 03:38	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 03:38	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/01/16 03:38*	*1*
Dibromofluoromethane (Surr)	*105*		*76 - 132*		*06/01/16 03:38*	*1*
Toluene-d8 (Surr)	*104*		*80 - 128*		*06/01/16 03:38*	*1*

Method Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: MW-35
Date Collected: 05/26/16 08:59
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	05/31/16 21:33	WC	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	333710	06/01/16 08:58	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	05/31/16 21:33	WC	TAL IRV

Client Sample ID: MW-31
Date Collected: 05/26/16 09:30
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	05/31/16 23:04	WC	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	05/31/16 23:04	WC	TAL IRV

Client Sample ID: MW-36
Date Collected: 05/26/16 10:01
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	05/31/16 23:34	WC	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	05/31/16 23:34	WC	TAL IRV

Client Sample ID: MW-37
Date Collected: 05/26/16 10:35
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	06/01/16 00:04	WC	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	333710	06/01/16 10:20	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	06/01/16 00:04	WC	TAL IRV

Client Sample ID: MW-38
Date Collected: 05/26/16 11:03
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	10 mL	10 mL	333663	06/01/16 00:35	WC	TAL IRV
Total/NA	Analysis	8260B	RA	2.5	10 mL	10 mL	333710	06/01/16 10:48	MM1	TAL IRV
Total/NA	Analysis	8260B	DL	20	10 mL	10 mL	333710	06/01/16 11:15	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		2.5	10 mL	10 mL	333664	06/01/16 00:35	WC	TAL IRV

Lab Chronicle

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: MW-33
Date Collected: 05/26/16 12:32
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	333663	06/01/16 01:05	WC	TAL IRV
Total/NA	Analysis	8260B	RA	10	10 mL	10 mL	333710	06/01/16 11:42	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		10	10 mL	10 mL	333664	06/01/16 01:05	WC	TAL IRV

Client Sample ID: MW-25R
Date Collected: 05/26/16 13:03
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	06/01/16 01:36	WC	TAL IRV
Total/NA	Analysis	8260B	RA	10	10 mL	10 mL	333710	06/01/16 12:10	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	06/01/16 01:36	WC	TAL IRV

Client Sample ID: MW-34
Date Collected: 05/26/16 13:21
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	06/01/16 02:06	WC	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	06/01/16 02:06	WC	TAL IRV

Client Sample ID: MW-19
Date Collected: 05/26/16 14:23
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	06/01/16 02:37	WC	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	333710	06/01/16 12:37	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	06/01/16 02:37	WC	TAL IRV

Client Sample ID: MW-27
Date Collected: 05/26/16 14:51
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	06/01/16 03:07	WC	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	333710	06/01/16 13:05	MM1	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	06/01/16 03:07	WC	TAL IRV

Lab Chronicle

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Client Sample ID: TB-1

Date Collected: 05/26/16 08:30
Date Received: 05/26/16 16:20

Lab Sample ID: 440-148520-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333663	06/01/16 03:38	WC	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333664	06/01/16 03:38	WC	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-333663/4
Matrix: Water
Analysis Batch: 333663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			05/31/16 19:20	1
Benzene	ND		0.50		ug/L			05/31/16 19:20	1
Bromobenzene	ND		1.0		ug/L			05/31/16 19:20	1
Bromochloromethane	ND		1.0		ug/L			05/31/16 19:20	1
Bromodichloromethane	ND		1.0		ug/L			05/31/16 19:20	1
Bromoform	ND		1.0		ug/L			05/31/16 19:20	1
Bromomethane	ND		1.0		ug/L			05/31/16 19:20	1
2-Butanone (MEK)	ND		10		ug/L			05/31/16 19:20	1
Carbon tetrachloride	ND		0.50		ug/L			05/31/16 19:20	1
Chlorobenzene	ND		1.0		ug/L			05/31/16 19:20	1
Chloroethane	ND		1.0		ug/L			05/31/16 19:20	1
Chloroform	ND		1.0		ug/L			05/31/16 19:20	1
Chloromethane	ND		1.0		ug/L			05/31/16 19:20	1
2-Chlorotoluene	ND		1.0		ug/L			05/31/16 19:20	1
4-Chlorotoluene	ND		1.0		ug/L			05/31/16 19:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/31/16 19:20	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/31/16 19:20	1
Dibromochloromethane	ND		1.0		ug/L			05/31/16 19:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/31/16 19:20	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			05/31/16 19:20	1
Dibromomethane	ND		1.0		ug/L			05/31/16 19:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/31/16 19:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/31/16 19:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/31/16 19:20	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/31/16 19:20	1
1,1-Dichloroethane	ND		1.0		ug/L			05/31/16 19:20	1
1,2-Dichloroethane	ND		0.50		ug/L			05/31/16 19:20	1
1,1-Dichloroethene	ND		1.0		ug/L			05/31/16 19:20	1
1,2-Dichloropropane	ND		1.0		ug/L			05/31/16 19:20	1
1,3-Dichloropropane	ND		1.0		ug/L			05/31/16 19:20	1
2,2-Dichloropropane	ND		1.0		ug/L			05/31/16 19:20	1
1,1-Dichloropropene	ND		1.0		ug/L			05/31/16 19:20	1
Ethylbenzene	ND		0.50		ug/L			05/31/16 19:20	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			05/31/16 19:20	1
Hexachlorobutadiene	ND		1.0		ug/L			05/31/16 19:20	1
2-Hexanone	ND		10		ug/L			05/31/16 19:20	1
Isopropylbenzene	ND		1.0		ug/L			05/31/16 19:20	1
Isopropyl Ether (DIPE)	ND		1.0		ug/L			05/31/16 19:20	1
Methylene Chloride	ND		5.0		ug/L			05/31/16 19:20	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			05/31/16 19:20	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/31/16 19:20	1
m,p-Xylene	ND		1.0		ug/L			05/31/16 19:20	1
Naphthalene	ND		1.0		ug/L			05/31/16 19:20	1
n-Butylbenzene	ND		1.0		ug/L			05/31/16 19:20	1
N-Propylbenzene	ND		1.0		ug/L			05/31/16 19:20	1
o-Xylene	ND		0.50		ug/L			05/31/16 19:20	1
p-Isopropyltoluene	ND		1.0		ug/L			05/31/16 19:20	1
sec-Butylbenzene	ND		1.0		ug/L			05/31/16 19:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-333663/4
Matrix: Water
Analysis Batch: 333663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0		ug/L			05/31/16 19:20	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			05/31/16 19:20	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/31/16 19:20	1
tert-Butylbenzene	ND		1.0		ug/L			05/31/16 19:20	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/31/16 19:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/31/16 19:20	1
Tetrachloroethene	ND		1.0		ug/L			05/31/16 19:20	1
Toluene	ND		0.50		ug/L			05/31/16 19:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/31/16 19:20	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/31/16 19:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/31/16 19:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/31/16 19:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/31/16 19:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/31/16 19:20	1
Trichloroethene	ND		1.0		ug/L			05/31/16 19:20	1
Trichlorofluoromethane	ND		1.0		ug/L			05/31/16 19:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/31/16 19:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/31/16 19:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/31/16 19:20	1
Vinyl chloride	ND		0.50		ug/L			05/31/16 19:20	1
Xylenes, Total	ND		1.5		ug/L			05/31/16 19:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/31/16 19:20*	*1*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*05/31/16 19:20*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*05/31/16 19:20*	*1*

Lab Sample ID: LCS 440-333663/5
Matrix: Water
Analysis Batch: 333663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	26.2		ug/L		105	10 - 150
Benzene	25.0	23.4		ug/L		94	68 - 130
Bromobenzene	25.0	25.1		ug/L		101	70 - 130
Bromochloromethane	25.0	25.0		ug/L		100	70 - 130
Bromodichloromethane	25.0	26.9		ug/L		108	70 - 132
Bromoform	25.0	31.2		ug/L		125	60 - 148
Bromomethane	25.0	24.6		ug/L		98	64 - 139
2-Butanone (MEK)	25.0	25.5		ug/L		102	44 - 150
Carbon tetrachloride	25.0	28.6		ug/L		114	60 - 150
Chlorobenzene	25.0	23.5		ug/L		94	70 - 130
Chloroethane	25.0	26.3		ug/L		105	64 - 135
Chloroform	25.0	24.1		ug/L		96	70 - 130
Chloromethane	25.0	27.4		ug/L		110	47 - 140
2-Chlorotoluene	25.0	24.0		ug/L		96	70 - 130
4-Chlorotoluene	25.0	23.6		ug/L		95	70 - 130
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	70 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-333663/5
Matrix: Water
Analysis Batch: 333663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	28.4		ug/L		114	70 - 133
Dibromochloromethane	25.0	26.0		ug/L		104	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	28.8		ug/L		115	52 - 140
1,2-Dibromoethane (EDB)	25.0	26.0		ug/L		104	70 - 130
Dibromomethane	25.0	25.5		ug/L		102	70 - 130
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	23.9		ug/L		95	70 - 130
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130
Dichlorodifluoromethane	25.0	19.1		ug/L		76	29 - 150
1,1-Dichloroethane	25.0	26.3		ug/L		105	64 - 130
1,2-Dichloroethane	25.0	25.4		ug/L		102	57 - 138
1,1-Dichloroethene	25.0	25.1		ug/L		100	70 - 130
1,2-Dichloropropane	25.0	29.1		ug/L		116	67 - 130
1,3-Dichloropropane	25.0	25.2		ug/L		101	70 - 130
2,2-Dichloropropane	25.0	30.6		ug/L		123	68 - 141
1,1-Dichloropropene	25.0	24.0		ug/L		96	70 - 130
Ethylbenzene	25.0	23.7		ug/L		95	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	40.6	*	ug/L		162	60 - 136
Hexachlorobutadiene	25.0	28.0		ug/L		112	10 - 150
2-Hexanone	25.0	29.5		ug/L		118	10 - 150
Isopropylbenzene	25.0	23.4		ug/L		94	70 - 136
Isopropyl Ether (DIPE)	25.0	37.8	*	ug/L		151	58 - 139
Methylene Chloride	25.0	26.3		ug/L		105	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	30.0		ug/L		120	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	27.3		ug/L		109	63 - 131
m,p-Xylene	25.0	24.1		ug/L		96	70 - 130
Naphthalene	25.0	26.9		ug/L		107	60 - 140
n-Butylbenzene	25.0	24.8		ug/L		99	65 - 150
N-Propylbenzene	25.0	23.7		ug/L		95	67 - 139
o-Xylene	25.0	23.6		ug/L		94	70 - 130
p-Isopropyltoluene	25.0	24.5		ug/L		98	70 - 132
sec-Butylbenzene	25.0	24.0		ug/L		96	70 - 138
Styrene	25.0	25.1		ug/L		100	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	33.0		ug/L		132	57 - 139
tert-Butyl alcohol (TBA)	250	275		ug/L		110	70 - 130
tert-Butylbenzene	25.0	23.8		ug/L		95	70 - 130
1,1,1,2-Tetrachloroethane	25.0	27.5		ug/L		110	60 - 141
1,1,2,2-Tetrachloroethane	25.0	26.6		ug/L		106	63 - 130
Tetrachloroethene	25.0	26.6		ug/L		107	70 - 130
Toluene	25.0	24.5		ug/L		98	70 - 130
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	28.4		ug/L		114	70 - 132
1,2,3-Trichlorobenzene	25.0	27.2		ug/L		109	60 - 140
1,2,4-Trichlorobenzene	25.0	27.5		ug/L		110	60 - 140
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
1,1,2-Trichloroethane	25.0	24.6		ug/L		99	70 - 130
Trichloroethene	25.0	24.8		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	24.6		ug/L		98	60 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-333663/5
Matrix: Water
Analysis Batch: 333663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	28.8		ug/L		115	63 - 130
1,2,4-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 135
1,3,5-Trimethylbenzene	25.0	24.4		ug/L		98	70 - 136
Vinyl chloride	25.0	25.4		ug/L		101	59 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*76 - 132*
Toluene-d8 (Surr)	*106*		*80 - 128*

Lab Sample ID: 440-148520-1 MS
Matrix: Water
Analysis Batch: 333663

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	29.8		ug/L		119	10 - 150
Benzene	3.3		25.0	26.9		ug/L		94	66 - 130
Bromobenzene	ND		25.0	25.4		ug/L		102	70 - 130
Bromochloromethane	ND		25.0	25.1		ug/L		100	70 - 130
Bromodichloromethane	ND		25.0	27.4		ug/L		110	70 - 138
Bromoform	ND		25.0	31.3		ug/L		125	59 - 150
Bromomethane	ND		25.0	20.5		ug/L		82	62 - 131
2-Butanone (MEK)	ND		25.0	26.8		ug/L		107	48 - 140
Carbon tetrachloride	ND		25.0	29.2		ug/L		117	60 - 150
Chlorobenzene	ND		25.0	23.7		ug/L		95	70 - 130
Chloroethane	ND		25.0	23.5		ug/L		94	68 - 130
Chloroform	ND		25.0	24.7		ug/L		99	70 - 130
Chloromethane	ND		25.0	19.7		ug/L		79	39 - 144
2-Chlorotoluene	ND		25.0	25.0		ug/L		100	70 - 130
4-Chlorotoluene	ND		25.0	24.7		ug/L		99	70 - 130
cis-1,2-Dichloroethene	ND		25.0	25.1		ug/L		100	70 - 130
cis-1,3-Dichloropropene	ND		25.0	27.7		ug/L		111	70 - 133
Dibromochloromethane	ND		25.0	26.5		ug/L		106	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	32.0		ug/L		128	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	27.8		ug/L		111	70 - 131
Dibromomethane	ND		25.0	26.2		ug/L		105	70 - 130
1,2-Dichlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.6		ug/L		98	70 - 130
1,4-Dichlorobenzene	ND		25.0	24.8		ug/L		99	70 - 130
Dichlorodifluoromethane	ND		25.0	11.4		ug/L		46	25 - 142
1,1-Dichloroethane	ND		25.0	26.8		ug/L		107	65 - 130
1,2-Dichloroethane	ND		25.0	25.5		ug/L		102	56 - 146
1,1-Dichloroethene	ND		25.0	24.8		ug/L		99	70 - 130
1,2-Dichloropropane	ND		25.0	28.9		ug/L		116	69 - 130
1,3-Dichloropropane	ND		25.0	25.4		ug/L		102	70 - 130
2,2-Dichloropropane	ND		25.0	30.7		ug/L		123	69 - 138
1,1-Dichloropropene	ND		25.0	26.2		ug/L		105	64 - 130
Ethylbenzene	ND		25.0	24.8		ug/L		99	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148520-1 MS
Matrix: Water
Analysis Batch: 333663

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethyl-t-butyl ether (ETBE)	ND	*	25.0	30.5		ug/L		122	70 - 130
Hexachlorobutadiene	ND		25.0	30.5		ug/L		122	10 - 150
2-Hexanone	ND		25.0	30.7		ug/L		123	10 - 150
Isopropylbenzene	4.5		25.0	28.0		ug/L		94	70 - 132
Isopropyl Ether (DIPE)	3.4	F1 *	25.0	41.5	F1	ug/L		152	64 - 138
Methylene Chloride	ND		25.0	25.0		ug/L		100	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	34.6		ug/L		138	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.8		ug/L		99	70 - 130
m,p-Xylene	ND		25.0	25.4		ug/L		101	70 - 133
Naphthalene	ND		25.0	30.2		ug/L		121	60 - 140
n-Butylbenzene	ND		25.0	28.2		ug/L		113	61 - 149
N-Propylbenzene	ND		25.0	26.4		ug/L		102	66 - 135
o-Xylene	ND		25.0	23.7		ug/L		95	70 - 133
p-Isopropyltoluene	ND		25.0	25.9		ug/L		104	70 - 130
sec-Butylbenzene	4.0		25.0	28.9		ug/L		99	67 - 134
Styrene	ND		25.0	25.7		ug/L		103	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	23.3		ug/L		93	68 - 133
tert-Butyl alcohol (TBA)	ND		250	281		ug/L		112	70 - 130
tert-Butylbenzene	ND		25.0	25.6		ug/L		102	70 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	28.6		ug/L		115	63 - 130
Tetrachloroethene	ND		25.0	28.0		ug/L		112	70 - 137
Toluene	ND		25.0	24.8		ug/L		99	70 - 130
trans-1,2-Dichloroethene	ND		25.0	25.6		ug/L		102	70 - 130
trans-1,3-Dichloropropene	ND		25.0	27.7		ug/L		111	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	29.0		ug/L		116	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	30.5		ug/L		122	60 - 140
1,1,1-Trichloroethane	ND		25.0	26.9		ug/L		107	70 - 130
1,1,2-Trichloroethane	ND		25.0	26.9		ug/L		108	70 - 130
Trichloroethene	ND		25.0	25.8		ug/L		103	70 - 130
Trichlorofluoromethane	ND		25.0	25.3		ug/L		101	60 - 150
1,2,3-Trichloropropane	ND		25.0	28.8		ug/L		115	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	25.5		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	25.3		ug/L		101	70 - 130
Vinyl chloride	ND		25.0	20.8		ug/L		83	50 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: 440-148520-1 MSD
Matrix: Water
Analysis Batch: 333663

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	27.9		ug/L		112	10 - 150	6	35
Benzene	3.3		25.0	26.6		ug/L		93	66 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148520-1 MSD
Matrix: Water
Analysis Batch: 333663

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	ND		25.0	26.9		ug/L		107	70 - 130	5	20
Bromochloromethane	ND		25.0	24.8		ug/L		99	70 - 130	1	25
Bromodichloromethane	ND		25.0	28.0		ug/L		112	70 - 138	2	20
Bromoform	ND		25.0	31.6		ug/L		126	59 - 150	1	25
Bromomethane	ND		25.0	19.9		ug/L		80	62 - 131	3	25
2-Butanone (MEK)	ND		25.0	24.5		ug/L		98	48 - 140	9	40
Carbon tetrachloride	ND		25.0	29.3		ug/L		117	60 - 150	1	25
Chlorobenzene	ND		25.0	24.0		ug/L		96	70 - 130	1	20
Chloroethane	ND		25.0	23.7		ug/L		95	68 - 130	1	25
Chloroform	ND		25.0	24.4		ug/L		98	70 - 130	1	20
Chloromethane	ND		25.0	19.8		ug/L		79	39 - 144	1	25
2-Chlorotoluene	ND		25.0	26.0		ug/L		104	70 - 130	4	20
4-Chlorotoluene	ND		25.0	25.5		ug/L		102	70 - 130	3	20
cis-1,2-Dichloroethene	ND		25.0	25.3		ug/L		101	70 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	28.1		ug/L		113	70 - 133	2	20
Dibromochloromethane	ND		25.0	26.6		ug/L		106	70 - 148	0	25
1,2-Dibromo-3-Chloropropane	ND		25.0	30.2		ug/L		121	48 - 140	6	30
1,2-Dibromoethane (EDB)	ND		25.0	27.8		ug/L		111	70 - 131	0	25
Dibromomethane	ND		25.0	25.4		ug/L		102	70 - 130	3	25
1,2-Dichlorobenzene	ND		25.0	25.8		ug/L		103	70 - 130	1	20
1,3-Dichlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130	3	20
1,4-Dichlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130	1	20
Dichlorodifluoromethane	ND		25.0	11.3		ug/L		45	25 - 142	1	30
1,1-Dichloroethane	ND		25.0	26.5		ug/L		106	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	25.3		ug/L		101	56 - 146	1	20
1,1-Dichloroethene	ND		25.0	24.5		ug/L		98	70 - 130	1	20
1,2-Dichloropropane	ND		25.0	28.7		ug/L		115	69 - 130	1	20
1,3-Dichloropropane	ND		25.0	25.9		ug/L		103	70 - 130	2	25
2,2-Dichloropropane	ND		25.0	29.4		ug/L		117	69 - 138	4	25
1,1-Dichloropropene	ND		25.0	26.0		ug/L		104	64 - 130	1	20
Ethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130	2	20
Ethyl-t-butyl ether (ETBE)	ND	*	25.0	31.1		ug/L		124	70 - 130	2	25
Hexachlorobutadiene	ND		25.0	31.5		ug/L		126	10 - 150	3	20
2-Hexanone	ND		25.0	30.2		ug/L		121	10 - 150	1	35
Isopropylbenzene	4.5		25.0	28.9		ug/L		98	70 - 132	3	20
Isopropyl Ether (DIPE)	3.4	F1 *	25.0	41.4	F1	ug/L		152	64 - 138	0	25
Methylene Chloride	ND		25.0	24.5		ug/L		98	52 - 130	2	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	33.9		ug/L		135	52 - 150	2	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.3		ug/L		97	70 - 130	2	25
m,p-Xylene	ND		25.0	26.1		ug/L		104	70 - 133	3	25
Naphthalene	ND		25.0	30.2		ug/L		121	60 - 140	0	30
n-Butylbenzene	ND		25.0	28.9		ug/L		116	61 - 149	3	20
N-Propylbenzene	ND		25.0	27.6		ug/L		106	66 - 135	4	20
o-Xylene	ND		25.0	24.1		ug/L		96	70 - 133	2	20
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	70 - 130	3	20
sec-Butylbenzene	4.0		25.0	29.9		ug/L		104	67 - 134	4	20
Styrene	ND		25.0	26.0		ug/L		104	29 - 150	1	35
Tert-amyl-methyl ether (TAME)	ND		25.0	23.5		ug/L		94	68 - 133	1	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148520-1 MSD
Matrix: Water
Analysis Batch: 333663

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	ND		250	285		ug/L		114	70 - 130	1	25
tert-Butylbenzene	ND		25.0	26.5		ug/L		106	70 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	28.2		ug/L		113	60 - 149	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	28.6		ug/L		114	63 - 130	0	30
Tetrachloroethene	ND		25.0	29.4		ug/L		117	70 - 137	5	20
Toluene	ND		25.0	25.4		ug/L		102	70 - 130	2	20
trans-1,2-Dichloroethene	ND		25.0	25.7		ug/L		103	70 - 130	0	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	70 - 138	1	25
1,2,3-Trichlorobenzene	ND		25.0	30.2		ug/L		121	60 - 140	4	20
1,2,4-Trichlorobenzene	ND		25.0	30.5		ug/L		122	60 - 140	0	20
1,1,1-Trichloroethane	ND		25.0	26.4		ug/L		106	70 - 130	2	20
1,1,2-Trichloroethane	ND		25.0	27.0		ug/L		108	70 - 130	0	25
Trichloroethene	ND		25.0	25.6		ug/L		102	70 - 130	1	20
Trichlorofluoromethane	ND		25.0	24.1		ug/L		96	60 - 150	5	25
1,2,3-Trichloropropane	ND		25.0	28.1		ug/L		112	60 - 130	3	30
1,2,4-Trimethylbenzene	ND		25.0	26.3		ug/L		105	70 - 130	3	25
1,3,5-Trimethylbenzene	ND		25.0	26.1		ug/L		105	70 - 130	3	20
Vinyl chloride	ND		25.0	21.2		ug/L		85	50 - 137	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: MB 440-333710/4
Matrix: Water
Analysis Batch: 333710

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			06/01/16 08:02	1
Isopropyl Ether (DIPE)	ND		1.0	ug/L			06/01/16 08:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/01/16 08:02*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 132*		*06/01/16 08:02*	*1*
Toluene-d8 (Surr)	*112*		*80 - 128*		*06/01/16 08:02*	*1*

Lab Sample ID: LCS 440-333710/5
Matrix: Water
Analysis Batch: 333710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.2		ug/L		89	68 - 130
Isopropyl Ether (DIPE)	25.0	23.5		ug/L		94	58 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-333710/5
Matrix: Water
Analysis Batch: 333710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*76 - 132*
Toluene-d8 (Surr)	*108*		*80 - 128*

Lab Sample ID: 440-148520-1 MS
Matrix: Water
Analysis Batch: 333710

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	3.6		25.0	31.4		ug/L		111	66 - 130		
Isopropyl Ether (DIPE)	2.7		25.0	32.3		ug/L		118	64 - 138		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*76 - 132*
Toluene-d8 (Surr)	*106*		*80 - 128*

Lab Sample ID: 440-148520-1 MSD
Matrix: Water
Analysis Batch: 333710

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	3.6		25.0	30.0		ug/L		106	66 - 130	5	20
Isopropyl Ether (DIPE)	2.7		25.0	30.9		ug/L		113	64 - 138	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*76 - 132*
Toluene-d8 (Surr)	*107*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-333664/4
Matrix: Water
Analysis Batch: 333664

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			05/31/16 19:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*76 - 132*		*05/31/16 19:20*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/31/16 19:20*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*05/31/16 19:20*	*1*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 440-333664/6
Matrix: Water
Analysis Batch: 333664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	479		ug/L		96	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*76 - 132*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: 440-148520-1 MS
Matrix: Water
Analysis Batch: 333664

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	610		1730	2500		ug/L		110	50 - 145		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 132*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: 440-148520-1 MSD
Matrix: Water
Analysis Batch: 333664

Client Sample ID: MW-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	610		1730	2450		ug/L		107	50 - 145	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*76 - 132*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

QC Association Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

GC/MS VOA

Analysis Batch: 333663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148520-1	MW-35	Total/NA	Water	8260B	
440-148520-1 MS	MW-35	Total/NA	Water	8260B	
440-148520-1 MSD	MW-35	Total/NA	Water	8260B	
440-148520-2	MW-31	Total/NA	Water	8260B	
440-148520-3	MW-36	Total/NA	Water	8260B	
440-148520-4	MW-37	Total/NA	Water	8260B	
440-148520-5	MW-38	Total/NA	Water	8260B	
440-148520-6	MW-33	Total/NA	Water	8260B	
440-148520-7	MW-25R	Total/NA	Water	8260B	
440-148520-8	MW-34	Total/NA	Water	8260B	
440-148520-9	MW-19	Total/NA	Water	8260B	
440-148520-10	MW-27	Total/NA	Water	8260B	
440-148520-11	TB-1	Total/NA	Water	8260B	
LCS 440-333663/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-333663/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 333664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148520-1	MW-35	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-1 MS	MW-35	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-1 MSD	MW-35	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-2	MW-31	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-3	MW-36	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-4	MW-37	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-5	MW-38	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-6	MW-33	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-7	MW-25R	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-8	MW-34	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-9	MW-19	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-10	MW-27	Total/NA	Water	8260B/CA_LUFT MS	
440-148520-11	TB-1	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-333664/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-333664/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 333710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148520-1 - RA	MW-35	Total/NA	Water	8260B	
440-148520-1 MS	MW-35	Total/NA	Water	8260B	
440-148520-1 MSD	MW-35	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 333710 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148520-4 - RA	MW-37	Total/NA	Water	8260B	
440-148520-5 - RA	MW-38	Total/NA	Water	8260B	
440-148520-5 - DL	MW-38	Total/NA	Water	8260B	
440-148520-6 - RA	MW-33	Total/NA	Water	8260B	
440-148520-7 - RA	MW-25R	Total/NA	Water	8260B	
440-148520-9 - RA	MW-19	Total/NA	Water	8260B	
440-148520-10 - RA	MW-27	Total/NA	Water	8260B	
LCS 440-333710/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-333710/4	Method Blank	Total/NA	Water	8260B	

Definitions/Glossary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516 Mon

TestAmerica Job ID: 440-148520-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-16
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16
Nevada	State Program	9	CA015312016-2	07-31-16
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

* Certification renewal pending - certification considered valid.

TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Phone: 949.261.1022 Fax:

Chain of Custody Record

079687

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TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Taylor Waters	Site Contact:	Date: 5/26/2016	COC No:
Company Name: Eco & Associates, Inc	Tel/Fax: 714-289-0995	Lab Contact:	Carrier:	1 of 1 COCs
Address: 1855 W Katella Ave Ste 340	Analysis Turnaround Time			Sampler:
City/State/Zip: Orange CA 92867	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 714-289-0995	TAT if different from Below STD			Walk-in Client:
Fax: 714-289-0965	☐ 2 weeks			Lab Sampling:
Project Name: LA Times Quarterly GW Mon	☐ 1 week			
Site: LA Times Facility	☐ 2 days			Job / SDG No.:
PO# ECO-12-516	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Full VOCs + OXY (8260B)	TPHg (GAUFT)(8260B)	Sample Specific Notes:
MW-35	5-26-16	0859	G	GW	5	N	N	X	X	
MW-31	"	0930	G	GW	5	N	N	X	X	
MW-36	"	1001	G	GW	5	N	N	X	X	
MW-37	"	1035	G	GW	5	N	N	X	X	
MW-38	"	1103	G	GW	5	N	N	X	X	
MW-33	"	1232	G	GW	5	N	N	X	X	
MW-25R	"	1303	G	GW	5	N	N	X	X	
MW-34	"	1321	G	GW	5	N	N	X	X	
MW-19	"	1423	G	GW	5	N	N	X	X	
MW-27	"	1451	G	GW	5	N	N	X	X	
TB-1	"	0830	G	W	5	N	N	X	X	

440-148520 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2, 1

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Helen Thomas	Eco + Associates	May 26, 2016 1620			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[illegible signature]	TAI	5/26/16 16:20

4.1/4.3.9 D278

5-26-16

Login Sample Receipt Checklist

Client: Eco & Associates, Inc

Job Number: 440-148520-1

Login Number: 148520
List Number: 1
Creator: Schulze, Julon S

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Field on COC is blank.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-148602-1
Client Project/Site: LA Times Quarterly GW, ECO-12-516

For:
Eco & Associates, Inc
1855 W. Katella Avenue
Suite 340
Orange, California 92867

Attn: David Manoukian

Authorized for release by:
6/8/2016 10:19:08 PM
Urvashi Patel, Manager of Project Management
urvashi.patel@testamericainc.com

Designee for

Patty Mata, Senior Project Manager
(949)261-1022
patty.mata@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-148602-1	MW-30	Water	05/27/16 08:01	05/27/16 13:43
440-148602-2	MW-22	Water	05/27/16 08:25	05/27/16 13:43
440-148602-3	MW-29	Water	05/27/16 08:55	05/27/16 13:43
440-148602-4	MW-28	Water	05/27/16 09:16	05/27/16 13:43
440-148602-5	MW-24	Water	05/27/16 09:33	05/27/16 13:43
440-148602-6	MW-21	Water	05/27/16 10:03	05/27/16 13:43
440-148602-7	MW-20	Water	05/27/16 10:35	05/27/16 13:43
440-148602-8	MW-17	Water	05/27/16 11:03	05/27/16 13:43
440-148602-9	MW-18	Water	05/27/16 11:19	05/27/16 13:43
440-148602-10	MW-26	Water	05/27/16 12:40	05/27/16 13:43
440-148602-11	MW-23	Water	05/27/16 13:15	05/27/16 13:43
440-148602-12	TB-2	Water	05/27/16 07:45	05/27/16 13:43

Job ID: 440-148602-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-148602-1

Comments
No additional comments.

Receipt
The samples were received on 5/27/2016 1:43 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.0º C.

GC/MS VOA
Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 440-334192 recovered above the upper control limit for Dibromochloromethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: MW-29 (440-148602-3), MW-28 (440-148602-4), MW-24 (440-148602-5) and TB-2 (440-148602-12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-30

Date Collected: 0/ 6296 15 08:01
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-1

Matrix: Water

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*06/02/16 02:30*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 02:30*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 02:30*	*1*

Method: 8250B - Volatile Organic Compounds RGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 02:30	1
Benzene	ND		0.50		ug/L			06/02/16 02:30	1
Bromobenzene	ND		1.0		ug/L			06/02/16 02:30	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 02:30	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 02:30	1
Bromoform	ND		1.0		ug/L			06/02/16 02:30	1
Bromomethane	ND		1.0		ug/L			06/02/16 02:30	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 02:30	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 02:30	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 02:30	1
Chloroethane	ND		1.0		ug/L			06/02/16 02:30	1
Chloroform	ND		1.0		ug/L			06/02/16 02:30	1
Chloromethane	ND		1.0		ug/L			06/02/16 02:30	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 02:30	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 02:30	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 02:30	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 02:30	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 02:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 02:30	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 02:30	1
Dibromomethane	ND		1.0		ug/L			06/02/16 02:30	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 02:30	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 02:30	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 02:30	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 02:30	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 02:30	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 02:30	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 02:30	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 02:30	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 02:30	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 02:30	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 02:30	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 02:30	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 02:30	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 02:30	1
2-Hexanone	ND		10		ug/L			06/02/16 02:30	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
Isopropyl Ether (DIPE)	ND		1.0		ug/L			06/02/16 02:30	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 02:30	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 02:30	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/02/16 02:30	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-30

Lab Sample ID: 440-148502-1
Matrix: Water

Date Collected: 0/ 6296 15 08:01
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
m,p-Xylene	ND		1.0		ug/L			06/02/16 02:30	1
Naphthalene	ND		1.0		ug/L			06/02/16 02:30	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
o-Xylene	ND		0.50		ug/L			06/02/16 02:30	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 02:30	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
Styrene	ND		1.0		ug/L			06/02/16 02:30	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 02:30	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 02:30	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 02:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 02:30	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 02:30	1
Toluene	ND		0.50		ug/L			06/02/16 02:30	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 02:30	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 02:30	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 02:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 02:30	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 02:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 02:30	1
Trichloroethene	ND		1.0		ug/L			06/02/16 02:30	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 02:30	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 02:30	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 02:30	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 02:30	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 02:30*	*1*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*06/02/16 02:30*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 02:30*	*1*

Client Sample ID: MW-22

Lab Sample ID: 440-148502-2
Matrix: Water

Date Collected: 0/ 6296 15 08:2/
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel f ydrocarbons PC4-C12Q	**5.**		50		ug/L			06/02/16 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 132*		*06/02/16 03:00*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 03:00*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 03:00*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 03:00	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-22

Date Collected: 0/ 6296 15 08:2/
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-2

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Benzene	ND		0.50		ug/L			06/02/16 03:00	1
Bromobenzene	ND		1.0		ug/L			06/02/16 03:00	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 03:00	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 03:00	1
Bromoform	ND		1.0		ug/L			06/02/16 03:00	1
Bromomethane	ND		1.0		ug/L			06/02/16 03:00	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 03:00	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 03:00	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 03:00	1
Chloroethane	ND		1.0		ug/L			06/02/16 03:00	1
Chloroform	ND		1.0		ug/L			06/02/16 03:00	1
Chloromethane	ND		1.0		ug/L			06/02/16 03:00	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 03:00	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 03:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 03:00	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 03:00	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 03:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 03:00	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 03:00	1
Dibromomethane	ND		1.0		ug/L			06/02/16 03:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:00	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 03:00	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 03:00	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 03:00	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 03:00	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 03:00	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 03:00	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 03:00	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 03:00	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 03:00	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 03:00	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 03:00	1
2-Hexanone	ND		10		ug/L			06/02/16 03:00	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
Isopropyl Ether PDI(EQ	**4/**		1.0		ug/L			06/02/16 03:00	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 03:00	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 03:00	1
Methyl-t-Butyl Ether PMTBEQ	**572**		1.0		ug/L			06/02/16 03:00	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 03:00	1
Naphthalene	ND		1.0		ug/L			06/02/16 03:00	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
o-Xylene	ND		0.50		ug/L			06/02/16 03:00	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 03:00	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
Styrene	ND		1.0		ug/L			06/02/16 03:00	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 03:00	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-22

Lab Sample ID: 440-148502-2
Matrix: Water

Date Collected: 0/ 6296 15 08:2/
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 03:00	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 03:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 03:00	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 03:00	1
Toluene	ND		0.50		ug/L			06/02/16 03:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 03:00	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 03:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 03:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 03:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 03:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 03:00	1
Trichloroethene	ND		1.0		ug/L			06/02/16 03:00	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 03:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 03:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 03:00	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 03:00	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 03:00*	*1*
Dibromofluoromethane (Surr)	*112*		*76 - 132*		*06/02/16 03:00*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 03:00*	*1*

Client Sample ID: MW-2.

Lab Sample ID: 440-148502-3
Matrix: Water

Date Collected: 0/ 6296 15 08:/ /
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel f ydrocarbons PC4-C12Q	**930**		100		ug/L			06/02/16 22:29	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*06/02/16 22:29*	*2*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/16 22:29*	*2*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/02/16 22:29*	*2*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		20		ug/L			06/02/16 22:29	2
BenHene	**120**		1.0		ug/L			06/02/16 22:29	2
Bromobenzene	ND		2.0		ug/L			06/02/16 22:29	2
Bromochloromethane	ND		2.0		ug/L			06/02/16 22:29	2
Bromodichloromethane	ND		2.0		ug/L			06/02/16 22:29	2
Bromoform	ND		2.0		ug/L			06/02/16 22:29	2
Bromomethane	ND		2.0		ug/L			06/02/16 22:29	2
2-Butanone (MEK)	ND		20		ug/L			06/02/16 22:29	2
Carbon tetrachloride	ND		1.0		ug/L			06/02/16 22:29	2
Chlorobenzene	ND		2.0		ug/L			06/02/16 22:29	2

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-2.

Date Collected: 0/ 6296 15 08:/ /
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-3

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Chloroethane	ND		2.0		ug/L			06/02/16 22:29	2
Chloroform	ND		2.0		ug/L			06/02/16 22:29	2
Chloromethane	ND		2.0		ug/L			06/02/16 22:29	2
2-Chlorotoluene	ND		2.0		ug/L			06/02/16 22:29	2
4-Chlorotoluene	ND		2.0		ug/L			06/02/16 22:29	2
cis-1,2-Dichloroethene	ND		2.0		ug/L			06/02/16 22:29	2
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/02/16 22:29	2
Dibromochloromethane	ND		2.0		ug/L			06/02/16 22:29	2
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			06/02/16 22:29	2
1,2-Dibromoethane (EDB)	ND		2.0		ug/L			06/02/16 22:29	2
Dibromomethane	ND		2.0		ug/L			06/02/16 22:29	2
1,2-Dichlorobenzene	ND		2.0		ug/L			06/02/16 22:29	2
1,3-Dichlorobenzene	ND		2.0		ug/L			06/02/16 22:29	2
1,4-Dichlorobenzene	ND		2.0		ug/L			06/02/16 22:29	2
Dichlorodifluoromethane	ND		4.0		ug/L			06/02/16 22:29	2
1,1-Dichloroethane	ND		2.0		ug/L			06/02/16 22:29	2
1,2-Dichloroethane	ND		1.0		ug/L			06/02/16 22:29	2
1,1-Dichloroethene	ND		2.0		ug/L			06/02/16 22:29	2
1,2-Dichloropropane	ND		2.0		ug/L			06/02/16 22:29	2
1,3-Dichloropropane	ND		2.0		ug/L			06/02/16 22:29	2
2,2-Dichloropropane	ND		2.0		ug/L			06/02/16 22:29	2
1,1-Dichloropropene	ND		2.0		ug/L			06/02/16 22:29	2
EthylbenHene	**479**		1.0		ug/L			06/02/16 22:29	2
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			06/02/16 22:29	2
Hexachlorobutadiene	ND		2.0		ug/L			06/02/16 22:29	2
2-Hexanone	ND		20		ug/L			06/02/16 22:29	2
IsopropylbenHene	**378**		2.0		ug/L			06/02/16 22:29	2
Isopropyl Ether PDI(EQ	**375**		2.0		ug/L			06/02/16 22:29	2
Methylene Chloride	ND		10		ug/L			06/02/16 22:29	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			06/02/16 22:29	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0		ug/L			06/02/16 22:29	2
mhp-, ylene	**/ 70**		2.0		ug/L			06/02/16 22:29	2
Xaphthalene	**14**		2.0		ug/L			06/02/16 22:29	2
n-ButylbenHene	**271**		2.0		ug/L			06/02/16 22:29	2
X-(ropylbenHene	**970**		2.0		ug/L			06/02/16 22:29	2
o-Xylene	ND		1.0		ug/L			06/02/16 22:29	2
p-Isopropyltoluene	ND		2.0		ug/L			06/02/16 22:29	2
sec-Butylbenzene	ND		2.0		ug/L			06/02/16 22:29	2
Styrene	ND		2.0		ug/L			06/02/16 22:29	2
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			06/02/16 22:29	2
tert-Butyl alcohol (TBA)	ND		20		ug/L			06/02/16 22:29	2
tert-Butylbenzene	ND		2.0		ug/L			06/02/16 22:29	2
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			06/02/16 22:29	2
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			06/02/16 22:29	2
Tetrachloroethene	ND		2.0		ug/L			06/02/16 22:29	2
Toluene	**270**		1.0		ug/L			06/02/16 22:29	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			06/02/16 22:29	2
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/02/16 22:29	2
1,2,3-Trichlorobenzene	ND		2.0		ug/L			06/02/16 22:29	2

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-2.

Lab Sample ID: 440-148502-3
Matrix: Water

Date Collected: 0/ 6296 15 08:/ /
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0		ug/L			06/02/16 22:29	2
1,1,1-Trichloroethane	ND		2.0		ug/L			06/02/16 22:29	2
1,1,2-Trichloroethane	ND		2.0		ug/L			06/02/16 22:29	2
Trichloroethene	ND		2.0		ug/L			06/02/16 22:29	2
Trichlorofluoromethane	ND		2.0		ug/L			06/02/16 22:29	2
1,2,3-Trichloropropane	ND		2.0		ug/L			06/02/16 22:29	2
1N2N4-TrimethylbenHene	**971**		2.0		ug/L			06/02/16 22:29	2
1,3,5-Trimethylbenzene	ND		2.0		ug/L			06/02/16 22:29	2
Vinyl chloride	ND		1.0		ug/L			06/02/16 22:29	2
, ylenesNTotal	**/ 70**		3.0		ug/L			06/02/16 22:29	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/16 22:29*	*2*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*06/02/16 22:29*	*2*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/02/16 22:29*	*2*

Client Sample ID: MW-28

Lab Sample ID: 440-148502-4
Matrix: Water

Date Collected: 0/ 6296 15 0. :15
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel f ydrocarbons PC4-C12Q	**2400**		1000		ug/L			06/02/16 22:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 132*		*06/02/16 22:57*	*20*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/02/16 22:57*	*20*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/02/16 22:57*	*20*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		200		ug/L			06/02/16 22:57	20
BenHene	**. / 0**		10		ug/L			06/02/16 22:57	20
Bromobenzene	ND		20		ug/L			06/02/16 22:57	20
Bromochloromethane	ND		20		ug/L			06/02/16 22:57	20
Bromodichloromethane	ND		20		ug/L			06/02/16 22:57	20
Bromoform	ND		20		ug/L			06/02/16 22:57	20
Bromomethane	ND		20		ug/L			06/02/16 22:57	20
2-Butanone (MEK)	ND		200		ug/L			06/02/16 22:57	20
Carbon tetrachloride	ND		10		ug/L			06/02/16 22:57	20
Chlorobenzene	ND		20		ug/L			06/02/16 22:57	20
Chloroethane	ND		20		ug/L			06/02/16 22:57	20
Chloroform	ND		20		ug/L			06/02/16 22:57	20
Chloromethane	ND		20		ug/L			06/02/16 22:57	20
2-Chlorotoluene	ND		20		ug/L			06/02/16 22:57	20
4-Chlorotoluene	ND		20		ug/L			06/02/16 22:57	20
cis-1,2-Dichloroethene	ND		20		ug/L			06/02/16 22:57	20
cis-1,3-Dichloropropene	ND		10		ug/L			06/02/16 22:57	20
Dibromochloromethane	ND		20		ug/L			06/02/16 22:57	20
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			06/02/16 22:57	20

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-28

Date Collected: 0/ 6296 15 0. :15
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-4

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
1,2-Dibromoethane (EDB)	ND		20		ug/L			06/02/16 22:57	20
Dibromomethane	ND		20		ug/L			06/02/16 22:57	20
1,2-Dichlorobenzene	ND		20		ug/L			06/02/16 22:57	20
1,3-Dichlorobenzene	ND		20		ug/L			06/02/16 22:57	20
1,4-Dichlorobenzene	ND		20		ug/L			06/02/16 22:57	20
Dichlorodifluoromethane	ND		40		ug/L			06/02/16 22:57	20
1,1-Dichloroethane	ND		20		ug/L			06/02/16 22:57	20
1,2-Dichloroethane	ND		10		ug/L			06/02/16 22:57	20
1,1-Dichloroethene	ND		20		ug/L			06/02/16 22:57	20
1,2-Dichloropropane	ND		20		ug/L			06/02/16 22:57	20
1,3-Dichloropropane	ND		20		ug/L			06/02/16 22:57	20
2,2-Dichloropropane	ND		20		ug/L			06/02/16 22:57	20
1,1-Dichloropropene	ND		20		ug/L			06/02/16 22:57	20
Ethylbenzene	ND		10		ug/L			06/02/16 22:57	20
Ethyl-t-butyl ether (ETBE)	ND		20		ug/L			06/02/16 22:57	20
Hexachlorobutadiene	ND		20		ug/L			06/02/16 22:57	20
2-Hexanone	ND		200		ug/L			06/02/16 22:57	20
Isopropylbenzene	ND		20		ug/L			06/02/16 22:57	20
Isopropyl Ether PDI(EQ	**35**		20		ug/L			06/02/16 22:57	20
Methylene Chloride	ND		100		ug/L			06/02/16 22:57	20
4-Methyl-2-pentanone (MIBK)	ND		200		ug/L			06/02/16 22:57	20
Methyl-t-Butyl Ether (MTBE)	ND		20		ug/L			06/02/16 22:57	20
m,p-Xylene	ND		20		ug/L			06/02/16 22:57	20
Naphthalene	ND		20		ug/L			06/02/16 22:57	20
n-Butylbenzene	ND		20		ug/L			06/02/16 22:57	20
X-(ropylbenHene	**22**		20		ug/L			06/02/16 22:57	20
o-Xylene	ND		10		ug/L			06/02/16 22:57	20
p-Isopropyltoluene	ND		20		ug/L			06/02/16 22:57	20
sec-Butylbenzene	ND		20		ug/L			06/02/16 22:57	20
Styrene	ND		20		ug/L			06/02/16 22:57	20
Tert-amyl-methyl ether (TAME)	ND		20		ug/L			06/02/16 22:57	20
tert-Butyl alcohol (TBA)	ND		200		ug/L			06/02/16 22:57	20
tert-Butylbenzene	ND		20		ug/L			06/02/16 22:57	20
1,1,1,2-Tetrachloroethane	ND		20		ug/L			06/02/16 22:57	20
1,1,2,2-Tetrachloroethane	ND		20		ug/L			06/02/16 22:57	20
Tetrachloroethene	ND		20		ug/L			06/02/16 22:57	20
Toluene	ND		10		ug/L			06/02/16 22:57	20
trans-1,2-Dichloroethene	ND		20		ug/L			06/02/16 22:57	20
trans-1,3-Dichloropropene	ND		10		ug/L			06/02/16 22:57	20
1,2,3-Trichlorobenzene	ND		20		ug/L			06/02/16 22:57	20
1,2,4-Trichlorobenzene	ND		20		ug/L			06/02/16 22:57	20
1,1,1-Trichloroethane	ND		20		ug/L			06/02/16 22:57	20
1,1,2-Trichloroethane	ND		20		ug/L			06/02/16 22:57	20
Trichloroethene	ND		20		ug/L			06/02/16 22:57	20
Trichlorofluoromethane	ND		20		ug/L			06/02/16 22:57	20
1,2,3-Trichloropropane	ND		20		ug/L			06/02/16 22:57	20
1,2,4-Trimethylbenzene	ND		20		ug/L			06/02/16 22:57	20
1,3,5-Trimethylbenzene	ND		20		ug/L			06/02/16 22:57	20
Vinyl chloride	ND		10		ug/L			06/02/16 22:57	20

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-28

Lab Sample ID: 440-148502-4
Date Collected: 0/ 6296 15 0. :15
Matrix: Water
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQ PContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Xylenes, Total	ND		30		ug/L			06/02/16 22:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/02/16 22:57*	*20*
Dibromofluoromethane (Surr)	*112*		*76 - 132*		*06/02/16 22:57*	*20*
Toluene-d8 (Surr)	*106*		*80 - 128*		*06/02/16 22:57*	*20*

Client Sample ID: MW-24

Lab Sample ID: 440-148502-/
Date Collected: 0/ 6296 15 0. :33
Matrix: Water
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel f ydrocarbons PC4-C12Q	**1. 0**		50		ug/L			06/02/16 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 132*		*06/02/16 23:25*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/16 23:25*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/02/16 23:25*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 23:25	1
BenHene	**178**		0.50		ug/L			06/02/16 23:25	1
Bromobenzene	ND		1.0		ug/L			06/02/16 23:25	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 23:25	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 23:25	1
Bromoform	ND		1.0		ug/L			06/02/16 23:25	1
Bromomethane	ND		1.0		ug/L			06/02/16 23:25	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 23:25	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 23:25	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 23:25	1
Chloroethane	ND		1.0		ug/L			06/02/16 23:25	1
Chloroform	ND		1.0		ug/L			06/02/16 23:25	1
Chloromethane	ND		1.0		ug/L			06/02/16 23:25	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 23:25	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 23:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 23:25	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 23:25	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 23:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 23:25	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 23:25	1
Dibromomethane	ND		1.0		ug/L			06/02/16 23:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 23:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 23:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 23:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 23:25	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 23:25	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 23:25	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 23:25	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-24

Date Collected: 0/ 6296 15 0. :33
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-/

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 23:25	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 23:25	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 23:25	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 23:25	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 23:25	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 23:25	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 23:25	1
2-Hexanone	ND		10		ug/L			06/02/16 23:25	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
Isopropyl Ether PDI(EQ	**/ 1**		1.0		ug/L			06/02/16 23:25	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 23:25	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 23:25	1
Methyl-t-Butyl Ether PMTBEQ	**14**		1.0		ug/L			06/02/16 23:25	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 23:25	1
Naphthalene	ND		1.0		ug/L			06/02/16 23:25	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
o-Xylene	ND		0.50		ug/L			06/02/16 23:25	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 23:25	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
Styrene	ND		1.0		ug/L			06/02/16 23:25	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 23:25	1
tert-Butyl alcohol PTBAQ	**11**	**ID**	10		ug/L			06/02/16 23:25	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 23:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 23:25	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 23:25	1
Toluene	ND		0.50		ug/L			06/02/16 23:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 23:25	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 23:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 23:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 23:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 23:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 23:25	1
Trichloroethene	ND		1.0		ug/L			06/02/16 23:25	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 23:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 23:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 23:25	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 23:25	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/16 23:25*	*1*
Dibromofluoromethane (Surr)	*114*		*76 - 132*		*06/02/16 23:25*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/02/16 23:25*	*1*

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-21

Date Collected: 0/ 6296 15 10:03
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-5

Matrix: Water

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*06/02/16 03:29*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/02/16 03:29*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 03:29*	*1*

Method: 8250B - Volatile Organic Compounds RGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 03:29	1
Benzene	ND		0.50		ug/L			06/02/16 03:29	1
Bromobenzene	ND		1.0		ug/L			06/02/16 03:29	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 03:29	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 03:29	1
Bromoform	ND		1.0		ug/L			06/02/16 03:29	1
Bromomethane	ND		1.0		ug/L			06/02/16 03:29	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 03:29	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 03:29	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 03:29	1
Chloroethane	ND		1.0		ug/L			06/02/16 03:29	1
Chloroform	ND		1.0		ug/L			06/02/16 03:29	1
Chloromethane	ND		1.0		ug/L			06/02/16 03:29	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 03:29	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 03:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 03:29	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 03:29	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 03:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 03:29	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 03:29	1
Dibromomethane	ND		1.0		ug/L			06/02/16 03:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 03:29	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 03:29	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 03:29	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 03:29	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 03:29	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 03:29	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 03:29	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 03:29	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 03:29	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 03:29	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 03:29	1
2-Hexanone	ND		10		ug/L			06/02/16 03:29	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
Isopropyl Ether PDI(EQ	**875**		1.0		ug/L			06/02/16 03:29	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 03:29	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 03:29	1
Methyl-t-Butyl Ether PMTBEQ	**474**		1.0		ug/L			06/02/16 03:29	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-21

Lab Sample ID: 440-148502-5
Date Collected: 0/ 6296 15 10:03
Matrix: Water
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
m,p-Xylene	ND		1.0		ug/L			06/02/16 03:29	1
Naphthalene	ND		1.0		ug/L			06/02/16 03:29	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
o-Xylene	ND		0.50		ug/L			06/02/16 03:29	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 03:29	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
Styrene	ND		1.0		ug/L			06/02/16 03:29	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 03:29	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 03:29	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 03:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 03:29	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 03:29	1
Toluene	ND		0.50		ug/L			06/02/16 03:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 03:29	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 03:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 03:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 03:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 03:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 03:29	1
Trichloroethene	ND		1.0		ug/L			06/02/16 03:29	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 03:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 03:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 03:29	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 03:29	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/02/16 03:29*	*1*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*06/02/16 03:29*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 03:29*	*1*

Client Sample ID: MW-20

Lab Sample ID: 440-148502-9
Date Collected: 0/ 6296 15 10:3/
Matrix: Water
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*06/02/16 03:59*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 03:59*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 03:59*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 03:59	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-20

Date Collected: 0/ 6296 15 10:3/
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-9

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Benzene	ND		0.50		ug/L			06/02/16 03:59	1
Bromobenzene	ND		1.0		ug/L			06/02/16 03:59	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 03:59	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 03:59	1
Bromoform	ND		1.0		ug/L			06/02/16 03:59	1
Bromomethane	ND		1.0		ug/L			06/02/16 03:59	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 03:59	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 03:59	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 03:59	1
Chloroethane	ND		1.0		ug/L			06/02/16 03:59	1
Chloroform	ND		1.0		ug/L			06/02/16 03:59	1
Chloromethane	ND		1.0		ug/L			06/02/16 03:59	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 03:59	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 03:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 03:59	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 03:59	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 03:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 03:59	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 03:59	1
Dibromomethane	ND		1.0		ug/L			06/02/16 03:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 03:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 03:59	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 03:59	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 03:59	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 03:59	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 03:59	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 03:59	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 03:59	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 03:59	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 03:59	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 03:59	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 03:59	1
2-Hexanone	ND		10		ug/L			06/02/16 03:59	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
Isopropyl Ether PDI(EQ	**/ 72**		1.0		ug/L			06/02/16 03:59	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 03:59	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 03:59	1
Methyl-t-Butyl Ether PMTBEQ	**171**		1.0		ug/L			06/02/16 03:59	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 03:59	1
Naphthalene	ND		1.0		ug/L			06/02/16 03:59	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
o-Xylene	ND		0.50		ug/L			06/02/16 03:59	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 03:59	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
Styrene	ND		1.0		ug/L			06/02/16 03:59	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 03:59	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-20

Lab Sample ID: 440-148502-9
Matrix: Water

Date Collected: 0/ 6296 15 10:3/
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 03:59	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 03:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 03:59	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 03:59	1
Toluene	ND		0.50		ug/L			06/02/16 03:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 03:59	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 03:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 03:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 03:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 03:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 03:59	1
Trichloroethene	ND		1.0		ug/L			06/02/16 03:59	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 03:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 03:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 03:59	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 03:59	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 03:59*	*1*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*06/02/16 03:59*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/02/16 03:59*	*1*

Client Sample ID: MW-19

Lab Sample ID: 440-148502-8
Matrix: Water

Date Collected: 0/ 6296 15 11:03
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel f ydrocarbons PC4-C12Q	/ 2		50		ug/L			06/02/16 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*06/02/16 04:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 04:29*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/02/16 04:29*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 04:29	1
Benzene	ND		0.50		ug/L			06/02/16 04:29	1
Bromobenzene	ND		1.0		ug/L			06/02/16 04:29	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 04:29	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 04:29	1
Bromoform	ND		1.0		ug/L			06/02/16 04:29	1
Bromomethane	ND		1.0		ug/L			06/02/16 04:29	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 04:29	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 04:29	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 04:29	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-19

Date Collected: 0/ 6296 15 11:03
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-8

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Chloroethane	ND		1.0		ug/L			06/02/16 04:29	1
Chloroform	ND		1.0		ug/L			06/02/16 04:29	1
Chloromethane	ND		1.0		ug/L			06/02/16 04:29	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 04:29	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 04:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 04:29	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 04:29	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 04:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 04:29	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 04:29	1
Dibromomethane	ND		1.0		ug/L			06/02/16 04:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 04:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 04:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 04:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 04:29	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 04:29	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 04:29	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 04:29	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 04:29	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 04:29	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 04:29	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 04:29	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 04:29	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 04:29	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 04:29	1
2-Hexanone	ND		10		ug/L			06/02/16 04:29	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
Isopropyl Ether PDI(EQ	**. 70**		1.0		ug/L			06/02/16 04:29	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 04:29	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 04:29	1
Methyl-t-Butyl Ether PMTBEQ	**34**		1.0		ug/L			06/02/16 04:29	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 04:29	1
Naphthalene	ND		1.0		ug/L			06/02/16 04:29	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
o-Xylene	ND		0.50		ug/L			06/02/16 04:29	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 04:29	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
Styrene	ND		1.0		ug/L			06/02/16 04:29	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 04:29	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 04:29	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 04:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 04:29	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 04:29	1
Toluene	ND		0.50		ug/L			06/02/16 04:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 04:29	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 04:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 04:29	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-19

Lab Sample ID: 440-148502-8
Date Collected: 0/ 6296 15 11:03
Matrix: Water
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 04:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 04:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 04:29	1
Trichloroethene	ND		1.0		ug/L			06/02/16 04:29	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 04:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 04:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 04:29	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 04:29	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 04:29*	*1*
Dibromofluoromethane (Surr)	*111*		*76 - 132*		*06/02/16 04:29*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/02/16 04:29*	*1*

Client Sample ID: MW-18

Lab Sample ID: 440-148502-.
Date Collected: 0/ 6296 15 11:1.
Matrix: Water
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel f ydrocarbons PC4-C12Q	**8.**		50		ug/L			06/02/16 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 132*		*06/02/16 04:58*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*06/02/16 04:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/02/16 04:58*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 04:58	1
Benzene	ND		0.50		ug/L			06/02/16 04:58	1
Bromobenzene	ND		1.0		ug/L			06/02/16 04:58	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 04:58	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 04:58	1
Bromoform	ND		1.0		ug/L			06/02/16 04:58	1
Bromomethane	ND		1.0		ug/L			06/02/16 04:58	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 04:58	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 04:58	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 04:58	1
Chloroethane	ND		1.0		ug/L			06/02/16 04:58	1
Chloroform	ND		1.0		ug/L			06/02/16 04:58	1
Chloromethane	ND		1.0		ug/L			06/02/16 04:58	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 04:58	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 04:58	1
cis-1N2-Dichloroethene	**578**		1.0		ug/L			06/02/16 04:58	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 04:58	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 04:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 04:58	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-18

Date Collected: 0/ 6296 15 11:1.
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-.

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 04:58	1
Dibromomethane	ND		1.0		ug/L			06/02/16 04:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 04:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 04:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 04:58	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 04:58	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 04:58	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 04:58	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 04:58	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 04:58	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 04:58	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 04:58	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 04:58	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 04:58	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 04:58	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 04:58	1
2-Hexanone	ND		10		ug/L			06/02/16 04:58	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
Isopropyl Ether PDI(EQ	**375**		1.0		ug/L			06/02/16 04:58	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 04:58	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 04:58	1
Methyl-t-Butyl Ether PMTBEQ	**. 70**		1.0		ug/L			06/02/16 04:58	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 04:58	1
Naphthalene	ND		1.0		ug/L			06/02/16 04:58	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
o-Xylene	ND		0.50		ug/L			06/02/16 04:58	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 04:58	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
Styrene	ND		1.0		ug/L			06/02/16 04:58	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 04:58	1
tert-Butyl alcohol PTBAQ	**12**	**ID**	10		ug/L			06/02/16 04:58	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 04:58	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 04:58	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 04:58	1
Toluene	ND		0.50		ug/L			06/02/16 04:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 04:58	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 04:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 04:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 04:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 04:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 04:58	1
Trichloroethene	ND		1.0		ug/L			06/02/16 04:58	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 04:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 04:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 04:58	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 04:58	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-18

Lab Sample ID: 440-148502-.
Matrix: Water
Date Collected: 0/ 6296 15 11:1.
Date Received: 0/ 6296 15 13:43

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Xylenes, Total	ND		1.5		ug/L			06/02/16 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*06/02/16 04:58*	*1*
Dibromofluoromethane (Surr)	*109*		*76 - 132*		*06/02/16 04:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/02/16 04:58*	*1*

Client Sample ID: MW-25

Lab Sample ID: 440-148502-10
Matrix: Water
Date Collected: 0/ 6296 15 12:40
Date Received: 0/ 6296 15 13:43

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 05:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 132*		*06/02/16 05:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/02/16 05:28*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*06/02/16 05:28*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 05:28	1
Benzene	ND		0.50		ug/L			06/02/16 05:28	1
Bromobenzene	ND		1.0		ug/L			06/02/16 05:28	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 05:28	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 05:28	1
Bromoform	ND		1.0		ug/L			06/02/16 05:28	1
Bromomethane	ND		1.0		ug/L			06/02/16 05:28	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 05:28	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 05:28	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 05:28	1
Chloroethane	ND		1.0		ug/L			06/02/16 05:28	1
Chloroform	ND		1.0		ug/L			06/02/16 05:28	1
Chloromethane	ND		1.0		ug/L			06/02/16 05:28	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 05:28	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 05:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 05:28	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 05:28	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 05:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 05:28	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 05:28	1
Dibromomethane	ND		1.0		ug/L			06/02/16 05:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 05:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 05:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 05:28	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 05:28	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 05:28	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 05:28	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 05:28	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-25

Date Collected: 0/ 6296 15 12:40
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-10

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 05:28	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 05:28	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 05:28	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 05:28	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 05:28	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 05:28	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 05:28	1
2-Hexanone	ND		10		ug/L			06/02/16 05:28	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
Isopropyl Ether (DIPE)	ND		1.0		ug/L			06/02/16 05:28	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 05:28	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 05:28	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/02/16 05:28	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 05:28	1
Naphthalene	ND		1.0		ug/L			06/02/16 05:28	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
o-Xylene	ND		0.50		ug/L			06/02/16 05:28	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 05:28	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
Styrene	ND		1.0		ug/L			06/02/16 05:28	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 05:28	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 05:28	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 05:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 05:28	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 05:28	1
Toluene	ND		0.50		ug/L			06/02/16 05:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 05:28	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 05:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 05:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 05:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 05:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 05:28	1
Trichloroethene	ND		1.0		ug/L			06/02/16 05:28	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 05:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 05:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 05:28	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 05:28	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 05:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*		*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*			*06/02/16 05:28*	*1*
Dibromofluoromethane (Surr)	*113*		*76 - 132*			*06/02/16 05:28*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*			*06/02/16 05:28*	*1*

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-23

Date Collected: 0/ 6296 15 13:1/
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-11

Matrix: Water

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 05:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*06/02/16 05:58*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 05:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/02/16 05:58*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 05:58	1
Benzene	ND		0.50		ug/L			06/02/16 05:58	1
Bromobenzene	ND		1.0		ug/L			06/02/16 05:58	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 05:58	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 05:58	1
Bromoform	ND		1.0		ug/L			06/02/16 05:58	1
Bromomethane	ND		1.0		ug/L			06/02/16 05:58	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 05:58	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 05:58	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 05:58	1
Chloroethane	ND		1.0		ug/L			06/02/16 05:58	1
Chloroform	ND		1.0		ug/L			06/02/16 05:58	1
Chloromethane	ND		1.0		ug/L			06/02/16 05:58	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 05:58	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 05:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 05:58	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 05:58	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 05:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 05:58	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 05:58	1
Dibromomethane	ND		1.0		ug/L			06/02/16 05:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 05:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 05:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 05:58	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 05:58	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 05:58	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 05:58	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 05:58	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 05:58	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 05:58	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 05:58	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 05:58	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 05:58	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 05:58	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 05:58	1
2-Hexanone	ND		10		ug/L			06/02/16 05:58	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
Isopropyl Ether PDI(EQ	**27**		1.0		ug/L			06/02/16 05:58	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 05:58	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 05:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/02/16 05:58	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-23

Lab Sample ID: 440-148502-11

Date Collected: 0/ 6296 15 13:1/
Date Received: 0/ 6296 15 13:43

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
m,p-Xylene	ND		1.0		ug/L			06/02/16 05:58	1
Naphthalene	ND		1.0		ug/L			06/02/16 05:58	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
o-Xylene	ND		0.50		ug/L			06/02/16 05:58	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 05:58	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
Styrene	ND		1.0		ug/L			06/02/16 05:58	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 05:58	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 05:58	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 05:58	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 05:58	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 05:58	1
Toluene	ND		0.50		ug/L			06/02/16 05:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 05:58	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 05:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 05:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 05:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 05:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 05:58	1
Trichloroethene	ND		1.0		ug/L			06/02/16 05:58	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 05:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 05:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 05:58	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 05:58	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 05:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/02/16 05:58*	*1*
Dibromofluoromethane (Surr)	*115*		*76 - 132*		*06/02/16 05:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 128*		*06/02/16 05:58*	*1*

Client Sample ID: TB-2

Lab Sample ID: 440-148502-12

Date Collected: 0/ 6296 15 09:4/
Date Received: 0/ 6296 15 13:43

Matrix: Water

Method: 8250B6CA_LUFTMS - Volatile Organic Compounds by GC6MS

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*06/02/16 23:52*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/16 23:52*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/02/16 23:52*	*1*

Method: 8250B - Volatile Organic Compounds PGC6MSQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Acetone	ND		10		ug/L			06/02/16 23:52	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: TB-2

Date Collected: 0/ 6296 15 09:4/
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-12

Matrix: Water

Method: 8250B - Volatile Organic Compounds PGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
Benzene	ND		0.50		ug/L			06/02/16 23:52	1
Bromobenzene	ND		1.0		ug/L			06/02/16 23:52	1
Bromochloromethane	ND		1.0		ug/L			06/02/16 23:52	1
Bromodichloromethane	ND		1.0		ug/L			06/02/16 23:52	1
Bromoform	ND		1.0		ug/L			06/02/16 23:52	1
Bromomethane	ND		1.0		ug/L			06/02/16 23:52	1
2-Butanone (MEK)	ND		10		ug/L			06/02/16 23:52	1
Carbon tetrachloride	ND		0.50		ug/L			06/02/16 23:52	1
Chlorobenzene	ND		1.0		ug/L			06/02/16 23:52	1
Chloroethane	ND		1.0		ug/L			06/02/16 23:52	1
Chloroform	ND		1.0		ug/L			06/02/16 23:52	1
Chloromethane	ND		1.0		ug/L			06/02/16 23:52	1
2-Chlorotoluene	ND		1.0		ug/L			06/02/16 23:52	1
4-Chlorotoluene	ND		1.0		ug/L			06/02/16 23:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 23:52	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 23:52	1
Dibromochloromethane	ND		1.0		ug/L			06/02/16 23:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/02/16 23:52	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 23:52	1
Dibromomethane	ND		1.0		ug/L			06/02/16 23:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 23:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 23:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 23:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 23:52	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 23:52	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 23:52	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 23:52	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 23:52	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 23:52	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 23:52	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 23:52	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 23:52	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 23:52	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 23:52	1
2-Hexanone	ND		10		ug/L			06/02/16 23:52	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
Isopropyl Ether (DIPE)	ND		1.0		ug/L			06/02/16 23:52	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 23:52	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 23:52	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/02/16 23:52	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 23:52	1
Naphthalene	ND		1.0		ug/L			06/02/16 23:52	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
o-Xylene	ND		0.50		ug/L			06/02/16 23:52	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 23:52	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
Styrene	ND		1.0		ug/L			06/02/16 23:52	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 23:52	1

Client Sample Results

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: TB-2

Date Collected: 0/ 6296 15 09:4/
Date Received: 0/ 6296 15 13:43

Lab Sample ID: 440-148502-12

Matrix: Water

Method: 8250B - Volatile Organic Compounds RGC6MSQPContinuedQ

Analyte	Result	) ualizier	RL		Unit	D	(repared	AnalyHed	Dil Fac
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 23:52	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 23:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 23:52	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 23:52	1
Toluene	ND		0.50		ug/L			06/02/16 23:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 23:52	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 23:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 23:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 23:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 23:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 23:52	1
Trichloroethene	ND		1.0		ug/L			06/02/16 23:52	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 23:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 23:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 23:52	1
Vinyl chloride	ND		0.50		ug/L			06/02/16 23:52	1
Xylenes, Total	ND		1.5		ug/L			06/02/16 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/16 23:52*	*1*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*06/02/16 23:52*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*06/02/16 23:52*	*1*

Method Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-615

TestAmerica Job ID: 440-148502-1

Method	Method Description	Protocol	Laboratory
8250M	Bolatile OrVanic Comgounps dGC/(S)	SW845	TAL IRB
8250M/CA_LUFT(S	Bolatile OrVanic Comgounps by GC/(S	SW845	TAL IRB

Protocol References:

SW845 = "Test (ethops For EvaluatinV Solip Waste, Physical/Chemical (ethops", Thirp Epition, November 1985 Anp Its Ugpates.

Laboratory References:

TAL IRB = TestAmerica Irvine, 17451 Derian Ave, Suite 100, Irvine, CA 92514-6817, TEL d949)251-1022

Lab Chronicle

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-35
Date Collected: 5/ 6296 08 51:50
Date Received: 5/ 6296 08 03:43

Lab Sample ID: 445-041852-0
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 02:30	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 02:30	AA	TAL IRV

Client Sample ID: MW-22
Date Collected: 5/ 6296 08 51:2/
Date Received: 5/ 6296 08 03:43

Lab Sample ID: 445-041852-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 03:00	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 03:00	AA	TAL IRV

Client Sample ID: MW-27
Date Collected: 5/ 6296 08 51:/ /
Date Received: 5/ 6296 08 03:43

Lab Sample ID: 445-041852-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	10 mL	10 mL	334192	06/02/16 22:29	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		2	10 mL	10 mL	334193	06/02/16 22:29	AA	TAL IRV

Client Sample ID: MW-21
Date Collected: 5/ 6296 08 57:08
Date Received: 5/ 6296 08 03:43

Lab Sample ID: 445-041852-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	10 mL	10 mL	334192	06/02/16 22:57	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		20	10 mL	10 mL	334193	06/02/16 22:57	AA	TAL IRV

Client Sample ID: MW-24
Date Collected: 5/ 6296 08 57:33
Date Received: 5/ 6296 08 03:43

Lab Sample ID: 445-041852-/
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	334192	06/02/16 23:25	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	334193	06/02/16 23:25	AA	TAL IRV

Lab Chronicle

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-20
Date Collected: 5/ 6/2016 08 05:53
Date Received: 5/ 6/2016 08 03:43

Lab Sample ID: 445-041852-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 03:29	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 03:29	AA	TAL IRV

Client Sample ID: MW-25
Date Collected: 5/ 6/2016 08 05:3/
Date Received: 5/ 6/2016 08 03:43

Lab Sample ID: 445-041852-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 03:59	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 03:59	AA	TAL IRV

Client Sample ID: MW-09
Date Collected: 5/ 6/2016 08 00:53
Date Received: 5/ 6/2016 08 03:43

Lab Sample ID: 445-041852-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 04:29	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 04:29	AA	TAL IRV

Client Sample ID: MW-01
Date Collected: 5/ 6/2016 08 00:07
Date Received: 5/ 6/2016 08 03:43

Lab Sample ID: 445-041852-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 04:58	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 04:58	AA	TAL IRV

Client Sample ID: MW-28
Date Collected: 5/ 6/2016 08 02:45
Date Received: 5/ 6/2016 08 03:43

Lab Sample ID: 445-041852-05
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 05:28	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 05:28	AA	TAL IRV

Lab Chronicle

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

Client Sample ID: MW-23

Lab Sample ID: 445-041852-00
Date Collected: 5/ 6296 08 03:0/
Matrix: Water
Date Received: 5/ 6296 08 03:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	333947	06/02/16 05:58	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	333948	06/02/16 05:58	AA	TAL IRV

Client Sample ID: TB-2

Lab Sample ID: 445-041852-02
Date Collected: 5/ 6296 08 59:4/
Matrix: Water
Date Received: 5/ 6296 08 03:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	334192	06/02/16 23:52	AA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	334193	06/02/16 23:52	AA	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-333947/5
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			06/01/16 20:33	1
Benzene	ND		0.50		ug/L			06/01/16 20:33	1
Bromobenzene	ND		1.0		ug/L			06/01/16 20:33	1
Bromochloromethane	ND		1.0		ug/L			06/01/16 20:33	1
Bromodichloromethane	ND		1.0		ug/L			06/01/16 20:33	1
Bromoform	ND		1.0		ug/L			06/01/16 20:33	1
Bromomethane	ND		1.0		ug/L			06/01/16 20:33	1
2-Butanone (MEK)	ND		10		ug/L			06/01/16 20:33	1
Carbon tetrachloride	ND		0.50		ug/L			06/01/16 20:33	1
Chlorobenzene	ND		1.0		ug/L			06/01/16 20:33	1
Chloroethane	ND		1.0		ug/L			06/01/16 20:33	1
Chloroform	ND		1.0		ug/L			06/01/16 20:33	1
Chloromethane	ND		1.0		ug/L			06/01/16 20:33	1
2-Chlorotoluene	ND		1.0		ug/L			06/01/16 20:33	1
4-Chlorotoluene	ND		1.0		ug/L			06/01/16 20:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/01/16 20:33	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			06/01/16 20:33	1
Dibromochloromethane	ND		1.0		ug/L			06/01/16 20:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/01/16 20:33	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/01/16 20:33	1
Dibromomethane	ND		1.0		ug/L			06/01/16 20:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/01/16 20:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/01/16 20:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/01/16 20:33	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/01/16 20:33	1
1,1-Dichloroethane	ND		1.0		ug/L			06/01/16 20:33	1
1,2-Dichloroethane	ND		0.50		ug/L			06/01/16 20:33	1
1,1-Dichloroethene	ND		1.0		ug/L			06/01/16 20:33	1
1,2-Dichloropropane	ND		1.0		ug/L			06/01/16 20:33	1
1,3-Dichloropropane	ND		1.0		ug/L			06/01/16 20:33	1
2,2-Dichloropropane	ND		1.0		ug/L			06/01/16 20:33	1
1,1-Dichloropropene	ND		1.0		ug/L			06/01/16 20:33	1
Ethylbenzene	ND		0.50		ug/L			06/01/16 20:33	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/01/16 20:33	1
Hexachlorobutadiene	ND		1.0		ug/L			06/01/16 20:33	1
2-Hexanone	ND		10		ug/L			06/01/16 20:33	1
Isopropylbenzene	ND		1.0		ug/L			06/01/16 20:33	1
Isopropyl Ether (DIPE)	ND		1.0		ug/L			06/01/16 20:33	1
Methylene Chloride	ND		5.0		ug/L			06/01/16 20:33	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/01/16 20:33	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/01/16 20:33	1
m,p-Xylene	ND		1.0		ug/L			06/01/16 20:33	1
Naphthalene	ND		1.0		ug/L			06/01/16 20:33	1
n-Butylbenzene	ND		1.0		ug/L			06/01/16 20:33	1
N-Propylbenzene	ND		1.0		ug/L			06/01/16 20:33	1
o-Xylene	ND		0.50		ug/L			06/01/16 20:33	1
p-Isopropyltoluene	ND		1.0		ug/L			06/01/16 20:33	1
sec-Butylbenzene	ND		1.0		ug/L			06/01/16 20:33	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-333947/5
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	ug/L			06/01/16 20:33	1
Tert-amyl-methyl ether (TAME)	ND		1.0	ug/L			06/01/16 20:33	1
tert-Butyl alcohol (TBA)	ND		10	ug/L			06/01/16 20:33	1
tert-Butylbenzene	ND		1.0	ug/L			06/01/16 20:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 20:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/01/16 20:33	1
Tetrachloroethene	ND		1.0	ug/L			06/01/16 20:33	1
Toluene	ND		0.50	ug/L			06/01/16 20:33	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/01/16 20:33	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			06/01/16 20:33	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/01/16 20:33	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/01/16 20:33	1
1,1,1-Trichloroethane	ND		1.0	ug/L			06/01/16 20:33	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/01/16 20:33	1
Trichloroethene	ND		1.0	ug/L			06/01/16 20:33	1
Trichlorofluoromethane	ND		1.0	ug/L			06/01/16 20:33	1
1,2,3-Trichloropropane	ND		1.0	ug/L			06/01/16 20:33	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/01/16 20:33	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/01/16 20:33	1
Vinyl chloride	ND		0.50	ug/L			06/01/16 20:33	1
Xylenes, Total	ND		1.5	ug/L			06/01/16 20:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/01/16 20:33*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/01/16 20:33*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/01/16 20:33*	*1*

Lab Sample ID: LCS 440-333947/6
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	18.8		ug/L		75	10 - 150
Benzene	25.0	29.0		ug/L		116	68 - 130
Bromobenzene	25.0	28.9		ug/L		116	70 - 130
Bromochloromethane	25.0	28.4		ug/L		114	70 - 130
Bromodichloromethane	25.0	27.5		ug/L		110	70 - 132
Bromoform	25.0	29.3		ug/L		117	60 - 148
Bromomethane	25.0	25.3		ug/L		101	64 - 139
2-Butanone (MEK)	25.0	19.7		ug/L		79	44 - 150
Carbon tetrachloride	25.0	24.8		ug/L		99	60 - 150
Chlorobenzene	25.0	25.5		ug/L		102	70 - 130
Chloroethane	25.0	25.5		ug/L		102	64 - 135
Chloroform	25.0	25.7		ug/L		103	70 - 130
Chloromethane	25.0	23.2		ug/L		93	47 - 140
2-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130
4-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	70 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-333947/6
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	30.5		ug/L		122	70 - 133
Dibromochloromethane	25.0	28.3		ug/L		113	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	26.4		ug/L		106	52 - 140
1,2-Dibromoethane (EDB)	25.0	29.1		ug/L		116	70 - 130
Dibromomethane	25.0	26.6		ug/L		107	70 - 130
1,2-Dichlorobenzene	25.0	28.7		ug/L		115	70 - 130
1,3-Dichlorobenzene	25.0	28.1		ug/L		112	70 - 130
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	70 - 130
Dichlorodifluoromethane	25.0	19.2		ug/L		77	29 - 150
1,1-Dichloroethane	25.0	27.0		ug/L		108	64 - 130
1,2-Dichloroethane	25.0	25.7		ug/L		103	57 - 138
1,1-Dichloroethene	25.0	27.0		ug/L		108	70 - 130
1,2-Dichloropropane	25.0	28.8		ug/L		115	67 - 130
1,3-Dichloropropane	25.0	26.7		ug/L		107	70 - 130
2,2-Dichloropropane	25.0	24.3		ug/L		97	68 - 141
1,1-Dichloropropene	25.0	26.6		ug/L		106	70 - 130
Ethylbenzene	25.0	27.6		ug/L		110	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	27.9		ug/L		112	60 - 136
Hexachlorobutadiene	25.0	26.2		ug/L		105	10 - 150
2-Hexanone	25.0	22.4		ug/L		90	10 - 150
Isopropylbenzene	25.0	27.0		ug/L		108	70 - 136
Isopropyl Ether (DIPE)	25.0	28.4		ug/L		114	58 - 139
Methylene Chloride	25.0	28.3		ug/L		113	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	25.7		ug/L		103	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	27.0		ug/L		108	63 - 131
m,p-Xylene	25.0	27.9		ug/L		111	70 - 130
Naphthalene	25.0	28.1		ug/L		112	60 - 140
n-Butylbenzene	25.0	25.1		ug/L		100	65 - 150
N-Propylbenzene	25.0	27.2		ug/L		109	67 - 139
o-Xylene	25.0	25.7		ug/L		103	70 - 130
p-Isopropyltoluene	25.0	27.2		ug/L		109	70 - 132
sec-Butylbenzene	25.0	25.6		ug/L		102	70 - 138
Styrene	25.0	27.0		ug/L		108	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	27.4		ug/L		110	57 - 139
tert-Butyl alcohol (TBA)	250	285		ug/L		114	70 - 130
tert-Butylbenzene	25.0	26.5		ug/L		106	70 - 130
1,1,1,2-Tetrachloroethane	25.0	25.8		ug/L		103	60 - 141
1,1,2,2-Tetrachloroethane	25.0	26.6		ug/L		107	63 - 130
Tetrachloroethene	25.0	27.2		ug/L		109	70 - 130
Toluene	25.0	29.2		ug/L		117	70 - 130
trans-1,2-Dichloroethene	25.0	29.4		ug/L		118	70 - 130
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	70 - 132
1,2,3-Trichlorobenzene	25.0	28.6		ug/L		114	60 - 140
1,2,4-Trichlorobenzene	25.0	30.3		ug/L		121	60 - 140
1,1,1-Trichloroethane	25.0	25.1		ug/L		100	70 - 130
1,1,2-Trichloroethane	25.0	27.1		ug/L		108	70 - 130
Trichloroethene	25.0	27.9		ug/L		112	70 - 130
Trichlorofluoromethane	25.0	21.3		ug/L		85	60 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-333947/6
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	27.9		ug/L		112	63 - 130
1,2,4-Trimethylbenzene	25.0	26.9		ug/L		108	70 - 135
1,3,5-Trimethylbenzene	25.0	26.9		ug/L		108	70 - 136
Vinyl chloride	25.0	22.6		ug/L		90	59 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*76 - 132*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: 440-148345-D-1 MS
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	23.0		ug/L		92	10 - 150
Benzene	3.1		25.0	31.2		ug/L		112	66 - 130
Bromobenzene	ND		25.0	27.8		ug/L		111	70 - 130
Bromochloromethane	ND		25.0	26.9		ug/L		107	70 - 130
Bromodichloromethane	ND		25.0	26.2		ug/L		105	70 - 138
Bromoform	ND		25.0	27.6		ug/L		111	59 - 150
Bromomethane	ND		25.0	22.3		ug/L		89	62 - 131
2-Butanone (MEK)	ND		25.0	21.0		ug/L		84	48 - 140
Carbon tetrachloride	ND		25.0	23.8		ug/L		95	60 - 150
Chlorobenzene	7.6		25.0	31.3		ug/L		95	70 - 130
Chloroethane	ND		25.0	23.1		ug/L		92	68 - 130
Chloroform	ND		25.0	24.6		ug/L		98	70 - 130
Chloromethane	ND		25.0	21.9		ug/L		88	39 - 144
2-Chlorotoluene	ND		25.0	25.5		ug/L		102	70 - 130
4-Chlorotoluene	ND		25.0	25.1		ug/L		101	70 - 130
cis-1,2-Dichloroethene	18		25.0	44.0		ug/L		104	70 - 130
cis-1,3-Dichloropropene	ND		25.0	29.3		ug/L		117	70 - 133
Dibromochloromethane	ND		25.0	26.4		ug/L		105	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	22.3		ug/L		89	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	27.5		ug/L		110	70 - 131
Dibromomethane	ND		25.0	25.3		ug/L		101	70 - 130
1,2-Dichlorobenzene	ND		25.0	28.1		ug/L		112	70 - 130
1,3-Dichlorobenzene	2.3		25.0	27.0		ug/L		99	70 - 130
1,4-Dichlorobenzene	2.1		25.0	27.2		ug/L		100	70 - 130
Dichlorodifluoromethane	ND		25.0	15.6		ug/L		62	25 - 142
1,1-Dichloroethane	ND		25.0	26.6		ug/L		106	65 - 130
1,2-Dichloroethane	ND		25.0	24.7		ug/L		99	56 - 146
1,1-Dichloroethene	ND		25.0	26.3		ug/L		105	70 - 130
1,2-Dichloropropane	4.7		25.0	32.4		ug/L		111	69 - 130
1,3-Dichloropropane	ND		25.0	25.0		ug/L		100	70 - 130
2,2-Dichloropropane	ND		25.0	24.7		ug/L		99	69 - 138
1,1-Dichloropropene	ND		25.0	26.4		ug/L		106	64 - 130
Ethylbenzene	ND		25.0	26.8		ug/L		107	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148345-D-1 MS
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.5		ug/L		106	70 - 130
Hexachlorobutadiene	ND		25.0	25.8		ug/L		103	10 - 150
2-Hexanone	ND		25.0	20.5		ug/L		82	10 - 150
Isopropylbenzene	ND		25.0	26.9		ug/L		107	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	28.0		ug/L		110	64 - 138
Methylene Chloride	ND		25.0	26.4		ug/L		106	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.4		ug/L		93	52 - 150
Methyl-t-Butyl Ether (MTBE)	4.7		25.0	30.4		ug/L		103	70 - 130
m,p-Xylene	ND		25.0	27.8		ug/L		111	70 - 133
Naphthalene	ND		25.0	26.5		ug/L		106	60 - 140
n-Butylbenzene	ND		25.0	25.5		ug/L		99	61 - 149
N-Propylbenzene	ND		25.0	26.4		ug/L		106	66 - 135
o-Xylene	ND		25.0	24.9		ug/L		100	70 - 133
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	70 - 130
sec-Butylbenzene	ND		25.0	25.5		ug/L		100	67 - 134
Styrene	ND		25.0	26.4		ug/L		106	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	26.5		ug/L		106	68 - 133
tert-Butyl alcohol (TBA)	24		250	304		ug/L		112	70 - 130
tert-Butylbenzene	ND		25.0	26.0		ug/L		103	70 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	25.0		ug/L		100	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	25.0		ug/L		100	63 - 130
Tetrachloroethene	ND		25.0	26.7		ug/L		107	70 - 137
Toluene	ND		25.0	28.2		ug/L		113	70 - 130
trans-1,2-Dichloroethene	1.9		25.0	31.0		ug/L		116	70 - 130
trans-1,3-Dichloropropene	ND		25.0	26.6		ug/L		106	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	27.6		ug/L		110	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	30.0		ug/L		120	60 - 140
1,1,1-Trichloroethane	ND		25.0	24.5		ug/L		98	70 - 130
1,1,2-Trichloroethane	ND		25.0	26.9		ug/L		105	70 - 130
Trichloroethene	16		25.0	42.9		ug/L		106	70 - 130
Trichlorofluoromethane	ND		25.0	20.3		ug/L		81	60 - 150
1,2,3-Trichloropropane	ND		25.0	25.3		ug/L		101	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	26.1		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	26.3		ug/L		105	70 - 130
Vinyl chloride	ND		25.0	21.9		ug/L		88	50 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-148345-D-1 MSD
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	23.5		ug/L		94	10 - 150	2	35
Benzene	3.1		25.0	31.2		ug/L		112	66 - 130	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148345-D-1 MSD
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	ND		25.0	28.7		ug/L		115	70 - 130	3	20
Bromochloromethane	ND		25.0	26.9		ug/L		108	70 - 130	0	25
Bromodichloromethane	ND		25.0	26.5		ug/L		106	70 - 138	1	20
Bromoform	ND		25.0	28.7		ug/L		115	59 - 150	4	25
Bromomethane	ND		25.0	23.1		ug/L		92	62 - 131	3	25
2-Butanone (MEK)	ND		25.0	22.0		ug/L		88	48 - 140	5	40
Carbon tetrachloride	ND		25.0	23.9		ug/L		95	60 - 150	0	25
Chlorobenzene	7.6		25.0	32.1		ug/L		98	70 - 130	3	20
Chloroethane	ND		25.0	23.4		ug/L		93	68 - 130	1	25
Chloroform	ND		25.0	24.9		ug/L		99	70 - 130	1	20
Chloromethane	ND		25.0	22.1		ug/L		88	39 - 144	1	25
2-Chlorotoluene	ND		25.0	26.4		ug/L		106	70 - 130	4	20
4-Chlorotoluene	ND		25.0	25.9		ug/L		104	70 - 130	3	20
cis-1,2-Dichloroethene	18		25.0	44.9		ug/L		108	70 - 130	2	20
cis-1,3-Dichloropropene	ND		25.0	29.8		ug/L		119	70 - 133	2	20
Dibromochloromethane	ND		25.0	27.7		ug/L		111	70 - 148	5	25
1,2-Dibromo-3-Chloropropane	ND		25.0	24.0		ug/L		96	48 - 140	8	30
1,2-Dibromoethane (EDB)	ND		25.0	28.7		ug/L		115	70 - 131	4	25
Dibromomethane	ND		25.0	25.3		ug/L		101	70 - 130	0	25
1,2-Dichlorobenzene	ND		25.0	28.8		ug/L		115	70 - 130	3	20
1,3-Dichlorobenzene	2.3		25.0	27.3		ug/L		100	70 - 130	1	20
1,4-Dichlorobenzene	2.1		25.0	28.1		ug/L		104	70 - 130	3	20
Dichlorodifluoromethane	ND		25.0	15.6		ug/L		62	25 - 142	0	30
1,1-Dichloroethane	ND		25.0	26.7		ug/L		107	65 - 130	0	20
1,2-Dichloroethane	ND		25.0	25.1		ug/L		100	56 - 146	1	20
1,1-Dichloroethene	ND		25.0	26.0		ug/L		104	70 - 130	1	20
1,2-Dichloropropane	4.7		25.0	33.0		ug/L		113	69 - 130	2	20
1,3-Dichloropropane	ND		25.0	26.1		ug/L		104	70 - 130	4	25
2,2-Dichloropropane	ND		25.0	24.7		ug/L		99	69 - 138	0	25
1,1-Dichloropropene	ND		25.0	26.5		ug/L		106	64 - 130	1	20
Ethylbenzene	ND		25.0	27.5		ug/L		110	70 - 130	3	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.7		ug/L		107	70 - 130	1	25
Hexachlorobutadiene	ND		25.0	26.2		ug/L		105	10 - 150	1	20
2-Hexanone	ND		25.0	20.1		ug/L		80	10 - 150	2	35
Isopropylbenzene	ND		25.0	27.4		ug/L		110	70 - 132	2	20
Isopropyl Ether (DIPE)	ND		25.0	27.8		ug/L		109	64 - 138	1	25
Methylene Chloride	ND		25.0	26.3		ug/L		105	52 - 130	0	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.4		ug/L		98	52 - 150	4	35
Methyl-t-Butyl Ether (MTBE)	4.7		25.0	31.4		ug/L		107	70 - 130	3	25
m,p-Xylene	ND		25.0	29.2		ug/L		117	70 - 133	5	25
Naphthalene	ND		25.0	27.8		ug/L		111	60 - 140	5	30
n-Butylbenzene	ND		25.0	26.1		ug/L		102	61 - 149	2	20
N-Propylbenzene	ND		25.0	27.2		ug/L		109	66 - 135	3	20
o-Xylene	ND		25.0	26.1		ug/L		104	70 - 133	5	20
p-Isopropyltoluene	ND		25.0	27.6		ug/L		110	70 - 130	3	20
sec-Butylbenzene	ND		25.0	26.2		ug/L		102	67 - 134	3	20
Styrene	ND		25.0	27.3		ug/L		109	29 - 150	3	35
Tert-amyl-methyl ether (TAME)	ND		25.0	27.0		ug/L		108	68 - 133	2	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148345-D-1 MSD
Matrix: Water
Analysis Batch: 333947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	24		250	299		ug/L		110	70 - 130	2	25
tert-Butylbenzene	ND		25.0	26.8		ug/L		106	70 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	60 - 149	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.8		ug/L		103	63 - 130	3	30
Tetrachloroethene	ND		25.0	27.6		ug/L		110	70 - 137	3	20
Toluene	ND		25.0	29.1		ug/L		116	70 - 130	3	20
trans-1,2-Dichloroethene	1.9		25.0	31.6		ug/L		119	70 - 130	2	20
trans-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	70 - 138	2	25
1,2,3-Trichlorobenzene	ND		25.0	28.4		ug/L		113	60 - 140	3	20
1,2,4-Trichlorobenzene	ND		25.0	30.6		ug/L		123	60 - 140	2	20
1,1,1-Trichloroethane	ND		25.0	24.4		ug/L		98	70 - 130	0	20
1,1,2-Trichloroethane	ND		25.0	27.4		ug/L		107	70 - 130	2	25
Trichloroethene	16		25.0	43.1		ug/L		107	70 - 130	1	20
Trichlorofluoromethane	ND		25.0	20.1		ug/L		81	60 - 150	1	25
1,2,3-Trichloropropane	ND		25.0	26.3		ug/L		105	60 - 130	4	30
1,2,4-Trimethylbenzene	ND		25.0	26.9		ug/L		108	70 - 130	3	25
1,3,5-Trimethylbenzene	ND		25.0	26.9		ug/L		108	70 - 130	2	20
Vinyl chloride	ND		25.0	22.0		ug/L		88	50 - 137	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: MB 440-334192/4
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			06/02/16 19:42	1
Benzene	ND		0.50	ug/L			06/02/16 19:42	1
Bromobenzene	ND		1.0	ug/L			06/02/16 19:42	1
Bromochloromethane	ND		1.0	ug/L			06/02/16 19:42	1
Bromodichloromethane	ND		1.0	ug/L			06/02/16 19:42	1
Bromoform	ND		1.0	ug/L			06/02/16 19:42	1
Bromomethane	ND		1.0	ug/L			06/02/16 19:42	1
2-Butanone (MEK)	ND		10	ug/L			06/02/16 19:42	1
Carbon tetrachloride	ND		0.50	ug/L			06/02/16 19:42	1
Chlorobenzene	ND		1.0	ug/L			06/02/16 19:42	1
Chloroethane	ND		1.0	ug/L			06/02/16 19:42	1
Chloroform	ND		1.0	ug/L			06/02/16 19:42	1
Chloromethane	ND		1.0	ug/L			06/02/16 19:42	1
2-Chlorotoluene	ND		1.0	ug/L			06/02/16 19:42	1
4-Chlorotoluene	ND		1.0	ug/L			06/02/16 19:42	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/02/16 19:42	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			06/02/16 19:42	1
Dibromochloromethane	ND		1.0	ug/L			06/02/16 19:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			06/02/16 19:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-334192/4
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			06/02/16 19:42	1
Dibromomethane	ND		1.0		ug/L			06/02/16 19:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/02/16 19:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/02/16 19:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/02/16 19:42	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/02/16 19:42	1
1,1-Dichloroethane	ND		1.0		ug/L			06/02/16 19:42	1
1,2-Dichloroethane	ND		0.50		ug/L			06/02/16 19:42	1
1,1-Dichloroethene	ND		1.0		ug/L			06/02/16 19:42	1
1,2-Dichloropropane	ND		1.0		ug/L			06/02/16 19:42	1
1,3-Dichloropropane	ND		1.0		ug/L			06/02/16 19:42	1
2,2-Dichloropropane	ND		1.0		ug/L			06/02/16 19:42	1
1,1-Dichloropropene	ND		1.0		ug/L			06/02/16 19:42	1
Ethylbenzene	ND		0.50		ug/L			06/02/16 19:42	1
Ethyl-t-butyl ether (ETBE)	ND		1.0		ug/L			06/02/16 19:42	1
Hexachlorobutadiene	ND		1.0		ug/L			06/02/16 19:42	1
2-Hexanone	ND		10		ug/L			06/02/16 19:42	1
Isopropylbenzene	ND		1.0		ug/L			06/02/16 19:42	1
Isopropyl Ether (DIPE)	ND		1.0		ug/L			06/02/16 19:42	1
Methylene Chloride	ND		5.0		ug/L			06/02/16 19:42	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/02/16 19:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			06/02/16 19:42	1
m,p-Xylene	ND		1.0		ug/L			06/02/16 19:42	1
Naphthalene	ND		1.0		ug/L			06/02/16 19:42	1
n-Butylbenzene	ND		1.0		ug/L			06/02/16 19:42	1
N-Propylbenzene	ND		1.0		ug/L			06/02/16 19:42	1
o-Xylene	ND		0.50		ug/L			06/02/16 19:42	1
p-Isopropyltoluene	ND		1.0		ug/L			06/02/16 19:42	1
sec-Butylbenzene	ND		1.0		ug/L			06/02/16 19:42	1
Styrene	ND		1.0		ug/L			06/02/16 19:42	1
Tert-amyl-methyl ether (TAME)	ND		1.0		ug/L			06/02/16 19:42	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			06/02/16 19:42	1
tert-Butylbenzene	ND		1.0		ug/L			06/02/16 19:42	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 19:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/02/16 19:42	1
Tetrachloroethene	ND		1.0		ug/L			06/02/16 19:42	1
Toluene	ND		0.50		ug/L			06/02/16 19:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/02/16 19:42	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			06/02/16 19:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/02/16 19:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/02/16 19:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/02/16 19:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/02/16 19:42	1
Trichloroethene	ND		1.0		ug/L			06/02/16 19:42	1
Trichlorofluoromethane	ND		1.0		ug/L			06/02/16 19:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/02/16 19:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/02/16 19:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/02/16 19:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-334192/4
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	ug/L			06/02/16 19:42	1
Xylenes, Total	ND		1.5	ug/L			06/02/16 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/02/16 19:42*	*1*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*06/02/16 19:42*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*06/02/16 19:42*	*1*

Lab Sample ID: LCS 440-334192/5
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	22.3		ug/L		89	10 - 150
Benzene	25.0	26.5		ug/L		106	68 - 130
Bromobenzene	25.0	26.4		ug/L		106	70 - 130
Bromochloromethane	25.0	30.1		ug/L		120	70 - 130
Bromodichloromethane	25.0	31.6		ug/L		126	70 - 132
Bromoform	25.0	34.9		ug/L		140	60 - 148
Bromomethane	25.0	24.4		ug/L		97	64 - 139
2-Butanone (MEK)	25.0	25.7		ug/L		103	44 - 150
Carbon tetrachloride	25.0	29.6		ug/L		118	60 - 150
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Chloroethane	25.0	26.4		ug/L		106	64 - 135
Chloroform	25.0	27.9		ug/L		111	70 - 130
Chloromethane	25.0	22.4		ug/L		89	47 - 140
2-Chlorotoluene	25.0	25.2		ug/L		101	70 - 130
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130
cis-1,2-Dichloroethene	25.0	28.5		ug/L		114	70 - 133
cis-1,3-Dichloropropene	25.0	29.8		ug/L		119	70 - 133
Dibromochloromethane	25.0	32.5		ug/L		130	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		108	52 - 140
1,2-Dibromoethane (EDB)	25.0	28.8		ug/L		115	70 - 130
Dibromomethane	25.0	30.1		ug/L		120	70 - 130
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130
Dichlorodifluoromethane	25.0	21.6		ug/L		86	29 - 150
1,1-Dichloroethane	25.0	27.2		ug/L		109	64 - 130
1,2-Dichloroethane	25.0	29.5		ug/L		118	57 - 138
1,1-Dichloroethene	25.0	27.1		ug/L		108	70 - 130
1,2-Dichloropropane	25.0	29.0		ug/L		116	67 - 130
1,3-Dichloropropane	25.0	28.1		ug/L		113	70 - 130
2,2-Dichloropropane	25.0	23.8		ug/L		95	68 - 141
1,1-Dichloropropene	25.0	28.4		ug/L		114	70 - 130
Ethylbenzene	25.0	25.6		ug/L		102	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	23.1		ug/L		93	60 - 136
Hexachlorobutadiene	25.0	23.4		ug/L		93	10 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-334192/5
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	25.0	23.1		ug/L		92	10 - 150
Isopropylbenzene	25.0	27.2		ug/L		109	70 - 136
Isopropyl Ether (DIPE)	25.0	28.1		ug/L		112	58 - 139
Methylene Chloride	25.0	29.7		ug/L		119	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	25.3		ug/L		101	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	25.2		ug/L		101	63 - 131
m,p-Xylene	25.0	27.0		ug/L		108	70 - 130
Naphthalene	25.0	27.2		ug/L		109	60 - 140
n-Butylbenzene	25.0	25.2		ug/L		101	65 - 150
N-Propylbenzene	25.0	25.2		ug/L		101	67 - 139
o-Xylene	25.0	26.6		ug/L		106	70 - 130
p-Isopropyltoluene	25.0	26.2		ug/L		105	70 - 132
sec-Butylbenzene	25.0	25.4		ug/L		102	70 - 138
Styrene	25.0	28.2		ug/L		113	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	24.2		ug/L		97	57 - 139
tert-Butyl alcohol (TBA)	250	288		ug/L		115	70 - 130
tert-Butylbenzene	25.0	26.4		ug/L		106	70 - 130
1,1,1,2-Tetrachloroethane	25.0	28.8		ug/L		115	60 - 141
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	63 - 130
Tetrachloroethene	25.0	26.0		ug/L		104	70 - 130
Toluene	25.0	25.7		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	27.8		ug/L		111	70 - 130
trans-1,3-Dichloropropene	25.0	30.8		ug/L		123	70 - 132
1,2,3-Trichlorobenzene	25.0	25.8		ug/L		103	60 - 140
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	60 - 140
1,1,1-Trichloroethane	25.0	26.6		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	70 - 130
Trichloroethene	25.0	29.4		ug/L		117	70 - 130
Trichlorofluoromethane	25.0	25.5		ug/L		102	60 - 150
1,2,3-Trichloropropane	25.0	26.9		ug/L		108	63 - 130
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 135
1,3,5-Trimethylbenzene	25.0	26.9		ug/L		108	70 - 136
Vinyl chloride	25.0	28.5		ug/L		114	59 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*118*		*76 - 132*
Toluene-d8 (Surr)	*104*		*80 - 128*

Lab Sample ID: 440-148489-C-2 MS
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	18.4		ug/L		73	10 - 150
Benzene	ND		25.0	25.7		ug/L		103	66 - 130
Bromobenzene	ND		25.0	25.9		ug/L		104	70 - 130
Bromochloromethane	ND		25.0	29.4		ug/L		118	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148489-C-2 MS
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	ND		25.0	30.5		ug/L		122	70 - 138
Bromoform	ND		25.0	30.7		ug/L		123	59 - 150
Bromomethane	ND		25.0	22.8		ug/L		91	62 - 131
2-Butanone (MEK)	ND		25.0	18.9		ug/L		76	48 - 140
Carbon tetrachloride	ND		25.0	27.1		ug/L		108	60 - 150
Chlorobenzene	ND		25.0	24.4		ug/L		98	70 - 130
Chloroethane	ND		25.0	24.2		ug/L		97	68 - 130
Chloroform	ND		25.0	26.7		ug/L		107	70 - 130
Chloromethane	ND		25.0	21.9		ug/L		87	39 - 144
2-Chlorotoluene	ND		25.0	23.7		ug/L		95	70 - 130
4-Chlorotoluene	ND		25.0	24.7		ug/L		99	70 - 130
cis-1,2-Dichloroethene	ND		25.0	27.6		ug/L		110	70 - 130
cis-1,3-Dichloropropene	ND		25.0	29.8		ug/L		119	70 - 133
Dibromochloromethane	ND		25.0	30.3		ug/L		121	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	22.5		ug/L		90	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	26.4		ug/L		106	70 - 131
Dibromomethane	ND		25.0	28.8		ug/L		115	70 - 130
1,2-Dichlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	ND		25.0	23.8		ug/L		95	70 - 130
Dichlorodifluoromethane	ND		25.0	19.5		ug/L		78	25 - 142
1,1-Dichloroethane	ND		25.0	26.7		ug/L		107	65 - 130
1,2-Dichloroethane	ND		25.0	28.4		ug/L		114	56 - 146
1,1-Dichloroethene	ND		25.0	24.1		ug/L		96	70 - 130
1,2-Dichloropropane	ND		25.0	28.5		ug/L		114	69 - 130
1,3-Dichloropropane	ND		25.0	26.5		ug/L		106	70 - 130
2,2-Dichloropropane	ND		25.0	23.4		ug/L		94	69 - 138
1,1-Dichloropropene	ND		25.0	27.6		ug/L		110	64 - 130
Ethylbenzene	ND		25.0	23.7		ug/L		95	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.7		ug/L		95	70 - 130
Hexachlorobutadiene	ND		25.0	21.4		ug/L		86	10 - 150
2-Hexanone	ND		25.0	19.3		ug/L		77	10 - 150
Isopropylbenzene	ND		25.0	24.9		ug/L		100	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	27.4		ug/L		110	64 - 138
Methylene Chloride	ND		25.0	28.1		ug/L		112	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	21.3		ug/L		85	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.5		ug/L		102	70 - 130
m,p-Xylene	ND		25.0	26.2		ug/L		105	70 - 133
Naphthalene	ND		25.0	24.4		ug/L		98	60 - 140
n-Butylbenzene	ND		25.0	23.8		ug/L		95	61 - 149
N-Propylbenzene	ND		25.0	23.4		ug/L		94	66 - 135
o-Xylene	ND		25.0	25.1		ug/L		101	70 - 133
p-Isopropyltoluene	ND		25.0	24.2		ug/L		97	70 - 130
sec-Butylbenzene	ND		25.0	23.4		ug/L		94	67 - 134
Styrene	ND		25.0	27.2		ug/L		109	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	24.6		ug/L		98	68 - 133
tert-Butyl alcohol (TBA)	ND		250	269		ug/L		107	70 - 130
tert-Butylbenzene	ND		25.0	24.6		ug/L		98	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148489-C-2 MS
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	22.7		ug/L		91	63 - 130
Tetrachloroethene	ND		25.0	24.8		ug/L		99	70 - 137
Toluene	ND		25.0	24.3		ug/L		97	70 - 130
trans-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	70 - 130
trans-1,3-Dichloropropene	ND		25.0	29.4		ug/L		117	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	26.2		ug/L		105	60 - 140
1,1,1-Trichloroethane	ND		25.0	24.7		ug/L		99	70 - 130
1,1,2-Trichloroethane	ND		25.0	24.9		ug/L		100	70 - 130
Trichloroethene	ND		25.0	27.7		ug/L		111	70 - 130
Trichlorofluoromethane	ND		25.0	24.4		ug/L		98	60 - 150
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	25.1		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	25.1		ug/L		101	70 - 130
Vinyl chloride	ND		25.0	26.5		ug/L		106	50 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*119*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: 440-148489-C-2 MSD
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	20.1		ug/L		80	10 - 150	9	35
Benzene	ND		25.0	26.0		ug/L		104	66 - 130	1	20
Bromobenzene	ND		25.0	26.5		ug/L		106	70 - 130	2	20
Bromochloromethane	ND		25.0	30.4		ug/L		122	70 - 130	3	25
Bromodichloromethane	ND		25.0	30.3		ug/L		121	70 - 138	0	20
Bromoform	ND		25.0	32.3		ug/L		129	59 - 150	5	25
Bromomethane	ND		25.0	22.6		ug/L		90	62 - 131	1	25
2-Butanone (MEK)	ND		25.0	23.5		ug/L		94	48 - 140	21	40
Carbon tetrachloride	ND		25.0	26.9		ug/L		108	60 - 150	1	25
Chlorobenzene	ND		25.0	24.9		ug/L		100	70 - 130	2	20
Chloroethane	ND		25.0	24.4		ug/L		98	68 - 130	1	25
Chloroform	ND		25.0	26.4		ug/L		106	70 - 130	1	20
Chloromethane	ND		25.0	21.2		ug/L		85	39 - 144	3	25
2-Chlorotoluene	ND		25.0	24.1		ug/L		96	70 - 130	2	20
4-Chlorotoluene	ND		25.0	25.2		ug/L		101	70 - 130	2	20
cis-1,2-Dichloroethene	ND		25.0	27.5		ug/L		110	70 - 130	0	20
cis-1,3-Dichloropropene	ND		25.0	29.6		ug/L		119	70 - 133	0	20
Dibromochloromethane	ND		25.0	31.2		ug/L		125	70 - 148	3	25
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L		102	48 - 140	12	30
1,2-Dibromoethane (EDB)	ND		25.0	27.7		ug/L		111	70 - 131	5	25
Dibromomethane	ND		25.0	29.5		ug/L		118	70 - 130	2	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148489-C-2 MSD
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		25.0	25.8		ug/L		103	70 - 130	3	20
1,3-Dichlorobenzene	ND		25.0	25.5		ug/L		102	70 - 130	3	20
1,4-Dichlorobenzene	ND		25.0	24.9		ug/L		99	70 - 130	4	20
Dichlorodifluoromethane	ND		25.0	19.0		ug/L		76	25 - 142	3	30
1,1-Dichloroethane	ND		25.0	26.4		ug/L		106	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	28.1		ug/L		112	56 - 146	1	20
1,1-Dichloroethene	ND		25.0	25.5		ug/L		102	70 - 130	6	20
1,2-Dichloropropane	ND		25.0	28.7		ug/L		115	69 - 130	1	20
1,3-Dichloropropane	ND		25.0	27.6		ug/L		111	70 - 130	4	25
2,2-Dichloropropane	ND		25.0	22.3		ug/L		89	69 - 138	5	25
1,1-Dichloropropene	ND		25.0	27.3		ug/L		109	64 - 130	1	20
Ethylbenzene	ND		25.0	24.1		ug/L		97	70 - 130	2	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.8		ug/L		95	70 - 130	1	25
Hexachlorobutadiene	ND		25.0	22.9		ug/L		91	10 - 150	6	20
2-Hexanone	ND		25.0	22.3		ug/L		89	10 - 150	14	35
Isopropylbenzene	ND		25.0	25.0		ug/L		100	70 - 132	0	20
Isopropyl Ether (DIPE)	ND		25.0	28.4		ug/L		113	64 - 138	3	25
Methylene Chloride	ND		25.0	28.1		ug/L		112	52 - 130	0	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.6		ug/L		94	52 - 150	10	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.5		ug/L		106	70 - 130	4	25
m,p-Xylene	ND		25.0	26.6		ug/L		106	70 - 133	1	25
Naphthalene	ND		25.0	27.6		ug/L		110	60 - 140	12	30
n-Butylbenzene	ND		25.0	24.4		ug/L		98	61 - 149	3	20
N-Propylbenzene	ND		25.0	24.2		ug/L		97	66 - 135	3	20
o-Xylene	ND		25.0	25.2		ug/L		101	70 - 133	0	20
p-Isopropyltoluene	ND		25.0	25.0		ug/L		100	70 - 130	4	20
sec-Butylbenzene	ND		25.0	24.3		ug/L		97	67 - 134	4	20
Styrene	ND		25.0	27.2		ug/L		109	29 - 150	0	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.2		ug/L		101	68 - 133	2	30
tert-Butyl alcohol (TBA)	ND		250	275		ug/L		110	70 - 130	3	25
tert-Butylbenzene	ND		25.0	25.2		ug/L		101	70 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.8		ug/L		111	60 - 149	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	63 - 130	11	30
Tetrachloroethene	ND		25.0	25.2		ug/L		101	70 - 137	1	20
Toluene	ND		25.0	24.3		ug/L		97	70 - 130	0	20
trans-1,2-Dichloroethene	ND		25.0	27.4		ug/L		110	70 - 130	6	20
trans-1,3-Dichloropropene	ND		25.0	30.0		ug/L		120	70 - 138	2	25
1,2,3-Trichlorobenzene	ND		25.0	27.3		ug/L		109	60 - 140	10	20
1,2,4-Trichlorobenzene	ND		25.0	27.8		ug/L		111	60 - 140	6	20
1,1,1-Trichloroethane	ND		25.0	24.0		ug/L		96	70 - 130	3	20
1,1,2-Trichloroethane	ND		25.0	25.8		ug/L		103	70 - 130	4	25
Trichloroethene	ND		25.0	27.7		ug/L		111	70 - 130	0	20
Trichlorofluoromethane	ND		25.0	23.6		ug/L		94	60 - 150	4	25
1,2,3-Trichloropropane	ND		25.0	26.0		ug/L		104	60 - 130	11	30
1,2,4-Trimethylbenzene	ND		25.0	25.9		ug/L		104	70 - 130	3	25
1,3,5-Trimethylbenzene	ND		25.0	25.7		ug/L		103	70 - 130	2	20
Vinyl chloride	ND		25.0	25.8		ug/L		103	50 - 137	3	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-148489-C-2 MSD
Matrix: Water
Analysis Batch: 334192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*114*		*76 - 132*
Toluene-d8 (Surr)	*100*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-333948/5
Matrix: Water
Analysis Batch: 333948

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/01/16 20:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*76 - 132*		*06/01/16 20:33*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/01/16 20:33*	*1*
Toluene-d8 (Surr)	*108*		*80 - 128*		*06/01/16 20:33*	*1*

Lab Sample ID: LCS 440-333948/7
Matrix: Water
Analysis Batch: 333948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	406		ug/L		81	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*76 - 132*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 128*

Lab Sample ID: 440-148345-D-1 MS
Matrix: Water
Analysis Batch: 333948

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	250		1730	1930		ug/L		98	50 - 145		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*76 - 132*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-148345-D-1 MSD
Matrix: Water
Analysis Batch: 333948

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	250		1730	1950		ug/L		98	50 - 145	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*76 - 132*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: MB 440-334193/4
Matrix: Water
Analysis Batch: 334193

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			06/02/16 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*76 - 132*		*06/02/16 19:42*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/02/16 19:42*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*06/02/16 19:42*	*1*

Lab Sample ID: LCS 440-334193/6
Matrix: Water
Analysis Batch: 334193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			500	475		ug/L		95	55 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*112*		*76 - 132*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: 440-148489-C-2 MS
Matrix: Water
Analysis Batch: 334193

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	2290		ug/L		133	50 - 145		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*119*		*76 - 132*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 128*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-148489-C-2 MSD
Matrix: Water
Analysis Batch: 334193

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	2300		ug/L		133	50 - 145	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*76 - 132*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 128*

QC Association Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-516

TestAmerica Job ID: 440-148602-1

GC/MS VOA

Analysis Batch: 333947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148345-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-148345-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-148602-1	MW-30	Total/NA	Water	8260B	
440-148602-2	MW-22	Total/NA	Water	8260B	
440-148602-6	MW-21	Total/NA	Water	8260B	
440-148602-7	MW-20	Total/NA	Water	8260B	
440-148602-8	MW-17	Total/NA	Water	8260B	
440-148602-9	MW-18	Total/NA	Water	8260B	
440-148602-10	MW-26	Total/NA	Water	8260B	
440-148602-11	MW-23	Total/NA	Water	8260B	
LCS 440-333947/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-333947/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 333948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148345-D-1 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-148345-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-1	MW-30	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-2	MW-22	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-6	MW-21	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-7	MW-20	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-8	MW-17	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-9	MW-18	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-10	MW-26	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-11	MW-23	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-333948/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-333948/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 334192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148489-C-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-148489-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-148602-3	MW-29	Total/NA	Water	8260B	
440-148602-4	MW-28	Total/NA	Water	8260B	
440-148602-5	MW-24	Total/NA	Water	8260B	
440-148602-12	TB-2	Total/NA	Water	8260B	
LCS 440-334192/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-334192/4	Method Blank	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 334193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-148489-C-2 MS	Matrix Spike	Total/NA	Water	8260B/CA_LUFT MS	
440-148489-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-3	MW-29	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-4	MW-28	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-5	MW-24	Total/NA	Water	8260B/CA_LUFT MS	
440-148602-12	TB-2	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-334193/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-334193/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
ID	Analyte identified by RT & presence of single mass ion

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Eco & Associates, Inc
Project/Site: LA Times Quarterly GW, ECO-12-615

TestAmerica Job ID: 440-148502-1

Laboratory: TestAmerica Irvine

All certification f elh by tf is laboratory are listehd . ot all certification are aNNicable to tf is reNortd

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaspa	State Pro3ram	10	CA016k1	05-k0-15
Arigona	State Pro3ram	z	A905Z1	10-1k-15
California	LA Cty Sanitation Districts	z	10265	01-k1-1Z 7
California	State Pro3ram	z	CA ELAP 2Z05	05-k0-15
Guam	State Pro3ram	z	Certd. od12d002r	01-2k-1Z
* aHaii	State Pro3ram	z	. /A	01-2z-1Z
wansas	. ELAP Seconhary AK	Z	E-10420	0Z-k1-15
. eBaha	State Pro3ram	z	CA016k12015-2	0Z-k1-15
. eH v exico	State Pro3ram	5	. /A	01-2z-1Z
. ortf ern v ariana Islanhs	State Pro3ram	z	v P0002	01-2z-1Z
Ore3on	. ELAP	10	4028	01-2z-1Z
USDA	Feheral		Pkk0-0z-00080	0Z-08-18
Wasf in3ton	State Pro3ram	10	Cz00	0z-0k-15

7 Certification reneHal Nenhin3 - certification consihereh Balihd

TestAmerica Irvine
17461 Derian Ave
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Chain of Custody Record

079686

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THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Taylor Waters	Site Contact:	Date: 5/27/2016	COC No:
Company Name: Eco & Associates	Tel/Fax: 714.289.0985	Lab Contact:	Carrier:	1 of 1 COCs
Address: 1855 W Katella Ave Ste 340	Analysis Turnaround Time			Sampler:
City/State/Zip: Orange CA 92867	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 714.289.0945	TAT if different from Below STD			Walk-in Client:
Fax: 714.289.0965	☐ 2 weeks			Lab Sampling:
Project Name: LA TIMES QUARTERLY GW MON	☐ 1 week			
Site: LA TIMES FACILITY	☐ 2 days			Job / SDG No.:
PO# Eco-12-516	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Full VOCs +oxy (8260B)	TPHg (CA LUFT)(8260B)	Sample Specific Notes:
MW-30	5.27.16	0801	G	GW	5	N	N	X	X	
MW-22	"	0825	G	GW	5	N	N	X	X	
MW-29	"	0855	G	GW	5	N	N	X	X	
MW-28	"	0916	G	GW	5	N	N	X	X	
MW-24	"	0933	G	GW	5	N	N	X	X	
MW-21	"	1003	G	GW	5	N	N	X	X	
MW-20	"	1035	G	GW	5	N	N	X	X	
MW-17	"	1103	G	GW	5	N	N	X	X	
MW-18	"	1119	G	GW	5	N	N	X	X	
~~MW-23~~ MW-26	"	1240	G	GW	5	N	N	X	X	
~~MW-26~~ MW-23	"	1315	G	GW	5	N	N	X	X	
TB-2	"	0745	G	W	5	N	N	X	X	

440-148602 Chain of Custody

00 5/27/16 15:15

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 6.3 Corr'd: 6.0 | Therm ID No.: #77

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Helen Thomas	Eco & Associates	5/27/16 13:43			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA-I	Date/Time: 05/27/16 13:43

Login Sample Receipt Checklist

Client: Eco & Associates, Inc

Job Number: 440-148602-1

Login Number: 148602
List Number: 1
Creator: Garcia, Veronica G

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-17 (32.60)	Apr-04			<50	8.6	<0.30UJ	<0.30	<0.60	22	<25	17J	<5.0	<5.0
	Oct-04			<50	10	<0.30UJ	<0.30	<0.60	25	<25	14	<5.0	<5.0
	Apr-05			130	2.2	2.2	<0.30	<0.60	83	150	75	<5.0	<5.0
	Oct-05			67	0.6	0.31	<0.30	<0.60	100	140	75	<5.0	<5.0
	May-06			84	0.49	0.51	<0.30	<0.60	56	50	55	<5.0	<5.0
	Dec-06			<50	<0.30	<0.30	<0.30	<0.60	53	<25	42	<5.0	<5.0
	May-07			<50	<0.30	<0.30	<0.30	<0.60	63	<25	45	<5.0	<5.0
	Nov-07			<100	7.5	<0.50	<0.50	<1.0	24	<10	8.1	<0.50	<0.50
	May-08			<100	7.4	<0.50	<0.50	<1.0	27	<10	8.6	<0.50	<0.50
	Dec-08			<100	4.8	<0.50	<0.50	<1.0	24	<10	9.0	<1.0	<1.0
	May-09			<100	4.6	<0.50	<0.50	<1.0	29	<10	10	<1.0	<1.0
	Oct-09			<100	3.0	<0.50	<0.50	<1.0	29	<10	7.8	<0.50	<0.50
	Jun-10			<100	0.55	<0.50	<0.50	<1.5	33	22	17	<1.0	<1.0
	Oct-10			230	<0.50	<0.50	9.0	3.8	8.7	51	4.5	<0.50	<0.50
	May-11			1200	1.8	<0.50	4.7	<1.5	11	91	6.3	<1.0	<1.0
	Nov-11			280	0.53	<0.50	<0.50	<1.0	24	110	20	<0.50	<0.50
	Jun-12	13.88	18.72	<50	<0.50	<0.50	<0.50	<1.5	25	<10	7.8	<1.0	<1.0
	Aug-12	14.79	17.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	15.13	17.47	66	<0.5	<0.5	<0.5	<1.5	43	15	15	<1.0	<1.0
	Feb-13	NM	NM	170	15	<0.5	0.71	<1.5	<1.0	<10	3.2	<1.0	<1.0
	Jun-13	15.40	17.20	110	<0.5	<0.5	<0.5	<1.5	42	26	26	<1.0	<1.0
	Aug-13	15.78	16.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	16.20	16.40	52	<0.5	<0.5	<0.5	<1.5	28	<10	14	<1.0	<1.0
	Feb-14	16.42	16.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	16.71	15.89	<50	<0.50	<0.50	<0.50	<1.5	35	<10	11	<1.0	<1.0
	Aug-14	18.31	14.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	19.01	13.59	56	<.50	<0.50	<.50	<1.5	35	<10	10	<1.0	<1.0
	Feb-15	18.02	14.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	18.07	14.53	58	<0.50	<0.50	<0.50	<1.5	30	16	10	<1.0	<1.0
	Aug-15	18.28	14.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	18.45	14.15	44J	<0.50	<0.50	<0.50	<1.5	26	11 ID	9.4	<1.0	<1.0
	Feb-16	18.10	14.50	52	<0.50	<0.50	<0.50	<1.5	31	<10	12	<1.0	<1.0
	May-16	18.12	14.48	52	<0.50	<0.50	<0.50	<1.5	34	<10	9.00	<1.0	<1.0
MW-18 (32.77)	Apr-04			340	24	6.3J	0.80	2.5	20	58	14	<5.0	<5.0
	Apr-04			370	21	4.3J	<0.30	0.60	21	57	14	<5.0	<5.0
	Oct-04			410	19	0.45J	<0.30	<0.60	27	55	21	<5.0	<5.0
	Apr-05			330	5.9	5.7	<0.30	2.1	<5.0	<25	<5.0	<5.0	<5.0
	Oct-05			210	0.67	4.1	<0.30	<0.60	11	<25	<5.0	<5.0	<5.0
	May-06			<50	0.74	0.43	<0.30	0.60	<5.0	<25	<5.0	<5.0	<5.0
	Dec-06			<50UJ	<0.30	0.57	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	May-07			120	1.3	2.3	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Nov-07			<100	0.53	<0.50	<0.50	<1.0	1.0	<10	0.64	<0.50	<0.50
	May-08			610	8.6	<0.50	<0.50	<1.0	23	37	15	<0.50	<0.50
	Dec-08			460	28	<0.50	<0.50	<1.0	14	40	11	<1.0	<1.0
	May-09			290	11	<0.50	<0.50	<1.0	16	29	11	<1.0	<1.0
	Oct-09			270	5.8	<0.50	<0.50	<1.0	16	23	7.8	<0.50	<0.50
	Jun-10			160	0.54	<0.50	<0.50	<1.5	6.9	<10	2.1	<1.0	<1.0
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	May-11			360	8.0	0.52	<0.50	31	<1.0	<10	<1.0	<1.0	<1.0
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-12	13.86	18.91	53	<0.50	<0.50	<0.50	<1.5	4.90	<10	1.90	<1.0	<1.0
	Aug-12	14.80	17.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	15.09	17.68	<50	<0.5	<0.5	<0.5	<1.5	4.8	<10	1.1	<1.0	<1.0
	Jun-13	15.42	17.35	<50	<0.5	<0.5	<0.5	<1.5	3.1	<10	<1.0	<1.0	<1.0
	Aug-13	15.79	16.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	16.20	16.57	100	2.4	<0.5	<0.5	<1.5	10	15	5.3	<1.0	<1.0
	Feb-14	16.43	16.34	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	16.66	16.11	120	<0.50	<0.50	<0.50	<1.5	11	13	5.3	<1.0	<1.0
	Aug-14	18.24	14.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	18.97	13.80	150	2	<0.50	<.50	<1.5	9.7	16	4.6	<1.0	<1.0
	Feb-15	17.94	14.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	18.04	14.73	69	<0.50	<0.50	<0.50	<1.5	8.8	14	4.2	<1.0	<1.0
	Aug-15	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	18.41	14.36	85	4.6	<0.50	<0.50	<1.5	9.1	13 ID	4.2	<1.0	<1.0
	Feb-16	18.05	14.72	56	1.7	<0.50	<0.50	<1.5	4.9	10 ID	5.2	<1.0	<1.0
	May-16	18.13	14.64	89	<0.50	<0.50	<0.50	<1.5	9.00	12 ID	3.60	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-19 (33.84)	Apr-04			69	0.38	<0.30UJ	<0.30	<0.60	<5.0	<25	59	<5.0	<5.0
	Oct-04			110	<0.30	1.8J	<0.30	0.78	<5.0	<25	77	<5.0	<5.0
	Apr-05			52	<0.30	1.4	<0.30	<0.60	<5.0	<25UJ	89	<5.0	<5.0
	Oct-05			55	<0.30	1.5	<0.30	<0.60	<10	<50	190	<10	<10
	May-06			190J	<0.30	<0.30	<0.30	<0.60	<5.0	<25	140	<5.0	<5.0
	Dec-06			80	<0.30	<0.30	<0.30	<0.60	<5.0	<25	130	<5.0	<5.0
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			<50	<0.30	<0.30	<0.30	<0.60	<20	<100	180	<20	<20
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			230	<0.50	<0.50	<0.50	<1.0	<0.50	26	190	<0.50	<0.50
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			200 QP1	<1.0	<1.0	<1.0	<2.0	<1.0	<20	210	<1.0	<1.0
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			240 QP1	<0.50	<0.50	<0.50	<1.0	<1.0	31	240	<1.0	<1.0
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			160	<0.50	<0.50	<0.50	<1.0	<1.0	14	200	<1.0	<1.0
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			<200	<1.0	<1.0	<1.0	<2.0	<1.0	<20	180	<1.0	<1.0
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			<200	<1.0	<1.0	<1.0	<3.0	<2.0	<20	150	<2.0	<2.0
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			<100	29	0.69	<0.50	1.6	<0.50	<10	10	<0.50	<0.50
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			<100	2.4	0.75	<0.50	5.3	<1.0	<10	4.5	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	3.2	<0.50	<0.50
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	14.79	19.05	<50	<0.50	<0.50	<0.50	<1.5	<1.0	ND	3.6	<1.0	<1.0
	Aug-12	15.70	18.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	15.95	17.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	16.37	17.47	51	<0.5	<0.5	<0.5	<1.5	<1.0	<10	5	<1.0	<1.0
	Aug-13	16.70	17.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	17.12	16.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	17.34	16.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	17.65	16.19	57	<0.50	<0.50	<0.50	<1.5	<1.0	<10	53	<1.0	<1.0
	Aug-14	19.25	14.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	19.94	13.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	18.93	14.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	19.02	14.82	80	<0.50	<0.50	<0.50	<1.5	<1.0	<10	53	<1.0	<1.0
	Aug-15	19.21	14.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	19.40	14.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	19.02	14.82	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	49	<1.0 F1	<1.0 F1
	May-16	19.11	14.73	71	<0.50	<0.50	<0.50	<1.5	<1.0	<10	46	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-20 (31.58)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			<50	<0.30	<0.30UJ	<0.30	<0.60	<5.0	<25	7.4	<5.0	<5.0
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	19	<5.0	<5.0
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sep-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-06			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	17	<5.0	<5.0
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			<100	<0.50	<0.50	<0.50	<1.0	0.63	<10	5.5	<0.50	<0.50
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	5.2	<1.0	<1.0
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			<100	<0.50	<0.50	<0.50	<1.0	0.87	<10	6.0	<0.50	<0.50
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	1.8	<10	23	<0.50	<0.50
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			<100	<0.50	<0.50	<0.50	<1.5	2.3	<10	32	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	3.7	<10	24	<0.50	<0.50
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	12.41	19.17	<50	<0.50	<0.50	<0.50	<1.5	1.3	<10	12	<1.0	<1.0
	Aug-12	13.36	18.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	13.68	17.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	14.00	17.58	<50	<0.5	<0.5	<0.5	<1.5	1.7	<10	11	<1.0	<1.0
	Aug-13	14.32	17.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	14.76	16.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	14.99	16.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	15.26	16.32	<50	<0.50	<0.50	<0.50	<1.5	1.2	<10	7.2	<1.0	<1.0
	Aug-14	16.81	14.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	17.54	14.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	16.53	15.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	16.65	14.93	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	3.9	<1.0	<1.0
	Aug-15	16.82	14.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	17.01	14.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	16.68	14.90	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	5.7	<1.0	<1.0
	May-16	16.75	14.83	<50	<0.50	<0.50	<0.50	<1.5	1.10	<10	5.20	<1.0	<1.0

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LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-21 (31.21)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			<50	<0.30	<0.30UJ	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			<50	<0.30	<0.30UJ	<0.30	<0.60	<5.0	<25	19	<5.0	<5.0
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	14	<5.0	<5.0
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	15	<5.0	<5.0
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	16	<5.0	<5.0
	Sep-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-06			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	13	<5.0	<5.0
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	9.8	<5.0	<5.0
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			<100	<0.50	<0.50	<0.50	<1.0	3.1	<10	21	<0.50	<0.50
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			<100	<0.50	<0.50	<0.50	<1.0	4.4	<10	25	<0.50	<0.50
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	2.6	<10	9.7	<1.0	<1.0
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			<100	<0.50	<0.50	<0.50	<1.0	3.8	<10	11	<1.0	<1.0
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			<100	<0.50	<0.50	<0.50	<1.0	4.9	<10	25	<0.50	<0.50
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	2.7	<10	13	<1.0	<1.0
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			130	<0.50	<0.50	0.53	<1.0	1.8	23	24	<0.50	<0.50
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			160	<0.50	<0.50	<0.50	<1.5	1.0	24	19	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	2.1	16 ID	20	<0.50	<0.50
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	12.54	18.87	<50	<0.50	<0.50	<0.50	<1.5	2.5	<10	13	<1.0	<1.0
	Aug-12	13.50	17.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	13.81	17.60	<50	<0.5	<0.5	<0.5	<1.5	6.6	<10	24	<1.0	<1.0
	Jun-13	14.15	17.26	62	<0.5	<0.5	<0.5	<1.5	4.3	<10	12	<1.0	<1.0
	Aug--13	14.18	16.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	14.95	16.46	<50	<0.5	<0.5	<0.5	<1.5	6.7	<10	21	<1.0	<1.0
	Feb-14	15.13	16.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	15.38	16.03	<50	<0.50	<0.50	<0.50	<1.5	3.5	<10	11	<1.0	<1.0
	Aug-14	16.90	14.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	17.67	13.74	<50	<.50	<0.50	<.50	<1.5	7.1	<10	26	<1.0	<1.0
	Feb-15	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	16.75	14.66	<50	<0.50	<0.50	<0.50	<1.5	5.4	<10	18	<1.0	<1.0
	Aug-15	16.94	14.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	17.13	14.28	<50	<0.50	<0.50	<0.50	<1.5	5.3	10	9.2	<1.0	<1.0
	Feb-16	16.75	14.66	<50	<0.50	<0.50	<0.50	<1.5	3.4	<10	11	<1.0	<1.0
	May-16	16.85	14.56	<50	<0.50	<0.50	<0.50	<1.5	4.40	<10	8.60	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
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Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-22 (34.41)	Jan-04			12,000	3,200	190	1,000	210	<50	<250	<50	<50	<50
	Apr-04			8,600	2,100	280J	700	300	<5.0	25	7.9	<5.0	<5.0
	Jul-04			4,200	660	59	410	80	<5.0	25	<5.0	<5.0	<5.0
	Oct-04			53	2.6	1.7	2.5	5.0	<5.0	<25	<5.0	<5.0	<5.0
	Oct-04			72	2.5	2.4J	2.7	5.8	<5.0	<25	<5.0	<5.0	<5.0
	Jan-05			<50	2.6J	1.7J	0.49	2.5	<5.0	<25	<5.0	<5.0	<5.0
	Jan-05			<50	0.94J	0.55J	<0.30	0.79	<5.0	<25	<5.0	<5.0	<5.0
	Apr-05			2,000J	270J	3.3	280	<3.0	<5.0	<25	13	<5.0	<5.0
	Jul-05			1,600	120	11	18	<12	<5.0	<25	6.1	<5.0	<5.0
	Jul-05			1,300	100	8.0	16	<6.0	<5.0	<25	10	<5.0	<5.0
	Oct-05			3,100J	330	25	56	35	<50	<250	<50	<50	<50
	Feb-06			1,200	54J	6.8J	<3.0UJ	<6.0	<50	<25	30J	<5.0	<5.0
	May-06			220	8.5	1.8	<0.30	<0.60	6.7	<25	54	<5.0	<5.0
	May-06			230	8.9J	1.9J	<0.30UJ	<0.60UJ	6.6	<25	52	<5.0	<5.0
	Sep-06			210	17	3.1	<0.30	<0.60	5.6	<25	32	<5.0	<25
	Sep-06			200	17	3.0	<0.30	<0.60	5.4	<25	32	<5.0	<25
	Dec-06			140	4.5	0.90	<0.30	<0.60	<5.0	<25	34	<5.0	<5.0
	Dec-06			120	3.8	0.68	<0.30	<0.60	<5.0	<25	32	<5.0	<5.0
	Mar-07			67	2.9	0.45	<0.30	<0.60	<5.0	<25	32	<5.0	<5.0
	May-07			130	8.5	1.3	<0.30	<0.60	<5.0	<25	31	<5.0	<5.0
	Aug-07			540	63	<0.50	<0.50	<1.0	4.4	<10	33	<0.50	<0.50
	Nov-07			930	52	0.52	<0.50	<1.0	5.6	<10	51	<0.50	<0.50
	Nov-07			880	50	<0.50	<0.50	<1.0	5.7	<10	50	<0.50	<0.50
	Feb-08			1,200	11	<0.50	1.3	<1.0	5.2	<10	56	<0.50	<0.50
	May-08			1,100	16	1.4	26	<1.0	4.1	<10	45	<0.50	<0.50
	Aug-08			1,100	<0.50	<0.50	<0.50	<1.0	7.2	<10	92	<1.0	<1.0
	Dec-08			840	3.5	<0.50	2.1	<1.0	5.0	<10 C	72	<1.0	<1.0
	Mar-09			930	<0.50	<0.50	<0.50	<1.0	5.2	<10	74	<0.50	<0.50
	May-09			820	<0.50	<0.50	<0.50	<1.0	4.9	<10	85	<1.0	<1.0
	May-09			670	<0.50	<0.50	<0.50	<1.0	4.5	<10	78	<1.0	<1.0
	Aug-09			270	<0.50	<0.50	<0.50	<1.5	4.9	<10	71	<1.0	<1.0
	Aug-09			270	<0.50	<0.50	<0.50	<1.5	5.0	<10	73	<1.0	<1.0
	Oct-09			250	1.4	<0.50	<0.50	<1.0	3.7	<10	67	<0.50	<0.50
	Feb-10			630	3.6	<1.0	1.4	<2.0	3.7	<20	62	<1.0	<1.0
	Jun-10			200	0.63	<0.50	<0.50	<1.5	4.2	<10	66	<1.0	<1.0
	Jun-10			180	0.56	<0.50	<0.50	<1.5	4.0	<10	62	<1.0	<1.0
	Aug-10			200	1.0	<0.50	<0.50	<1.0	3.7	<10	47	<0.50	<0.50
	Oct-10			110	<0.50	<0.50	<0.50	<1.0	3.3	<10	46	<0.50	<0.50
	Oct-10			110	<0.50	<0.50	<0.50	<1.0	3.2	<10	46	<0.50	<0.50
	Feb-11			140	0.90	<0.50	<0.50	<1.0	5.4	<10	48	<0.50	<0.50
	Feb-11			140	0.89	<0.50	<0.50	<1.0	5.5	<10	48	<0.50	<0.50
	May-11			120	0.88	<0.50	<0.50	<1.5	6.2	<10	65	<1.0	<1.0
	May-11			120	0.64	<0.50	<0.50	<1.5	5.8	<10	59	<1.0	<1.0
	Aug-11			<100	<0.50	<0.50	<0.50	<1.0	6.9	<10	49	<0.50	<0.50
	Nov-11			100	<0.50	<0.50	<0.50	<1.0	8.7	<10	59	<0.50	<0.50
	Feb-12			100	<0.50	<0.50	<0.50	<1.0	8.8	<10	49	<0.50	<0.50
	Jun-12	16.11	18.30	55	<0.50	<0.50	<0.50	<1.5	6	<10	30	<1.0	<1.0
	Aug-12	17.00	17.41	64	< 0.28	< 0.36	< 0.25	< 0.9	6.5	<6.5	36	<0.33	<0.28
	Dec-12	16.88	17.53	64	<0.5	<0.5	<0.5	<1.5	8.7	<10	42	<1.0	<1.0
	Jun-13	17.24	17.17	87	<0.5	<0.5	<0.5	<1.5	7.6	<10	39	<1.0	<1.0
	Aug-13	17.59	16.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	18.06	16.35	58	<0.5	<0.5	<0.5	<1.5	8.5	<10	40	<1.0	<1.0
	Feb-14	18.20	16.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	18.46	15.95	61	<0.50	<0.50	<0.50	<1.5	9.3	<10	52	<1.0	<1.0
	Aug-14	19.15	15.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	20.75	13.66	72	<.50	<0.50	<.50	<1.5	6.5	<10	42	<1.0	<1.0
	Feb-15	19.82	14.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	19.86	14.55	79	<0.50	<0.50	<0.50	<1.5	6.1	<10	45	<1.0	<1.0
	Aug-15	20.06	14.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	20.21	14.20	67	<0.50	<0.50	<0.50	<1.5	5.2	<10	41	<1.0	<1.0
	Feb-16	19.92	14.49	73	<0.50	<0.50	<0.50	<1.5	7.3	<10	52	<1.0	<1.0
	May-16	19.95	14.46	69	<0.50	<0.50	<0.50	<1.5	6.20	<10	45	<1.0	<1.0

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Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-23 (32.75)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			<50	<0.30UJ	<0.30	<0.30	<0.60	<5.0	<25	9.4	<5.0	<5.0
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			59	<0.30	0.65	<0.30	<0.60	<5.0	<25	9.7	<5.0	<5.0
	Sep-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			<50	<0.30	1.0	<0.30	<0.60	<5.0	<25	20	<5.0	<5.0
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	38	<0.50	<0.50
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			180	<0.50	<0.50	<0.50	<1.0	<0.50	<10	41	<0.50	<0.50
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	30	<1.0	<1.0
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	39	<1.0	<1.0
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			110	<0.50	<0.50	<0.50	<1.0	<0.50	<10	38	<0.50	<0.50
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	21	<1.0	<1.0
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	15	<0.50	<0.50
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.69	<0.50	<0.50
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	13.32	19.43	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	14.25	18.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	14.50	18.25	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	2.8	<1.0	<1.0
	Jun-13	14.86	17.89	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	1	<1.0	<1.0
	Aug-13	15.20	17.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	15.70	17.05	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	2.7	<1.0	<1.0
	Feb-14	15.86	16.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	16.17	16.58	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	3	<1.0	<1.0
	Aug-14	17.75	15.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	18.42	14.33	55	<.50	<0.50	<.50	<1.5	<1.0	<10	15	<1.0	<1.0
	Feb-15	17.42	15.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	17.55	15.20	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	4.3	<1.0	<1.0
	Aug-15	17.74	15.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	17.95	14.80	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	6.1	<1.0	<1.0
	Feb-16	17.59	15.16	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	2.6	<1.0	<1.0
	May-16	17.68	15.07	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	2.50	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
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Well No. (Elevation)	Date	Depth to Water	GW Elevation	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
		ft btoc	ft msl	µg/L									
MW-24 (33.92)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			11,000	1,300	1,700J	540	2,500	9.0	<25	67.0	<5.0	<5.0
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			140,000J	7,100J	17,000J	3,400J	24,000J	<250	<1,200	<250	<250	<250
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			92,000	7,200	11,000	2,500	16,000	<20	<100	160	<20	<20
	Sep-06			260,000J	11,000J	13,000J	3,400J	17,000J	<5.0UJ	60J	96J	<5.0UJ	<5.0UJ
	Dec-06			130,000J	9,200	13,000	2,500	18,000	<100	<500	130	<100	<100
	Mar-07			120,000	7,700	11,000	2,300	15,000	<120	<620	120	<120	<120
	May-07			77,000	5,000	6,500	2,300[21]	15,000	<20	<100	60	<20	<20
	Aug-07			55,000	9,000	9,100	4,000	19,000	<100	<2,000	<100	<100	<100
	Nov-07			68,000	7,600	7,500	3,800	17,000	<50	<1,000	110	<50	<50
	Feb-08			54,000	2,100	3,400	2,800	15,000	<50	<1,000	<50	<50	<50
	May-08			56,000	4,700	4,900 M2	3,100	16,000	<50	<1,000	65	<50	<50
	Aug-08			56,000 M2	6,200	4,600	2,700	12,000	<100	<1,000	<100	<100	<100
	Dec-08			39,000	3,300	3,700	2,300	12,500	<100	<1,000	<100	<100	<100
	Mar-09			16,000	780	790	700	3,400	<2.5	<50	<2.5	<2.5	<2.5
	May-09			26,000	1,500	1,100	720	4,400	<50	<500	<50	<50	<50
	Aug-09			49,000	6,500	4,800	2,400	10,000	<50	<500	58	<50	<50
	Oct-09			65,000	7,200	6,900	2,900	11,000	<50	<1000	74	<50	<50
	Feb-10			6,700	280	270	200	810	8.5	60	<2.0	<2.0	<2.0
	Jun-10			14,000	1,400	710	690	1,700	<20	<200	<20	<20	<20
	Aug-10			19,000	1,700	770	690	2,400	<5.0	<100	19	<5.0	<5.0
	Aug-10			17,000	1,600	670	610	2,200	<5.0	<100	16	<5.0	<5.0
	Oct-10			2,700	210	25	6.7	340	<1.0	<20	1.7	<1.0	<1.0
	Feb-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	May-11			7,300	670	160	350	440	<10	<100	<10	<10	<10
	Aug-11			7,100	1,800	72	430	<25	<12	<250	17	<12	<12
	Aug-11			7,100	1,800	48	430	<25	<12	<250	17	<12	<12
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-12			3,200	370	54	220	85	<5.0	<100	11	<5.0	<5.0
	Jun-12	15.20	18.72	3,100	500	48	240	46	<10	<100	19	<10	<10
	Aug-12	16.07	17.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	16.38	17.54	5800	1600	68	190	78	<10	<100	44	<10	<10
	Feb-13	15.92	18.00	6100	810	180	550	240	<10	<100	19	<10	<10
	Jun-13	16.73	17.19	2000	380	19	110	<15	<10	<100	20	<10	<10
	Aug-13	17.11	16.81	670	3	0.7	4.2	<1.5	5.5	<10	27	<1.0	<1.0
	Nov-13	17.55	16.37	400	49	<0.5	<0.5	<1.5	1.8	15	14	<1.0	<1.0
	Feb-14	17.69	16.23	2400	380	42	160	9.0	<4.0	<40	30	<4.0	<4.0
	May-14	18.03	15.89	4000	670	91	320	79	<10	<100	15	<10	<10
	Aug-14	19.61	14.31	3100	640	72	160	140	<10	<100	14	<10	<10
	Nov-14	20.32	13.60	150	2.4	<0.50	1.5	<1.5	8.2	<10	32	<1.0	<1.0
	Feb-15	19.34	14.58	430	97	1.5	4.1	0.70J	7.9	6.0JD	43	>0.25	>0.25
	Jun-15	19.40	14.52	170	0.97	<0.50	0.77	<1.5	14	<10	49	<1.0	<1.0
	Aug-15	19.58	14.34	180	3.2	<0.5	0.91	<1.5	13	<10	47	<1.0	<1.0
	Nov-15	19.30	14.62	620	140	6	7.5	1.3J	7.3	<25	24	<2.5	<2.5
	Feb-16	19.45	14.47	88	<0.50	<0.50	0.51	<1.5	11	<10	36	<1.0	<1.0
	May-16	19.50	14.42	190	1.80	<0.50	0.51	<1.5	14	11 ID	51	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-25R * (32.42)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			15,000	620	1,000J	790	3,400	<5.0	<25	<5.0UJ	<5.0	<5.0
	Jan-05			38,000	630J	3,000J	1,200	8,500	<5.0	<250	<50	<50	<50
	Apr-05			170,000J	2,400J	7,000J	2,900J	15,000J	<5.0	30J	6.6	<5.0	<5.0
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			64,000	3,400	6,600	2,200	8,200	<5.0	<25	16	<5.0	<5.0
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-06			21,000	1,800	1,700	210	2,300	<50	<250	<50	<50	<50
	Dec-06			4,500J	500	<15	80	<30	<5.0	<25	13	<5.0	<5.0
	Mar-07			1,400	230	6.0	66	<6.0	<5.0	<25	17	<5.0	<5.0
	May-07			430	46	3.8	1.5	<3.0	<5.0	<25	9.6	<5.0	<5.0
	May-07			450	49	4.1	<1.5	<3.0	<5.0	<25	9.3	<5.0	<5.0
	Aug-07			830	58	<1.0	2.7	<2.0	<1.0	<20	11	<1.0	<1.0
	Nov-07			1,000 M2	12	1.2	2.8	1.1	<0.50	<10	15	<0.50	<0.50
	Feb-08			3,400	690	80	310	38	<2.5	<50	22	<2.5	<2.5
	May-08			3,200	1,300	5.8	37	11	<5.0	<100	25	<5.0	<5.0
	Aug-08			850 QP1, ZX	210	<1.2	<1.2	<2.5	<2.5	<25	19	<2.5	<2.5
	Dec-08			150	7.4	<0.50	<0.50	<1.0	<1.0	<10	8.0	<1.0	<1.0
	Mar-09			270	11	<0.50	<0.50	<1.0	<0.50	<10	10	<0.50	<0.50
	May-09			380	4.2	<0.50	<0.50	<1.0	<1.0	<10	13	<1.0	<1.0
	May-09			450	4.8	<0.50	<0.50	<1.0	<1.0	<10	13	<1.0	<1.0
	Aug-09			200	2.0	<0.50	<0.50	<1.5	<1.0	<10	5.7	<1.0	<1.0
	Oct-09			280	7.4	<0.50	1.1	<1.0	<0.50	<10	5.0	<0.50	<0.50
	Oct-09			220	8.2	<0.50	1.4	<1.0	<0.50	<10	5.6	<0.50	<0.50
	Feb-10			270	3.6	<0.50	<0.50	<1.0	<0.50	<10	5.3	<0.50	<0.50
	Jun-10			130	4.5	<0.50	<0.50	<1.5	<1.0	<10	5.6	<1.0	<1.0
	Aug-10			<100	1.8	<0.50	<0.50	<1.0	<0.50	<10	2.9	<0.50	<0.50
	Oct-10			<100	1.3	<0.50	<0.50	<1.0	<0.50	<10	1.9	<0.50	<0.50
	Feb-11			120	21	<0.50	<0.50	<1.0	<0.50	<10	4.3	<0.50	<0.50
	May-11			<100	0.85	<0.50	<0.50	<1.5	<1.0	<10	4.6	<1.0	<1.0
	Aug-11			<100	1.2	<0.50	<0.50	<1.0	<0.50	<10	3.5	<0.50	<0.50
	Nov-11			<100	0.86	<0.50	<0.50	<1.0	<0.50	<10	1.0	<0.50	<0.50
	Feb-12			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.64	<0.50	<0.50
	Jun-12	14.69	17.73	<50	1.2	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	15.67	16.75	61	2.3	< 0.36	< 0.25	< 0.9	<0.32	<6.5	3.4	<0.33	<0.28
	Dec-12	15.95	16.47	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Jun-13	16.33	16.09	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-13	16.65	15.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	17.07	15.35	<50	0.67	<0.5	<0.5	<1.5	<1.0	<10	1.5	<1.0	<1.0
	Feb-14	17.29	15.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	17.69	14.73	58	0.62	<0.50	<0.50	<1.5	<1.0	<10	2.4	<1.0	<1.0
	Aug-14	19.40	13.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	19.98	12.44	64	<.50	<0.50	<.50	<1.5	<1.0	<10	2.7	<1.0	<1.0
	Feb-15	19.01	13.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	19.01	13.41	110	0.76	<0.50	<0.50	<1.5	<1.0	<10	4.2	<1.0	<1.0
	Aug-15	19.19	13.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	19.33	13.09	56	1.6	<0.50	<0.50	<1.5	<1.0	<10	2.8	<1.0	<1.0
	Feb-16	18.91	13.51	<50	1.6	<0.50	<0.50	<1.5	<1.0	<10	3.5	<1.0	<1.0
	May-16	19.03	13.39	55	2.40	<0.50	<0.50	<1.5	<1.0	<10	<10	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-26 (30.03)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			<50	<0.30UJ	<0.30UJ	<0.30UJ	<0.60UJ	<5.0	<25	<5.0	<5.0	<5.0
	Sep-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	10.84	19.19	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	11.79	18.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	12.12	17.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	12.43	17.16	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-13	12.74	17.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	13.21	16.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	13.37	16.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	13.78	16.25	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-14	15.36	14.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	16.04	13.99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	14.99	15.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	15.11	14.92	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-15	15.30	14.73	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	15.49	14.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	15.11	14.92	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	May-16	15.20	14.83	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-27 (33.81)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			46,000	2,600	11,000J	2,200	11,000	<25	<120	340	<25	<25
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			78,000	2,100	4,700	3,500	19,000	<25	<120	170	<25	<25
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			24,000	1,400	480	1,300	3,300	<5.0	27	120	<5.0	<5.0
	Sep-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-06			50,000	2,100J	3,000	1,800J	6,100	<5.0	33	78	<5.0	<5.0
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			32,000	1,900	1,400	1,900	6,600	<5.0	32	96	<5.0	<5.0
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			24,000	2,000	680	1,400	3,700	<10	<200	270	<10	<10
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			33,000	990	420	1,300	6,900	<25	<500	120	<25	<25
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			10,000	1,300	93	560	1,770	<20	<200	140	<20	<20
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			6,700	1,500	59	250	520	<20	<200	170	<20	<20
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			11,000	1,700	62	340	680	5.2	<100	250	<5.0	<5.0
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			6,200	800	66	470	710	<20	<200	43	<20	<20
	Jun-10			6,000	750	60	440	660	<20	<200	42	<20	<20
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			4,100	210	19	100	440	<2.0	<40	15	<2.0	<2.0
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			<100	8.3	<0.50	<0.50	<1.5	<1.0	<10	5.3	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			<100	5.8	<0.50	<0.50	<1.0	<0.50	<10	4.7	<0.50	<0.50
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	14.97	18.84	300	31	<0.50	1.1	<1.5	<1.0	<10	9.1	<1.0	<1.0
	Aug-12	15.89	17.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	16.15	17.66	150	10	<0.5	<0.5	<1.5	<1.0	<10	2.1	<1.0	<1.0
	Feb-13	15.76	18.05	170	15	<0.5	0.71	<1.5	<1.0	<10	3.2	<1.0	<1.0
	Jun-13	16.56	17.25	190	13	<0.5	<0.5	<1.5	<1.0	<10	3.5	<1.0	<1.0
	Aug-13	16.90	16.91	670	28	0.65	<0.5	<1.5	<1.0	<10	8.4	<1.0	<1.0
	Nov-13	17.33	16.48	330	110	<0.5	<0.5	<1.5	<1.0	15	47	<1.0	<1.0
	Feb-14	17.51	16.30	300	49	<0.50	<0.50	<1.5	1.1	19	53	<1.0	<1.0
	May-14	17.84	15.97	960	120	<0.50	0.74	<1.5	1.2	22	62	<1.0	<1.0
	Aug-14	19.44	14.37	1300	180	<0.52	0.79	<1.5	2.2	38	110	<1.0	<1.0
	Nov-14	20.16	13.65	1400	500	<5	<5	<15	<10	<100	140	<10	<10
	Feb-15	19.17	14.64	2400	650	2.5	28	<2.5	3.1J	73	220	<1.3	<1.3
	Jun-15	19.23	14.58	1900	240	1.8	1.5	2	3.8	62	180	<1.0	<1.0
	Aug-15	19.42	14.39	4500	950	14	65	23	<10	<100	180	<10	<10
	Nov-15	19.60	14.21	2800	810	7.8	23	61	<20	<200	100	<20	<20
	Feb-16	19.26	14.55	730	110	<1.3	1.5	<3.8	<2.5	27	130	<2.5	<2.5
	May-16	19.32	14.49	670	29	<1.3	1.00	<3.8	1.20	35	56	<2.5	<2.5

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-28 (34.00)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			130,000	3,900	14,000	1,400	22,000	<200	<1,000	<200	<200	<200
	Sep-06			180,000J	5,500J	18,000J	2,100J	27,000J	<5.0	34	42	<5.0	<5.0
	Dec-06			120,000	5,000J	13,000	1,300J	20,000	<5.0	<25	55	<5.0	<5.0
	Mar-07			120,000	6,100	17,000	1,600	24,000	<100	<500	120	<100	<100
	May-07			83,000	6,300	15,000	1,500	21,000	7.1	35	63	<5.0	<5.0
	Aug-07			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nov-07			90,000	8,800	21,300	2,700	25,000	<100	<2,000	110	<100	<100
	Feb-08			41,000	2,600	6,700	1,300	9,800	<50	<1,000	<50	<50	<50
	May-08			39,000	1,700	3,900[21]	830	8,200	<50	<1,000	<50	<50	<50
	Aug-08			58,000[21]	6,000	16,000	2,200	16,000	<250	<2,500	<250	<250	<250
	Dec-08			34,000	2,900[21]	7,100	1,400	11,700	<100	<1,000 C	<100	<100	<100
	Mar-09			12,000	1,100	710[21]	430	2,700[21]	<5.0	<100	<5.0	<5.0	<5.0
	May-09			41,000	4,700	6,800	1,700	11,000	<40	<400	<40	<40	<40
	Aug-09			30,000	2,400	550	1,100	6,700	<25	<250	31	<25	<25
	Oct-09			38,000	3,700	490	1,500	8,100	<10	<200	42	<10	<10
	Feb-10			8,700	800	220	430	1,300	<10	<200	<10	<10	<10
	Jun-10			6,700	1,500	110	510	410	<20	<200	<20	<20	<20
	Aug-10			8,800	1,300	250	470	970	<5.0	<100	14	<5.0	<5.0
	Oct-10			13,000	2,300	250	750	2,100	<10	<200	20	<10	<10
	Feb-11			5,200	800	38	320	290	<5.0	<100	8.8	<5.0	<5.0
	May-11			15,000	3,200	130	820	660	<10	<100	51	<10	<10
	Aug-11			8,500	2,500	<20	670	<40	<20	<400	120	<20	<20
	Aug-11			8,900	2,600	<20	680	<40	<20	<400	120	<20	<20
	Nov-11			5,400	2,100	18	130	<25	22	<250	160	<12	<12
	Nov-11			5,100	2,000	16	120	<25	20	<250	150	<12	<12
	Feb-12			3,800	1,900	<13	<13	<25	16	<250	130	<13	<13
	Feb-12			3,700	1,800	<10	13	<20	17	<200	130	<10	<10
	Jun-12	16.01	17.99	2,700	1,100	22	17	73	<20	<200	84	<20	<20
	Aug-12	16.55	17.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	17.02	16.98	2200	1200	<10	<10	<30	21	<200	140	<20	<20
	Feb-13	16.76	17.24	2300	1200	<10	<10	<30	<20	<200	130	<20	<20
	Jun-13	17.19	16.81	2200	910	<10	<10	<30	<20	<200	120	<20	<20
	Aug-13	17.48	16.52	780	27	5.9	5.9	17	16	<10	79	<1.0	<1.0
	Nov-13	17.82	16.18	1500	600	<5.0	<5.0	<15	16	<100	110	<10	<10
	Feb-14	17.93	16.07	550	130	<1.0	<1.0	<3.0	13	26	91	<2.0	<2.0
	May-14	18.33	15.67	3000	1700	<10	<10	<30	21	<200	140	<20	<20
	Aug-14	19.81	14.19	1600	860	<10	<10	<30	<20	<200	81	<20	<20
	Nov-14	20.52	13.48	430	3	<0.50	<.50	<1.5	17	22	89	<1.0	<1.0
	Feb-15	19.60	14.40	1300	630	3.1	6.1	6.4	2.1J	<20	29	<1.0	<1.0
	Jun-15	19.61	14.39	6700	4800	12	21	39	24	<200	220	<20	<20
	Aug-15	20.80	13.20	7600	4400	<25	34	<75	<50	<500	220	<50	<50
	Nov-15	19.99	14.01	8600	5300	<50	<50	58J	<100	<1000	190	<100	<100
	Feb-16	19.92	14.08	3,400	2,600	<25	<25	<75	<50	<500	120	<50	<50
	May-16	19.70	14.30	2400	950	<25	<25	<75	<50	<500	36	<50	<50

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-29 (33.53)	Jan-04			1,800	80	20	31	77	<5.0	<25	<5.0	<5.0	<5.0
	Apr-04			3,200	500	42J	130	96	<5.0	<25	<5.0	<5.0	<5.0
	Jul-04			5,600	780	130	230	390	<5.0	<25	7.5	<5.0	<5.0
	Oct-04			15,000	760	340J	550	1,800	<5.0	<25	<5.0UJ	<5.0	<5.0
	Jan-05			<50	<0.30UJ	<0.30UJ	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Apr-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-05			5,300	440J	95	150	100	<5.0	<25	7.9	<5.0	<5.0
	Oct-05			14,000	1,500	330	370	1,200	<5.0	34	18	<5.0	<5.0
	Feb-06			24,000	3,700J	290J	680J	2,400	<5.0	54	29J	<5.0	<5.0
	May-06			<50UJ	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Sep-06			14,000	1,900	79	140	970	<5.0	<25	17	<5.0	<5.0
	Dec-06			23,000	3,900	210	230	1,500	<250	<1,200	<250	<250	<250
	Mar-07			<50	0.42	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	May-07			2,200 QP1	480	8.2	23	24	<5.0	<25	13	<5.0	<5.0
	Aug-07			4,800	1,700	47	72	530	<10	<200	30	<10	<10
	Nov-07			1,600[21]	370	9.5	19	58	<5.0	<100	<5.0	<5.0	<5.0
	Feb-08			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	May-08			1,100	170	5.1	26	8.3	<0.50	<10	1.3	<0.50	<0.50
	Aug-08			750 ZX	41	2.4	6.9	3.7	<1.0	<10	2.8	<1.0	<1.0
	Aug-08			740	27	1.6	3.2	1.2	<1.0	<10	2.5	<1.0	<1.0
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10 C	<1.0	<1.0	<1.0
	Mar-09			<100	<1.0	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	May-09			2,000 M2	280	18	25	21	<1.0	<10	3.6	<1.0	<1.0
	Aug-09			1,600	230	11	26	32	<4.0	<40	<4.0	<4.0	<4.0
	Oct-09			1,400	110	7.0	5.0	20	<0.50	<10	1.5	<0.50	<0.50
	Feb-10			<100	6.6	<0.50	<0.50	1.4	<0.50	<10	<0.50	<0.50	<0.50
	Jun-10			1,500	59	7.3	30	67	<4.0	<40	<4.0	<4.0	<4.0
	Aug-10			3,100	190	14	76	130	<0.50	<10	5.2	<0.50	<0.50
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			3,900	520	16[21]	55	130	<2.5	<50	11	<2.5	<2.5
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-12			<100	4.4	<0.50	<0.50	<1.0	<0.50	<10	1.8	<0.50	<0.50
	Jun-12	14.65	18.88	860	120	3	5.4	41	<2.5	<25	3.5	<2.5	<2.5
	Aug-12	15.61	17.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	15.13	18.40	<50	1.9	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Feb-13	15.32	18.21	<50	1.2	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Jun-13	16.26	17.27	920	120	3.6	16	29	<5	<50	5.3	<5	<5
	Aug-13	16.65	16.88	3600	560	12	45	90	<5.0	<5.0	19	<5.0	<5.0
	Nov-13	16.89	16.64	160	9.7	<0.5	<0.5	3.1	<1.0	<10	<1.0	<1.0	<1.0
	Feb-14	17.06	16.47	570	93	1.5	2.9	11	<1.0	<10	7.1	<1.0	<1.0
	May-14	17.56	15.97	860	160	3.3	9.2	21	<2.5	<25	11	<2.5	<2.5
	Aug-14	19.10	14.43	2000	380	7.5	14	64	<5.0	<50	14	<5.0	<5.0
	Nov-14	19.82	13.71	2900	570	8.3	8.4	70	<1.0	<10	16	<1.0	<1.0
	Feb-15	16.71	16.82	<25	0.46J	<0.25	<0.25	<0.50	<0.25	<5.0	<0.25	<0.25	<0.25
	Jun-15	18.87	14.66	510	84	2	4.3	8.7	<2.0	<20	4.3	<2.0	<2.0
	Aug-15	19.10	14.43	800	74	2.1	8.9	8.9	<1.0	<10	3.9	<1.0	<1.0
	Nov-15	19.78	13.75	1000	180	2.8	11	<6.0	<4.0	<40	6.4	<4.0	<4.0
	Feb-16	17.44	16.09	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	May-16	18.93	14.60	730	120	2.00	4.70	5.00	<1.0	<10	3.60	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water	GW Elevation	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
		ft btoc	ft msl	µg/L									
MW-30 (32.97)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			<50	<0.30UJ	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jun-06 (R^{33})			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Sep-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-06			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Mar-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-07			<50	0.47	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Aug-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-07			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-08			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Aug-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-08			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Mar-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-09			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0
	Aug-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-09			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-10			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-11			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-12			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-12	14.98	17.99	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	15.69	17.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dec-12	16.05	16.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	16.34	16.63	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-13	16.61	16.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	17.09	15.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	17.31	15.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	17.56	15.41	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-14	19.15	13.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	19.88	13.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	18.92	14.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	18.94	14.03	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-15	19.13	13.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	20.30	12.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	18.99	13.98	<10	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	May-16	19.00	13.97	<10	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water	GW Elevation	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
		ft btoc	ft msl	µg/L									
MW-31 (31.24)	Jan-04			6,700	1,100	140	160	410	<12	65	14	<12	<12
	Apr-04			5,000	810	140J	140	240	<12	80	<12	<12	<12
	Jul-04			6,800	870	100J	150	320	<12	74	<12	<12	<12
	Oct-04			6,900	1,000	87J	190	350	<10	77	11	<10	<10
	Oct-04			6,400	1,000	89J	170	330	<10	86	13	<10	<10
	Jan-05			6,200	1,100J	410J	190	350	<12	<62	<12	<12	<12
	Apr-05			4,200	760	28	55	94	<12	120	<12	<12	<12
	Apr-05			4,200	690	25	51	86	<12	110	<12	<12	<12
	Jul-05			2,200	250	13	6.8	18	<5.0	26	<5.0	<5.0	<5.0
	Jul-05			2,800	380J	17	<15	<30	<5.0	26	<5.0	<5.0	<5.0
	Oct-05			4,200	670	<15	30	39	<5.0	57	<5.0	<5.0	<5.0
	Oct-05			4,200	610	16	<15	<30	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-06			830	110J	5.9J	<1.5UJ	4.4	<5.0	100	<5.0	<5.0	<5.0
	May-06			320	2.5J	4.1	<0.30	1.4	<5.0	170	<5.0	<5.0	<5.0
	May-06			340	0.70J	4.0	<0.30	1.3	<5.0	140	<5.0	<5.0	<5.0
	Sep-06			650J	23J	4.7J	0.36J	2.5J	14	100	<5.0	<5.0	<5.0
	Dec-06			1,100	32	5.7	<1.5	3.1	<5.0	110	<5.0	<5.0	<5.0
	Mar-07			600J	52	2.8	0.89	4.3	<5.0	91	<5.0	<5.0	<5.0
	May-07			2,300	220	10	5.1	29	<5.0	86	<5.0	<5.0	<5.0
	May-07			1,600	130	9.4	3.4	19	<5.0	82	<5.0	<5.0	<5.0
	Aug-07			2,700	530	11	16	67	<2.5	68	5.3	<2.5	<2.5
	Aug-07			2,500	420	9.8	14	70	<2.5	83	5.3	<2.5	<2.5
	Nov-07			3,500	520	9.0	11	55	<2.5	86	2.8	<2.5	<2.5
	Nov-07			3,300	380	7.2	9.0	43	<2.5	92	2.8	<2.5	<2.5
	Feb-08			750	3.0	2.2	0.65	<1.0	<0.50	<10	0.51	<0.50	<0.50
	May-08			340	0.66	<0.50	<0.50	<1.0	<0.50	12	0.71	<0.50	<0.50
	Aug-08			330	<0.50	<0.50	<0.50	<1.0	<1.0	23	1.7	<1.0	<1.0
	Aug-08			480	<0.50	<0.50	<0.50	<1.0	<1.0	24	2.1	<1.0	<1.0
	Dec-08			350	<0.50	<0.50	<0.50	<1.0	<1.0	20	2.3	<1.0	<1.0
	Mar-09			290	<0.50	<0.50	<0.50	<1.0	<0.50	19	4.6	<0.50	<0.50
	May-09			460	<0.50	<0.50	<0.50	<1.0	<1.0	24	2.6	<1.0	<1.0
	Aug-09			410	<0.50	<0.50	<0.50	<1.5	<1.0	20	2.4	<1.0	<1.0
	Aug-09			450	<0.50	<0.50	<0.50	<1.5	<1.0	20	2.4	<1.0	<1.0
	Oct-09			330	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.77	<0.50	<0.50
	Feb-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.88	<0.50	<0.50
	Aug-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.92	<0.50	<0.50
	Oct-10			110	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.92	<0.50	<0.50
	Feb-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-12			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-12	13.19	18.05	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	14.52	16.72	46	< 0.28	< 0.36	< 0.25	< 0.9	<.32	24	1.1	<0.33	<0.28
	Dec-12	14.71	16.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	15.27	15.97	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-13	15.61	15.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	16.25	14.99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	16.01	15.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	16.60	14.64	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-14	18.11	13.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	17.83	13.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	17.74	13.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	17.84	13.40	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-15	17.96	13.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	17.61	13.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	17.82	13.42	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	May-16	17.56	13.68	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-32	Jan-04			23,000	5,800	2,500	1,100	3,000	<100	<500	220	<100	<100
	Apr-04			22,000	5,400	1,900J	960	2,100	<100	<500	250	<100	<100
	Jul-04			17,000	4,500	220	920	770	<50	<250	200	<50	<50
	Oct-04			27,000	6,200	520J	1,200	2,700	<10	120	200	<10	<10
	Jan-05			33,000	9,100J	1,400J	1,400	4,700	<10	<50	250	<10	<10
	Apr-05			11,000	4,800J	210	440J	900	<10	<100	120	<20	<20
	Jul-05			10,000	2,900J	100	540	140	<10	56	130J	<10	<10
	Oct-05			7,100	2,300	16	440	<30	<10	61	130	<10	<10
	Feb-06			6,700	1,800J	56J	81J	760	<5.0	42	64	<5.0	<5.0
	May-06			31,000	4,800	120	130	270	<5.0	69	180	<5.0	<5.0
	Sep-06			9,000J	2,200J	34J	<30UJ	66J	<5.0	58	130J	<5.0	<5.0
	Dec-06			18,000	2,700J	34	44J	1,100	<5.0	77	120	<5.0	<5.0
	Dec-06			17,000	2,600J	<30	33J	1,000	<5.0	79	120	<5.0	<5.0
	Mar-07			18,000	4,800	32	<30	700	<5.0	73	160	<5.0	<5.0
	Mar-07			22,000	5,900	<60	<60	840	<5.0	71	160	<5.0	<5.0
	May-07			6,700[21]	2,000[21]	<30	48	89[21]	<20	<100	170	<20	<20
	Aug-07			1,200	620	<2.5	5.0	<5.0	<2.5	73	110	<2.5	<2.5
	Nov-07			8,500[21]	5,600	34	100	200	<25	<500	170	<25	<25
	Feb-08			6,900	3,700	30	<25	71	<25	<500	160	<25	<25
	Feb-08			6,900	3,500	28	<25	64	<25	<500	160	<25	<25
	May-08			2,400	1,200	10	<10	<20	<10	<200	110	<10	<10
	May-08			2,300	1,400	12	<10	<20	<10	<200	130	<10	<10
	Aug-08			1,000 QP1, ZX	300	<2.5	<2.5	<5.0	<5.0	68	110	<5.0	<5.0
	Dec-08			2,900	1,700[21]	17	12	15	<10	<100	170	<10	<10
	Dec-08			2,100	870[21]	11	6.4	8.0	<4.0	64	160	<4.0	<4.0
	Mar-09			6,300	4,600	46	27	63	<20	<400	260	<20	<20
	Mar-09			6,600	4,800	49	31	66	<20	<400	260	<20	<20
	May-09			5,600[21]	4,600	29	43	21	<20	<200	170	<20	<20
	Aug-09			<4,000	1,500	<20	<20	<60	<40	<400	110	<40	<40
	Oct-09			2,400	1,400	<10	<10	<20	<10	<200	120	<10	<10
	Oct-09			2,100	1,200	<5.0	5.4	<10	<5.0	<100	120	<5.0	<5.0
	Feb-10			530	230	4.1	<2.0	18	<2.0	<40	5.4	<2.0	<2.0
	Feb-10			520	230	3.8	<2.0	16	<2.0	<40	5.5	<2.0	<2.0
	Jun-10			690	190	2.0	17	<3.8	<2.5	29	68	<2.5	<2.5
	Aug-10			470	39	<0.50	1.6	<1.0	<0.50	34	44	<0.50	<0.50
	Oct-10			700	70	0.79	0.73	2.9	<0.50	39	82	<0.50	<0.50
	Oct-10			520	54	0.57	0.67	2.4	<0.50	31	54	<0.50	<0.50
	Feb-11			190	31	<0.50	<0.50	<1.0	<0.50	13	25	<0.50	<0.50
	May-11			290	4.0	<0.50	<0.50	<1.5	<1.0	16	42	<1.0	<1.0
	Aug-11			400	2.9	<0.50	<0.50	1.3	<0.50	25	56	<0.50	<0.50
	Nov-11			520		<0.50	<0.50	6.8	<0.50	25	62	<0.50	<0.50
	Nov-11			570	5.0	0.60	<0.50	9.1	<0.50	27	66	<0.50	<0.50
	Feb-12			510	13	<0.50	<0.50	2.2	<0.50	29	52	<0.50	<0.50
	Jun-12			<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	MW-32 was properly destroyed prior to third quarter 2012 sampling event.												

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-33 (34.01)	Jan-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			14,000	460	1,700J	340	2,200	<5.0	<25	33J	<5.0	<5.0
	Jan-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jul-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-05			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-06			2,100	880J	360J	70J	4,700	<120	<620	<120	<120	<120
	May-06			73,000	9,100	8,500	2,000	9,200	<5.0	<25	140	<5.0	<5.0
	Sep-06			100,000J	12,000J	6,800J	2,800J	11,000J	<5.0	26	110	<5.0	<5.0
	Dec-06			95,000	9,200J	8,800	2,000J	10,000	<5.0	<25	140	<5.0	<5.0
	Mar-07			110,000	14,000	18,000	3,700	15,000	<5.0	50	160	<5.0	<5.0
	May-07			72,000	9,200	8,700	2,600	8,700	<20	<100	170	<20	<20
	Aug-07			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nov-07			62,000	8,200	11,000	3,100	15,000	<50	<1,000	180	<50	<50
	Feb-08			64,000	7,100	12,000	2,800	13,000	<50	<1,000	170	<50	<50
	May-08			87,000	7,300	15,000	3,400	22,000	<100	<2,000	180	<100	<100
	Aug-08			81,000	8,600	16,000	3,000	13,000	<250	<2,500	<250	<250	<250
	Dec-08			36,000	5,400	10,000	2,900	10,200	<100	<1,000	190	<100	<100
	Mar-09			47,000	6,800	11,000	3,100	8,100	<50	<1,000	280	<50	<50
	May-09			61,000 QP1	9,100	16,000	2,500	15,000	<200	<2,000	<200	<200	<200
	Aug-09			79,000	10,000	17,000	3,300	14,000	<200	<2,000	290	<200	<200
	Oct-09			66,000	6,200	12,000	2,600	10,000	<50	<1,000	160	<50	<50
	Feb-10			56,000	5,500	8,300	2,000	10,000	<50	<1,000	120	<50	<50
	Jun-10			21,000	7,700	1,900	1,700	1,900	<200	<2,000	<200	<200	<200
	Aug-10			22,000	7,500	2,000	1,100	1,600	<50	<1,000	130	<50	<50
	Oct-10			26,000	5,700	3,500	1,500	3,500	<50	<1,000	100	<50	<50
	Feb-11			20,000	4,300	760	1,700	1600	<50	<1000	73	<50	<50
	May-11			14,000	5,400	250	1,700	170	<100	<1000	<100	<100	<100
	Aug-11			12,000	3,100	330	1,300	130	<20	<400	59	<20	<20
	Nov-11			6,900	1,600	89	720	47	<5.0	<100	38	<5.0	<5.0
	Feb-12			9,500	1,700	360	1,200	230	<10	<200	39	<10	<10
	Jun-12	16.16	17.85	1,100	210	53	150	19	<4	<40	7.2	<4.0	<4.0
	Aug-12	17.21	16.80	5,900	1,200	130	760	99	<20	<130	32	<6.6	<5.6
	Dec-12	17.60	16.41	6,300	1,100	720	710	640	<20	<200	40	<20	<20
	Feb-13	17.12	16.89	6100	1100	120	940	58	<20	<100	50	<10	<10
	Jun-13	17.91	16.10	6600	850	100	830	47	<20	<200	35	<20	<20
	Aug-13	18.22	15.79	7600	1400	390	950	120	<20	<200	58	<20	<20
	Nov-13	18.66	15.35	2200	290	280	160	160	<4.0	<40	11	<4.0	<4.0
	Feb-14	18.79	15.22	9400	1500	710	1300	1200	<10	<100	47	<10	<10
	May-14	19.23	14.78	6100	790	150	800	59	<4.0	<40	39	<4.0	<4.0
	Aug-14	20.94	13.07	6100	1200	210	1000	68	<4.0	<40	45	<4.0	<4.0
	Nov-14	21.55	12.46	9700	1100	290	1100	95	<20	<200	54	<20	<20
	Feb-15	20.55	13.46	7400	990	200	970	120	<2.5	<50	64	<2.5	<2.5
	Jun-15	20.57	13.44	5000	800	120	800	<30	<20	<200	55	<20	<20
	Aug-15	20.75	13.26	4000	570	110	660	21	<5.0	<50	56	<5.0	<5.0
	Nov-15	20.92	13.09	2600	470	75	330	16	<10	<100	46	<10	<10
	Feb-16	20.50	13.51	2,100	430	54	250	15	<5.0	<50	59	<5.0	<5.0
	May-16	20.60	13.41	4000	610	99	320	18	<5.0	<50	66	<5.0	<5.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-34 (32.97)	Jan-04			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	10	<5.0	<5.0
	Apr-04			<50	<0.30	<0.30UJ	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jul-04			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Oct-04			<50	<0.30	<0.30UJ	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jan-05			<50	0.65J	<0.30UJ	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Apr-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jul-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0UJ	<5.0	<5.0
	Oct-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Feb-06			<50	<0.30UJ	<0.30UJ	<0.30UJ	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	May-06			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Sep-06			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Dec-06			<50	0.57	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Mar-07			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	5.4	<5.0	<5.0
	May-07			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Aug-07			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	2.9	<0.50	<0.50
	Nov-07			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	2.6	<0.50	<0.50
	Feb-08			<100	<0.50	<0.50	<0.50	<0.50	<0.50	<10	6.7	<0.50	<0.50
	May-08			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.73	<0.50	<0.50
	Aug-08			<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	2.3	<1.0	<1.0
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	2.6	<1.0	<1.0
	Mar-09			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	3.8	<0.50	<0.50
	May-09			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0
	Aug-09			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	2.7	<1.0	<1.0
	Oct-09			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	1.8	<0.50	<0.50
	Feb-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	1.9	<0.50	<0.50
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	2.3	<0.50	<0.50
	Feb-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	1.7	<0.50	<0.50
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.81	<0.50	<0.50
	Feb-12			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-12	15.25	17.72	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	16.27	16.70	< 30	< 0.28	< 0.36	< 0.25	< 0.9	<1.0	<6.5	0.35J	<0.33	<0.28
	Dec-12	16.52	16.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	16.95	16.02	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-13	17.31	15.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	17.68	15.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	17.89	15.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	18.30	14.67	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-14	20.01	12.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	20.68	12.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	19.62	13.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	19.60	13.37	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-15	19.81	13.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	19.94	13.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	19.54	13.43	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	2.0	<1.0	<1.0
	May-16	19.63	13.34	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-35 (31.01)	Jan-04			51,000	12,000	5,200	2,100	7,200	<200	<1,000	<200	<200	<200
	Jan-04			43,000	10,000	3,600	1,600	5,500	<200	<1,000	<200	<200	<200
	Apr-04			9,200	1,900	570J	360	1,300	<50	<250	50	<50	<50
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08-Oct-04(R[37])			26,000	6,500	2,100	1,400	3,100	<5.0	54	54	<5.0	<5.0
	28-Oct-04			18,000	3,400	1,100J	790	1,600	<5.0	44J	41	<5.0	<5.0
	Jan-05			63,000	13,000J	12,000J	2,200	8,500	<100	<500	<100	<100	<100
	Apr-05			12,000	4,100J	720	690J	1,200	<50	<250	54	<50	<50
	Apr-05			14,000	5,500J	930	950J	1,600	<50	<250	<50	<50	<50
	Jul-05			31,000	9,500J	330	1,700	1,100	<50	<250	61J	<50	<50
	Oct-05			48,000	12,000	2,600	2,300	2,700	<5.0	60	55	<5.0	<5.0
	Oct-05			48,000	11,000	2,300	2,100	2,500	<5.0	57	55	<5.0	<5.0
	Feb-06			35,000	7,300J	750J	1,400J	2,100	<20	<100	27J	<20	<20
	Feb-06			49,000	14,000J	990J	2,500J	2,100	<25	<120	50J	<25	<25
	May-06			16,000	4,400	55	930	190	<5.0	<25	32	<5.0	<5.0
	Sep-06			21,000J	3,000J	240J	1,300J	150J	<50	<250	<50	<50	<50
	Sep-06			15,000J	2,700J	220J	1,200J	140J	<50	<250	<50	<50	<50
	Dec-06			36,000	5,900J	860	2,200J	1,400	<5.0	<25	37J	<5.0	<5.0
	Mar-07			15,000	3,500	120	1,500	470	8.1	<25	43	<5.0	<5.0
	May-07			19,000	3,900 M2	150	1,900 M2	300	<5.0	<25 ID	39	<5.0	<5.0
	Aug-07			14,000	3,700	110	1,500	730	<25	<500	31	<25	<25
	Nov-07			13,000	4,300	130	960	600	<50	<1,000	51	<50	<50
	Feb-08			14,000	6,500	76	1,000	86	<25	<500	55	<25	<25
	Feb-08			15,000	6,700	150	1,100	350	<25	<500	52	<25	<25
	May-08			3,000	170	48	120	460	<1.0	<20	<1.0	<1.0	<1.0
	Aug-08			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-08			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Mar-09			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May-09			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Aug-09			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-09			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-10			67,000	1,200	2,000	2,500	15,000	<20	<400	<20	<20	<20
	Jun-10			37,000	1,300	2,000	2,300	12,000	<50	<500	<50	<50	<50
	Aug-10			36,000	1,400	1,500	2,300	9,300	<50	<1,000	<50	<50	<50
	Oct-10			42,000	2,100	2,000	2,400	11,000	<20	<400	<20	<20	<20
	Feb-11			14,000	960	300	840	2,400	<12	<250	<12	<12	<12
	May-11			480	<0.50	0.69	16	91	<1.0	<10	<1.0	<1.0	<1.0
	May-11			460	<0.50	0.60	15	86	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-12			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-12	13.12	17.89	1000	0.66	<0.50	2.2	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-12	14.29	16.72	2100	130	1.4	37	< 1.8	<2.0	<13	<0.5	<0.66	<0.56
	Dec-12	14.73	16.28	2300	150	1.5	47	2.6	<1.0	<10	1.8	<1.0	<1.0
	Feb-13	14.27	16.74	980	83	1	30	<1.5	<1.0	10	3.1	<1.0	<1.0
	Jun-13	14.97	16.04	770	40	<0.5	3.3	<1.5	<1.0	12	4.8	<1.0	<1.0
	Aug-13	15.29	15.72	1200	150	4.3	50	8.9	<2.0	<20	4.3	<2.0	<2.0
	Nov-13	NM	NM	1200	160	2.1	65	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Nov-13	15.53	15.48	1200	150	2.4	72	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Feb-14	14.99	16.02	1100	16	<0.50	25	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	May-14	14.51	16.50	93	1.5	<0.50	1.1	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-14	11.60	19.41	<50	<50	<50	<50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Nov-14	18.67	12.34	3400	290	<2	49	<6	<4	<40	<4	<4	<4
	Feb-15	17.71	13.30	2000	140	1.6	43	3.1	<0.25	<5.0	2.9J	<0.25	<0.25
	Jun-15	17.65	13.36	1500	130	<2.0	22	<6.0	<4.0	<40	4	<4.0	<4.0
	Aug-15	NM	NM	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Nov-15	18.02	12.99	880	39	0.61	3.1	0.83J	<1.0	5.3J ID	2.4	<1.0	<1.0
	Feb-16	17.65	13.36	240	0.66	<0.50	<0.50	<1.5	<1.0	<10	6.9	<1.0	<1.0
	May-16	17.69	13.32	610	3.30	<0.50	<0.50	<1.5	<1.0	<10	2.70	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-36 (30.20)	Jan-04			57	1.8	0.58	0.54	0.78	<5.0	<25	28	<5.0	<5.0
	Apr-04			80	<0.30	0.99	1.0	<0.60	<5.0	<25	19	<5.0	<5.0
	Jul-04			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-04			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	14	<5.0	<5.0
	28-Oct-04			230	6.2	11J	7.1	11	<5.0	<25	9.2	<5.0	<5.0
	Jan-05			1,000	57J	100J	54	86	<5.0	<25		<5.0	<5.0
	Apr-05			130	2.5J	<0.30	0.41	<0.60	<5.0	<25	9.0	<5.0	<5.0
	Jul-05			110	<0.30	3.3	<0.30	<0.60	<5.0	<25	8.6J	<5.0	<5.0
	Oct-05			98	<0.30	2.3	<0.30	<0.60	<5.0	<25	8.3	<5.0	<5.0
	Feb-06			<50	<0.30UJ	1.2J	<0.30UJ	<0.60	<5.0	<25	6.6	<5.0	<5.0
	May-06			64	<0.30	1.1	<0.30	<0.60	<5.0	<25	8.6	<5.0	<5.0
	Sep-06			100	<0.30	5.7	<0.30	<0.60	<5.0	<25	12	<5.0	<5.0
	Mar-07			170J	2.5	4.4	0.47	<0.60	<5.0	<25	16	<5.0	<5.0
	May-07			190	0.95	3.6	0.44	<0.60	<5.0	<25	9.8	<5.0	<5.0
	Aug-07			500	17	4.7	18	5.8	<0.50	<10	5.8	<0.50	<0.50
	Nov-07			610	38	26	17	19	<050	<10	0.72	<0.50	<0.50
	Feb-08			350	15	2.0	5.3	<1.0	<0.50	<10	0.67	<0.50	<0.50
	May-08			300	<0.50	<0.50	<0.50	<1.0	<0.50	<10	6.1	<0.50	<0.50
	May-08			300	<0.50	<0.50	<0.50	<1.0	<0.50	<10	5.7	<0.50	<0.50
	Aug-08			370	3.2	35	23	43	<1.0	<10	<1.0	<1.0	<1.0
	Dec-08			320 M2	7.6	<0.50	<0.50	<1.0	<1.0	<10	1.2	<1.0	<1.0
	Mar-09			330	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50 C	<0.50	<0.50
	May-09			160	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0
	Aug-09			230	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Oct-09			340	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-10			230	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	12	<1.0	<1.0
	Aug-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	8.9	<0.50	<0.50
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	3.4	<0.50	<0.50
	Feb-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	1.5	<0.50	<0.50
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.66	<0.50	<0.50
	Nov-11			150	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-12			240	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Jun-12	12.96	17.24	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	6.5	<1.0	<1.0
	Aug-12	13.90	16.30	68	< 0.28	< 0.36	< 0.25	< 0.9	<1.0	<6.5	<0.25	<0.33	<0.28
	Dec-12	14.33	15.87	58	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Jun-13	14.61	15.59	130	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-13	14.59	15.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	15.36	14.84	76	<0.5	<0.5	<0.5	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Feb-14	15.49	14.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	15.46	14.74	66	<0.50	0.7	3.4	2.9	<1.0	<10	<1.0	<1.0	<1.0
	Aug-14	17.62	12.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	18.31	11.89	120	<.50	<0.50	<.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Feb-15	17.32	12.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	17.22	12.98	150	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-15	17.46	12.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	18.61	11.59	220	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Feb-16	17.21	12.99	250	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	May-16	17.25	12.95	100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water	GW Elevation	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
		ft btoc	ft msl	µg/L									
MW-37 (30.97)	Jan-05			<50	<0.30UJ	<0.30UJ	<0.30	<0.60	<5.0	<25	5.1	<5.0	<5.0
	Apr-05			<50	<0.30UJ	<0.30	<0.30	<0.60	<5.0	<25	<5.0	<5.0	<5.0
	Jul-05			<50	<0.30	<0.30	<0.30	<0.60	<5.0	<25	<5.0UJ	<5.0	<5.0
	Oct-05			55	<0.30	0.52	<0.30	0.70	<10	<50	<10	<10	<10
	Feb-06			<50	1.8J	<0.30UJ	<0.30UJ	<0.60	<5.0	<25	6.1	<5.0	<5.0
	May-06			140	42	0.47	2.8	1.8	<5.0	<25	9.7	<5.0	<5.0
	Sep-06			120	28	0.51	2.2	<0.60	<5.0	<25	10	<5.0	<5.0
	Dec-06			120	25	0.31	2.0	<0.60	<5.0	<25	11	<5.0	<5.0
	Mar-07			79J	3.5	0.39	3.3	<0.60	<5.0	<25	15	<5.0	<5.0
	Mar-07			66J	3.6	<0.30	3.4	<0.60	<5.0	<25	14	<5.0	<5.0
	Jun-07			<50	0.76	<0.30	<0.30	<0.60	<5.0	<25	11	<5.0	<5.0
	Aug-07			<100	0.60	<0.50	<0.50	<1.0	<0.50	<10	14	<0.50	<0.50
	Nov-07			<100	0.50	<0.50	<0.50	<1.0	<0.50	<10	31	<0.50	<0.50
	Feb-08			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	46	<0.50	<0.50
	May-08			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	15	<0.50	<0.50
	Aug-08			<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	22	<1.0	<1.0
	Dec-08			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	26	<1.0	<1.0
	Mar-09			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	34	<0.50	<0.50
	May-09			<100	<0.50	<0.50	<0.50	<1.0	<1.0	<10	17	<1.0	<1.0
	Aug-09			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	14	<1.0	<1.0
	Oct-09			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	15	<0.50	<0.50
	Feb-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	2.1	<0.50	<0.50
	Jun-10			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	<1.0	<1.0	<1.0
	Aug-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.66	<0.50	<0.50
	Oct-10			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50
	Feb-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	0.83	<0.50	<0.50
	May-11			<100	<0.50	<0.50	<0.50	<1.5	<1.0	<10	1.0	<1.0	<1.0
	Aug-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	1.8	<0.50	<0.50
	Nov-11			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	2.0	<0.50	<0.50
	Feb-12			<100	<0.50	<0.50	<0.50	<1.0	<0.50	<10	3.2	<0.50	<0.50
	Jun-12	13.29	17.68	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	6.5	<1.0	<1.0
	Aug-12	14.17	16.80	< 30	< 0.28	< 0.36	< 0.25	< 0.9	0.76J	<6.5	6.6	<0.33	<0.28
	Dec-12	14.48	16.49	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-13	14.73	16.24	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<10	7.3	<1.0	<1.0
	Aug-13	15.05	15.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	15.49	15.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-14	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	16.02	14.95	<50	<0.50	<0.50	<0.50	<1.5	1.0	<10	8.2	<1.0	<1.0
	Aug-14	17.58	13.39	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	18.33	12.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-15	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	17.31	13.66	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	5	<1.0	<1.0
	Aug-15	17.56	13.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	17.39	13.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Feb-16	17.45	13.52	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	3.5	<1.0	<1.0
	May-16	17.41	13.56	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<10	5.60	<1.0	<1.0

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water ft btoc	GW Elevation ft msl	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
				µg/L									
MW-38 (31.00)	Jan-05			49,000	17,000J	650J	2,000	7,400	<50	<250	260	<50	<50
	Apr-05			64,000	18,000	4,900	2,500J	5,300	<20	330	310	<20	<20
	Jul-05			86,000	21,000J	13,000	2,900	8,400	<25	470	460J	<25	<25
	Oct-05			94,000	20,000	13,000	2,700	7,900	<25	350	330	<25	<25
	Feb-06			96,000	21,000J	8,300J	2,800J	7,700	<25	320	280J	<25	<25
	May-06			52,000	14,000	370	1,800	4,100	<10	140	270	<10	<10
	Sep-06			44,000J	10,000J	150J	1,800J	2,900J	<100UJ	<500UJ	250J	<100UJ	<100UJ
	Dec-06			70,000	14,000J	640	2,700J	4,600	<250	<1,200	<250	<250	<250
	Mar-07			62,000	16,000	1,200	2,800	5,300	<50	<250	270	<50	<50
	May-07			34,000	9,400[21]	180	1,800[21]	2,400	<50	<250	200	<50	<50
	Aug-07			17,000	8,100	510	2,200	2,600	<10	220	230	<10	<10
	Nov-07			44,000	15,000	1,800	2,800	5,400	<100	<2,000	290	<100	<100
	Feb-08			53,000	20,000	1,400	3,200	5,200	<100	<2,000	290	<100	<100
	May-08			24,000	9,400	290	1,200	1,200	<100	<2,000	140	<100	<100
	Aug-08			47,000 QP1, ZX	19,000	590	2,500	3,400	<250	<2,500	280	<250	<250
	Dec-08			25,000	16,000	320	2,700	2,110	<100	<1,000	260	<100	<100
	Mar-09			30,000	16,000	370	2,500	1,800	<50	<1,000	350	<50	<50
	Mar-09			24,000	14,000	260	2,200	1,200	<50	<1,000	340	<50	<50
	May-09			32,000	15,000	380	2,600	1,600	<50	<500	250	<50	<50
	Aug-09			30,000	14,000	350	2,300	1,300	<200	<2,000	230	<200	<200
	Oct-09			35,000	14,000	340	2,300	1,300	<50	<1,000	210	<50	<50
	Feb-10			29,000	14,000	260	2,300	840	<100	<2,000	230	<100	<100
	Feb-10			29,000	14,000	240	2,200	800	<100	<2,000	230	<100	<100
	Jun-10			30,000	16,000	300	2,500	1,100	<200	<2,000	260	<200	<200
	Aug-10			22,000	14,000	110	2,100	730	<100	<2,000	180	<100	<100
	Oct-10			23,000	15,000	110	2,400	830	<100	<2,000	140[21]	<100	<100
	Feb-10			5,000	2,500	<20	670	<40	<20	<400	98	<20	<20
	Feb-10			6,400 QP1	2,600	<20	670	<40	<20	<400	98	<20	<20
	May-11			390	96	<0.50	3.5	<1.5	2.4	19 ID	22	<1.0	<1.0
	Aug-11			220	3.5	<0.50	<0.50	<1.0	2.7	11	17	<0.50	<0.50
	Nov-11			140	0.55	<0.50	<0.50	<1.0	3.2	<10	20	<0.50	<0.50
	Feb-12			150	<0.50	<0.50	<0.50	<1.0	2.2	<10	17	<0.50	<0.5
	Feb-12			140	<0.50	<0.50	<0.50	<1.0	2.1	<10	17	<0.50	<0.50
	Jun-12	12.80	18.20	96	<0.50	<0.50	<0.50	<1.5	2.7	<10	16	<1.0	<1.0
	Aug-12	13.73	17.27	59	< 0.28	< 0.36	< 0.25	< 0.9	1.9	<6.5	10	<0.33	<0.28
	Dec-12	14.12	16.88	260	<0.5	<0.5	<0.5	<1.5	2	46	57	<1.0	<1.0
	Jun-13	14.40	16.60	250	<0.5	<0.5	<0.5	<1.5	1.1	37	29	<1.0	<1.0
	Aug-13	14.72	16.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-13	15.19	15.81	550	61	0.63	<0.5	<1.5	1.6	82	74	<1.0	<1.0
	Feb-14	15.38	15.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	May-14	15.69	15.31	580	81	1.2	8.3	2.1	1.2	120	68	<1.0	<1.0
	Aug-14	17.26	13.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-14	18.00	13.00	3900	1800	15	190	<15	<10	180	110	<10	<10
	Feb-15	17.01	13.99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jun-15	17.02	13.98	3200	1900	<10	14	<30	<20	<200	98	<20	<20
	Aug-15	17.22	13.78	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-15	17.40	13.60	390	140	<1.3	<1.3	<3.8	<2.5	80	44	<2.5	<2.5
	Feb-16	17.01	13.99	2,500	1,900	<13	<13	<38	<25	<250	120	<25	<25
	May-16	17.10	13.90	2000	1600	2.20	4.30	<38	<25	150	110	<25	<25

SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
LA Times Costa Mesa Facility - North Tanks Site

Well No. (Elevation)	Date	Depth to Water	GW Elevation	TVPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	TAME	ETBE
		ft btoc	ft msl	µg/L									

NOTES:

** Well* - MW-25 was damaged and replaced by well MW-25(R) in September 2006.

< - indicates analyte was not detected above reporting limit (RL) indicated or method detection limit (MDL), if available.

F1 - MS and/or MSD recovery is outside acceptance limits.

ID - indicates due to the low level of analyte found in the sample, the analyte was qualitatively identified based on the compound retention time and the presence of a single mass ion.

J - indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

M2 - indicates the Matrix Spike and/or Matrix Spike Duplicate percent recovery (using this sample) were below the acceptance limits; therefore, the concentration for this sample and for other samples with a similar magnitude of concentration is considered estimated.

QP1 - indicates hydrocarbon result partly due to individual peak(s) in quantitation range; result is considered estimated.

UJ - indicates the analyte was not detected above the reported sample quantitation limit; however, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

ZX - indicates due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

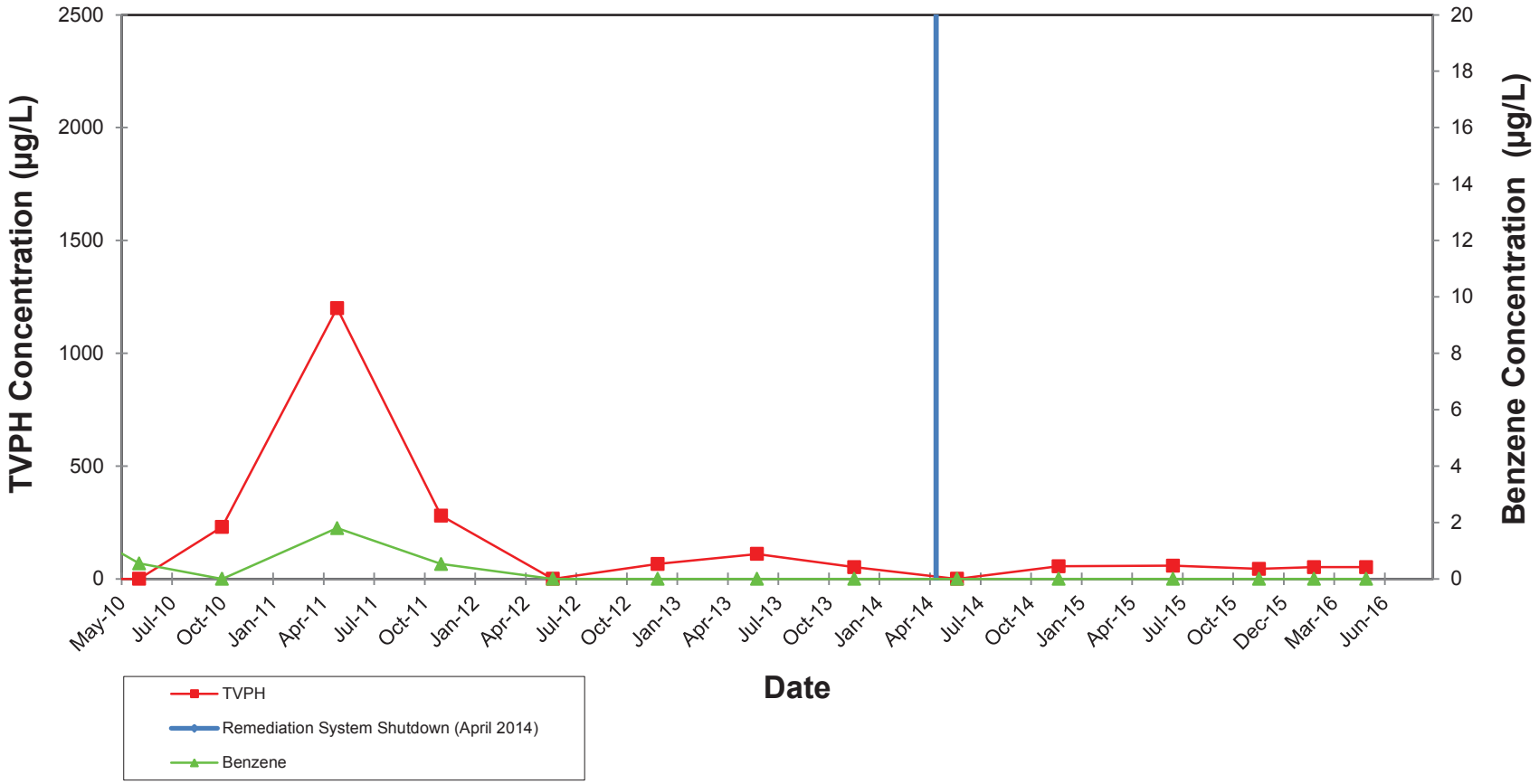
ABBREVIATIONS:

µg/L - micrograms per liter
ft btoc - feet below top of casing
ft msl - feet above mean sea level
NA - not analyzed or sampled
NM - not measured
NS - not sampled
R - repeat
DIPE - di-isopropyl ether
ETBE - ethyl tertiary butyl ether
MTBE - methyl tertiary butyl ether
TAME - tertiary-amyl methyl ether
TBA - tertiary butyl alcohol
TVPH - total volatile petroleum hydrocarbons; analyzed using CA LUFT Method 8260B.
VOC - volatile organic compound; analyzed by EPA Method 8260B.

Appendix D

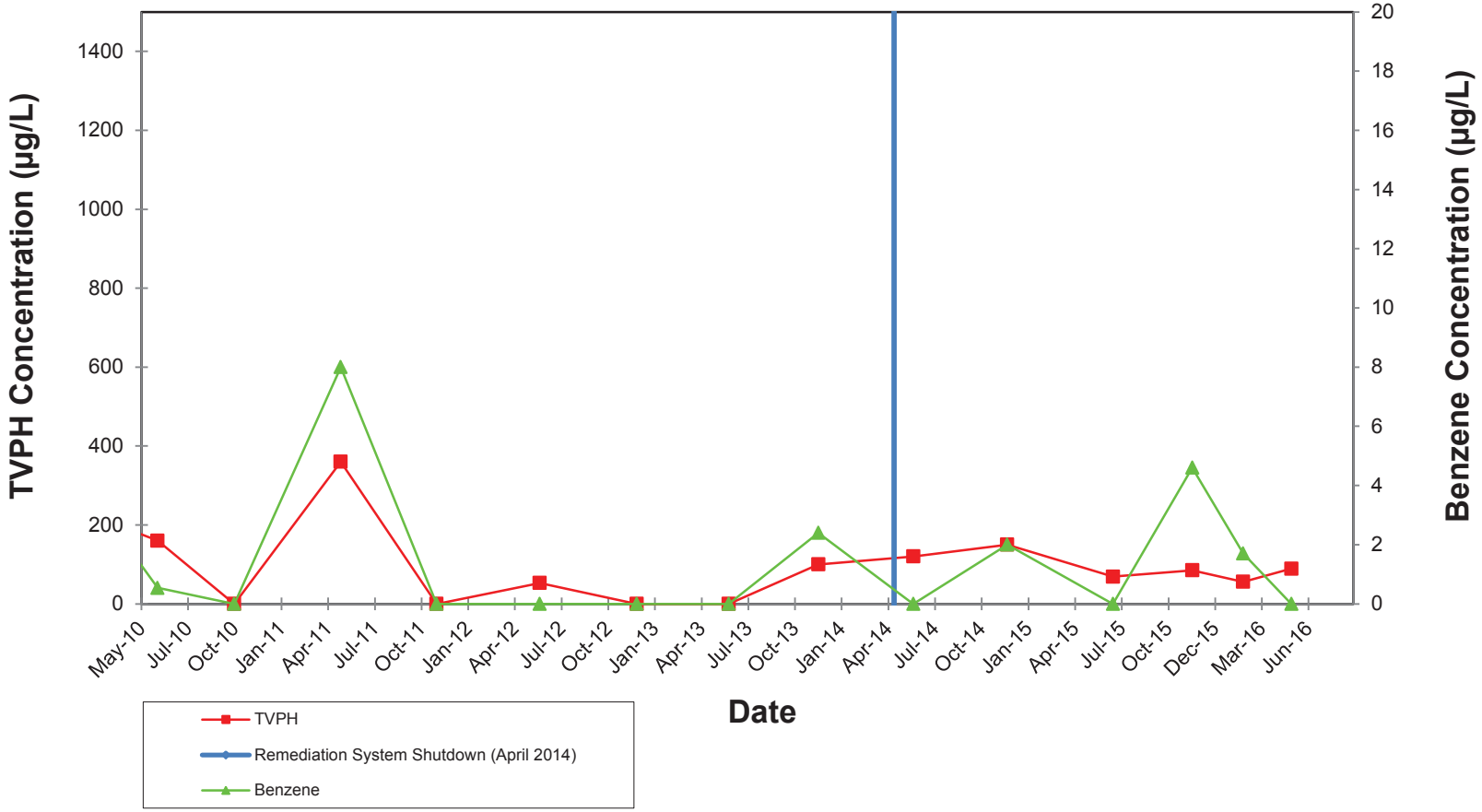
TVPH and Benzene Concentrations vs. Time Plots

TVPH and Benzene Concentration Plots
Monitoring Well MW-17



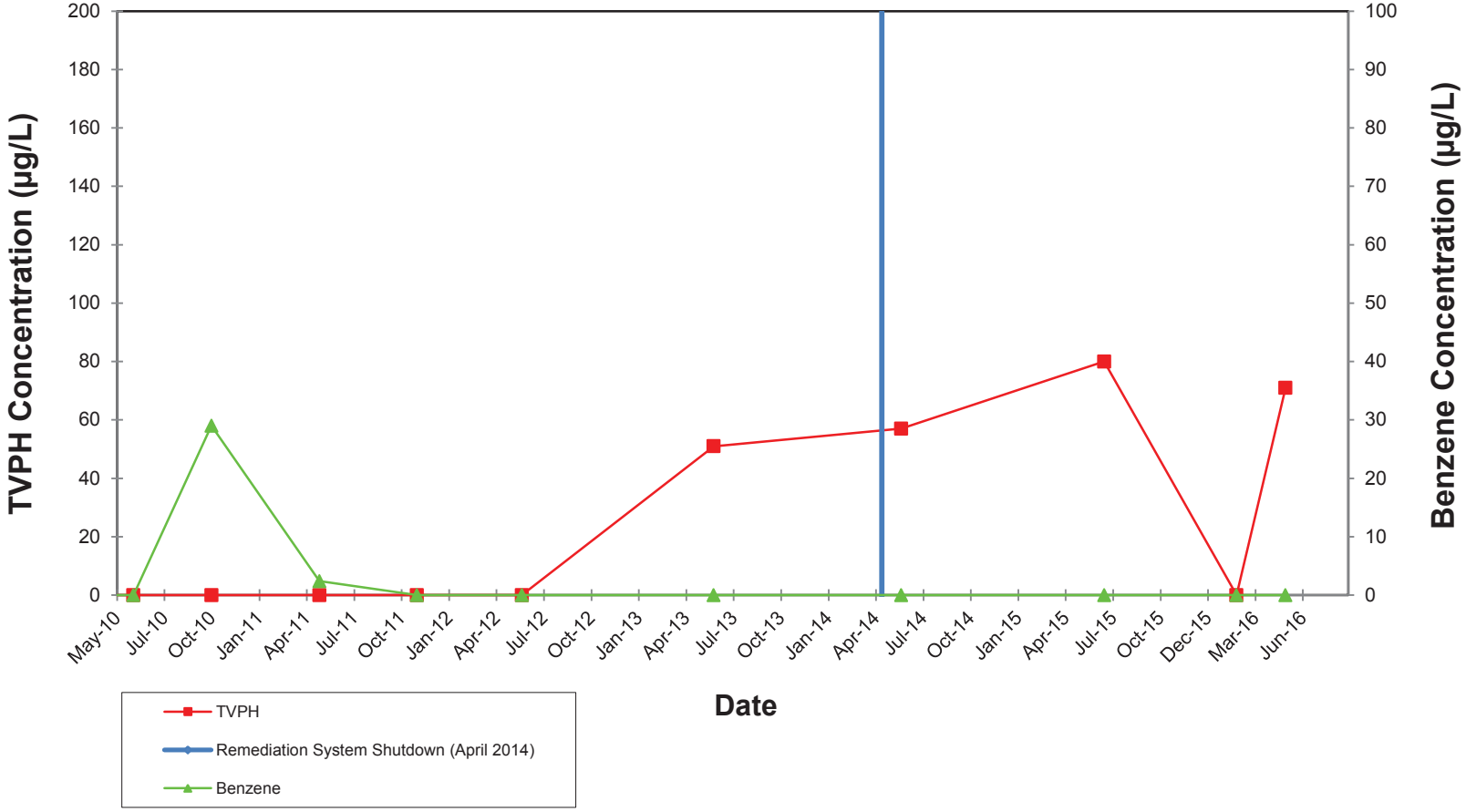
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-18



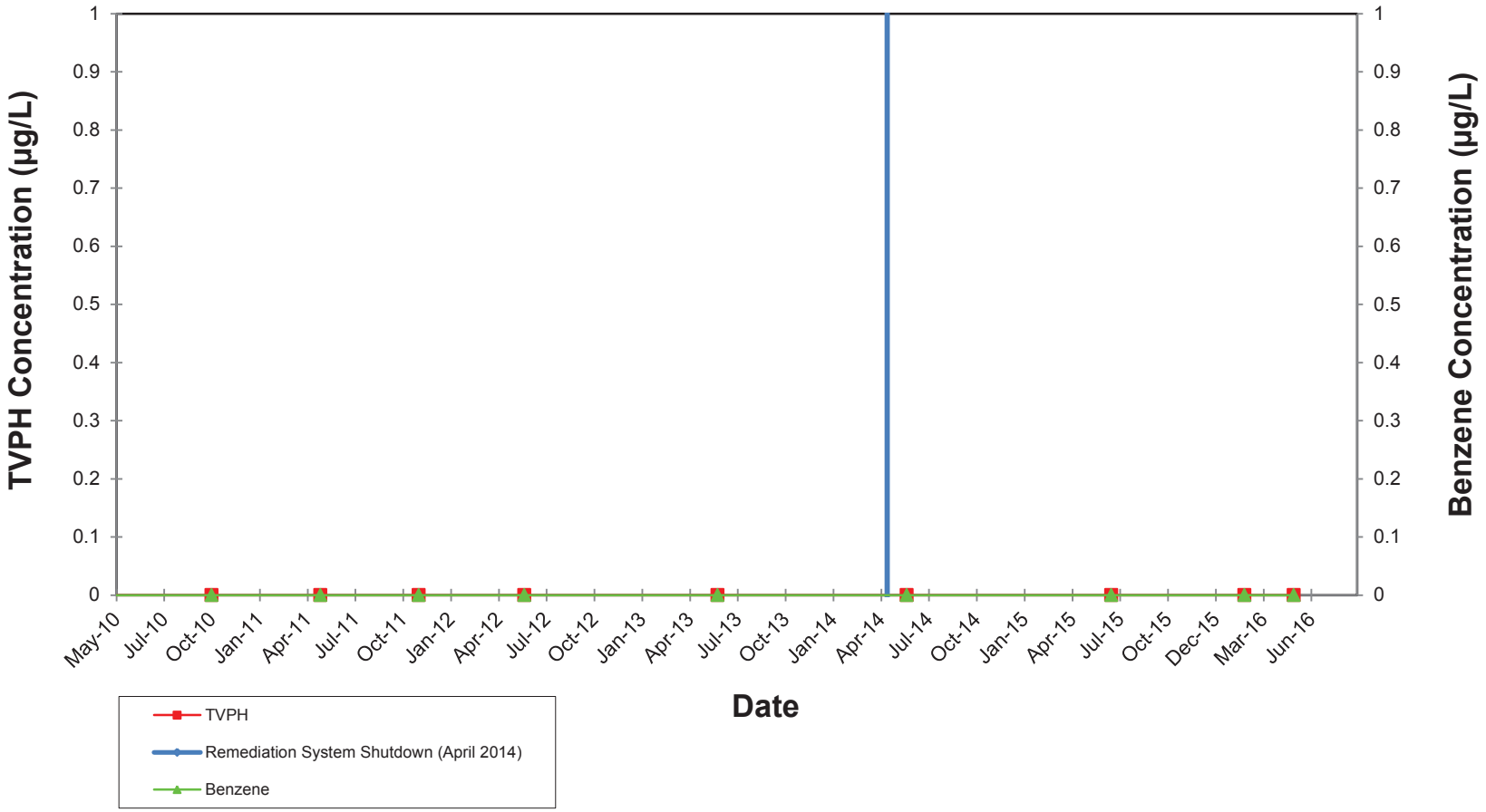
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-19



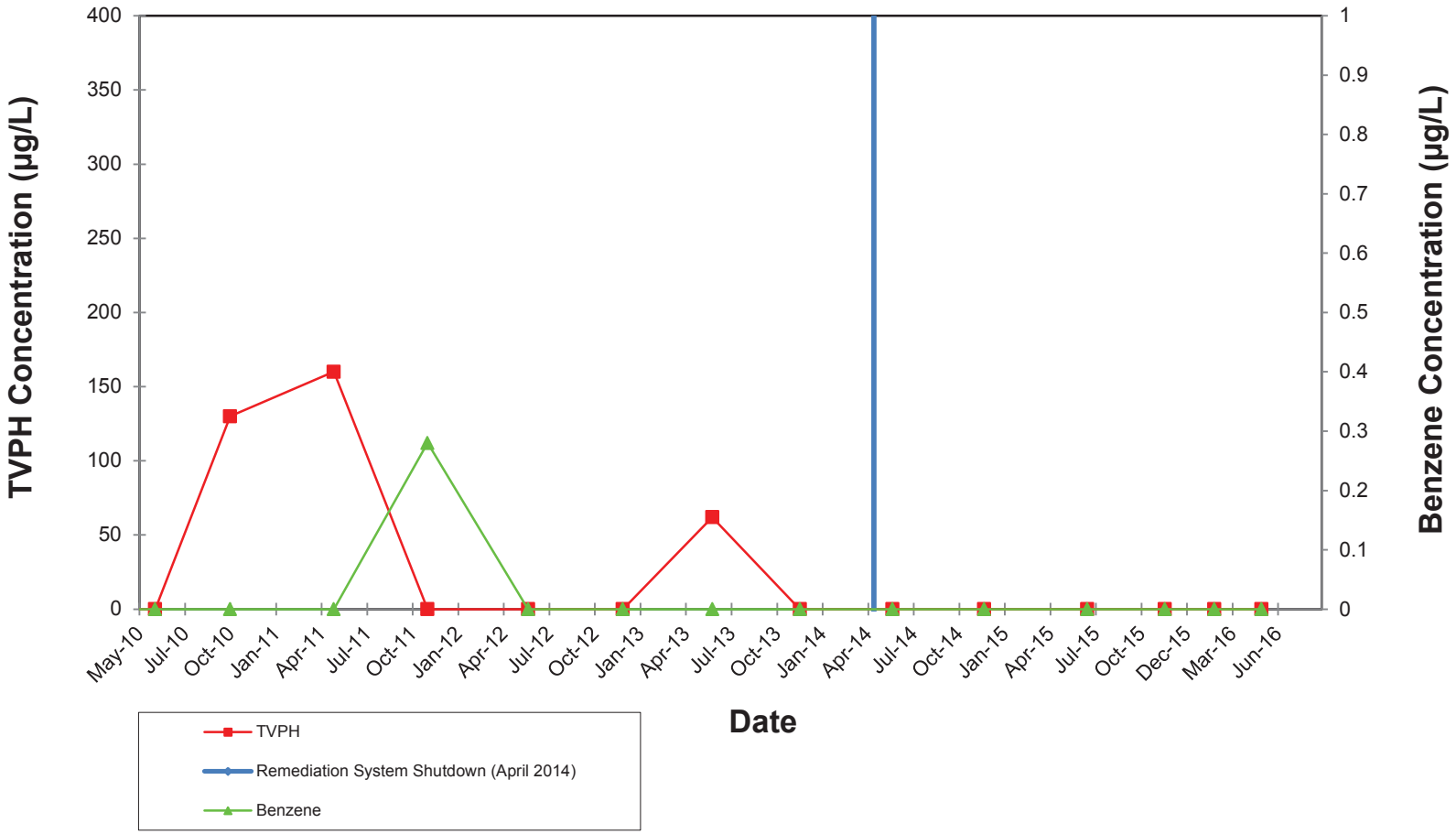
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-20



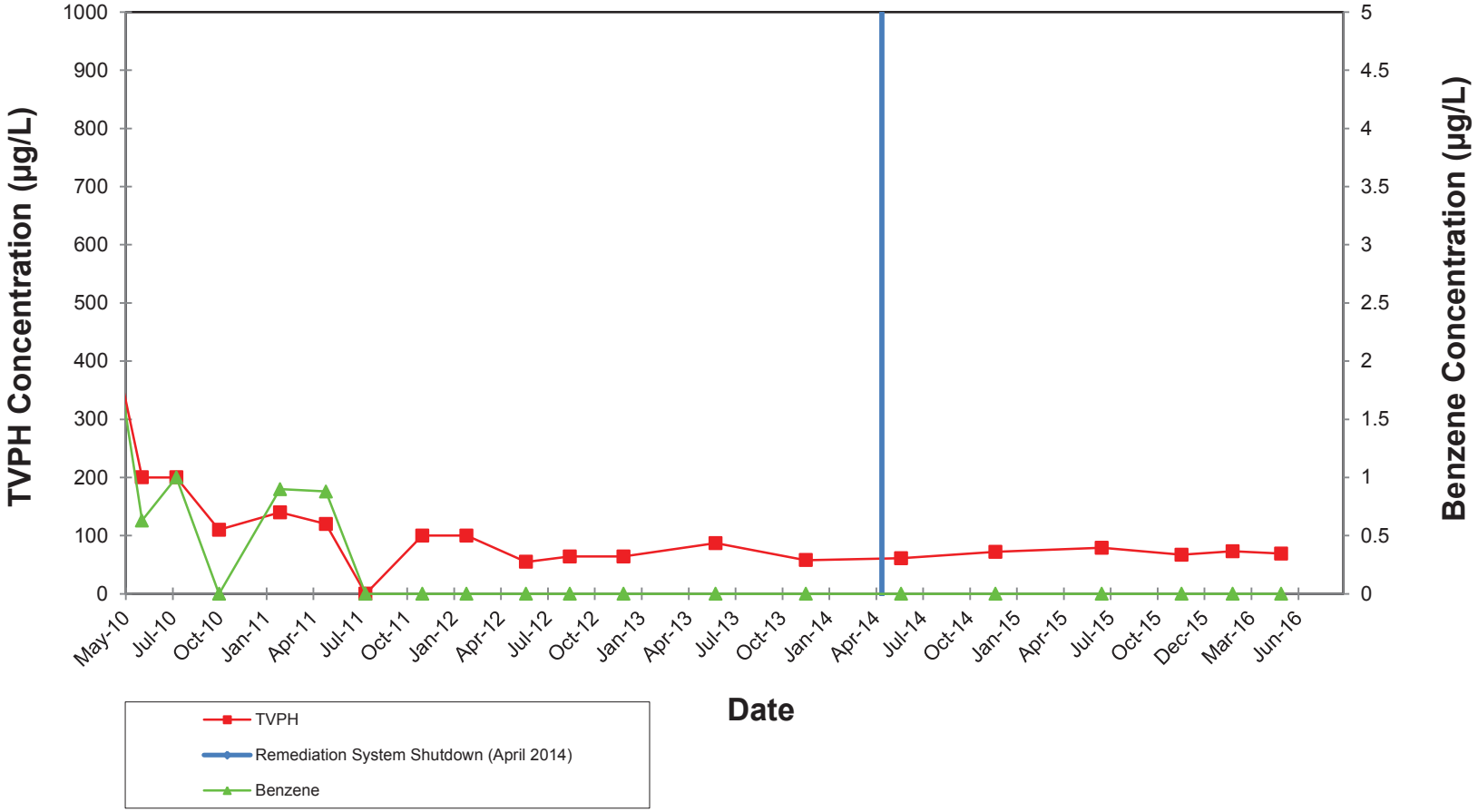
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-21



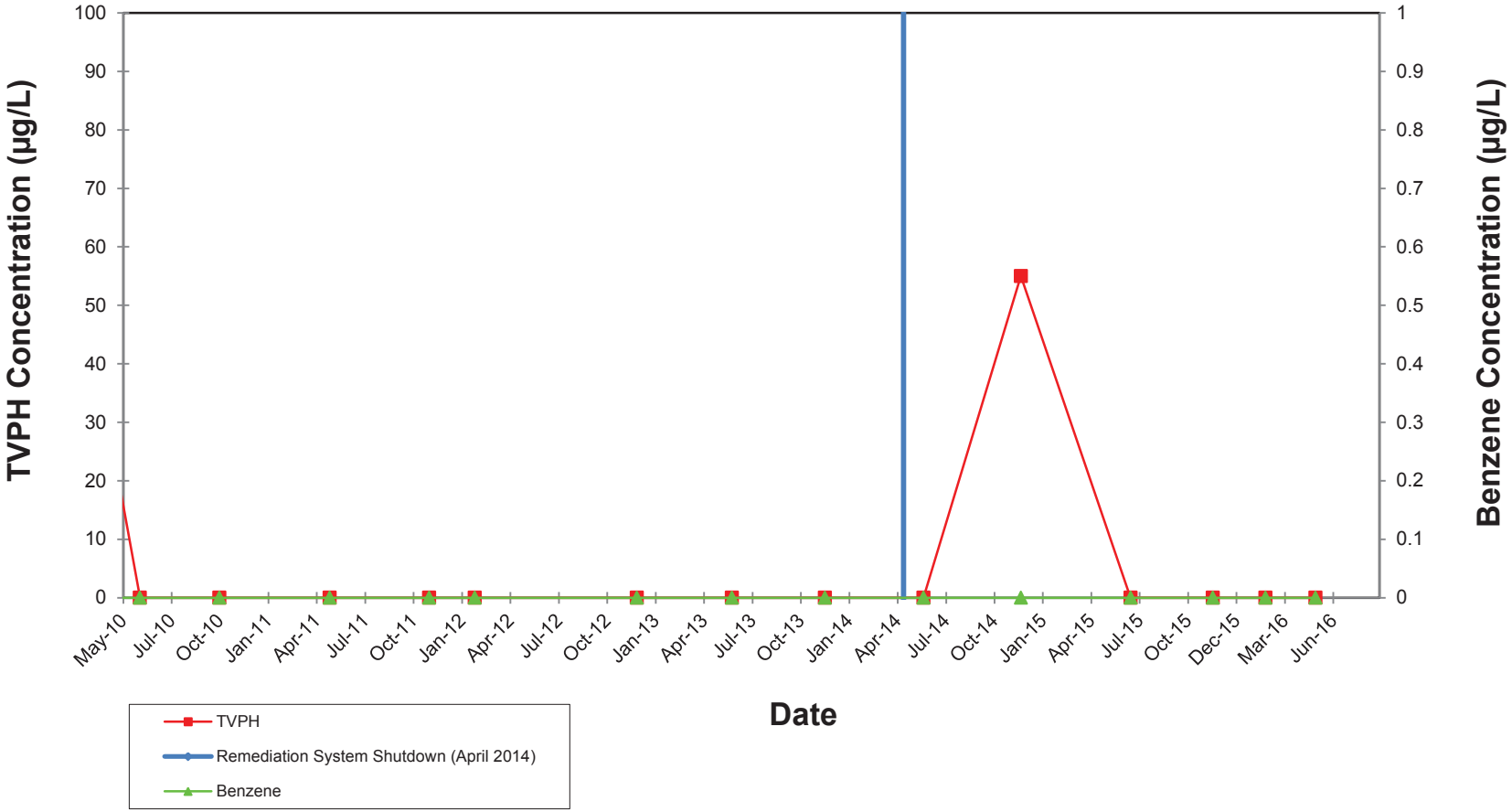
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-22



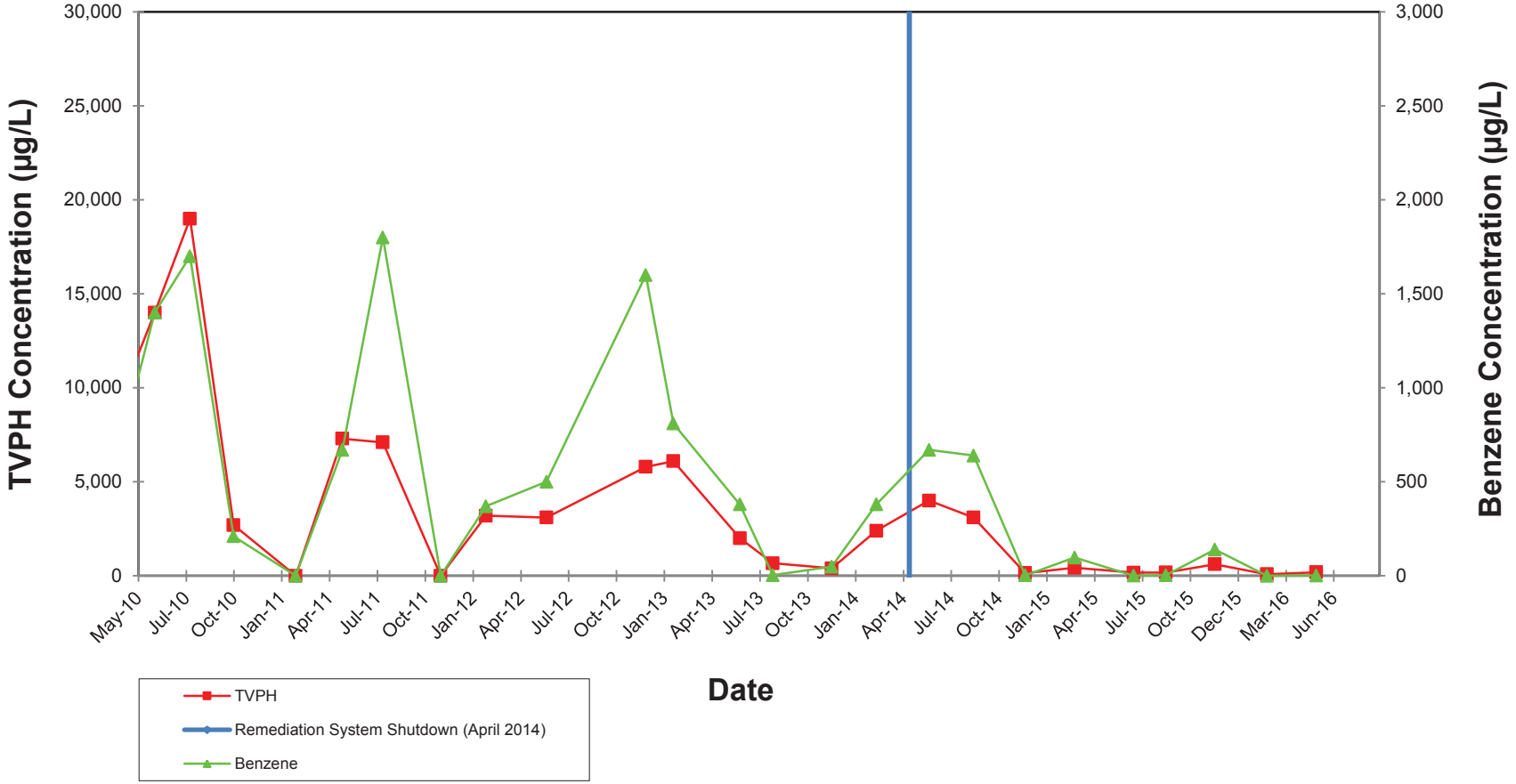
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-23



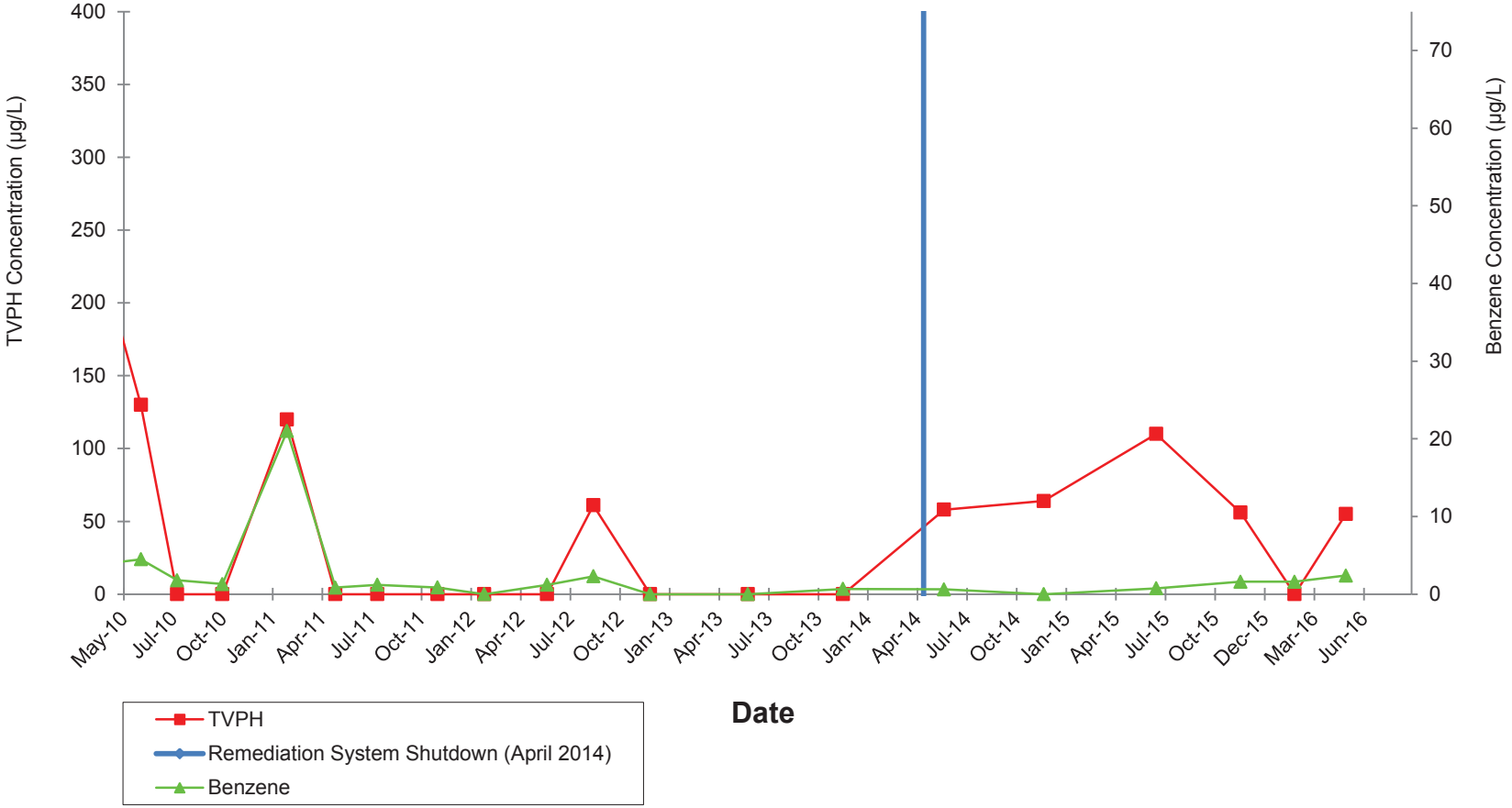
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-24



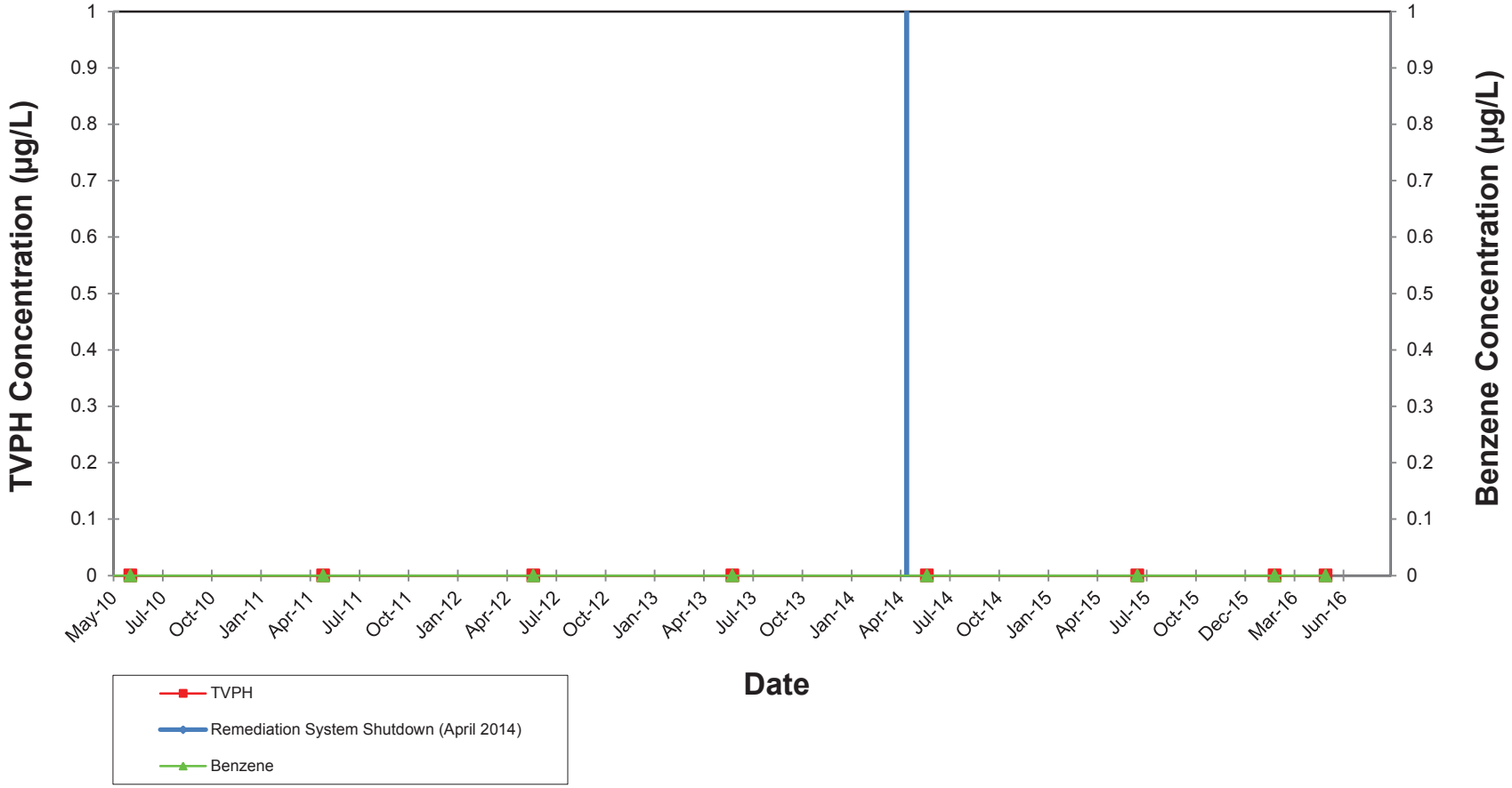
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-25/MW-25(R)



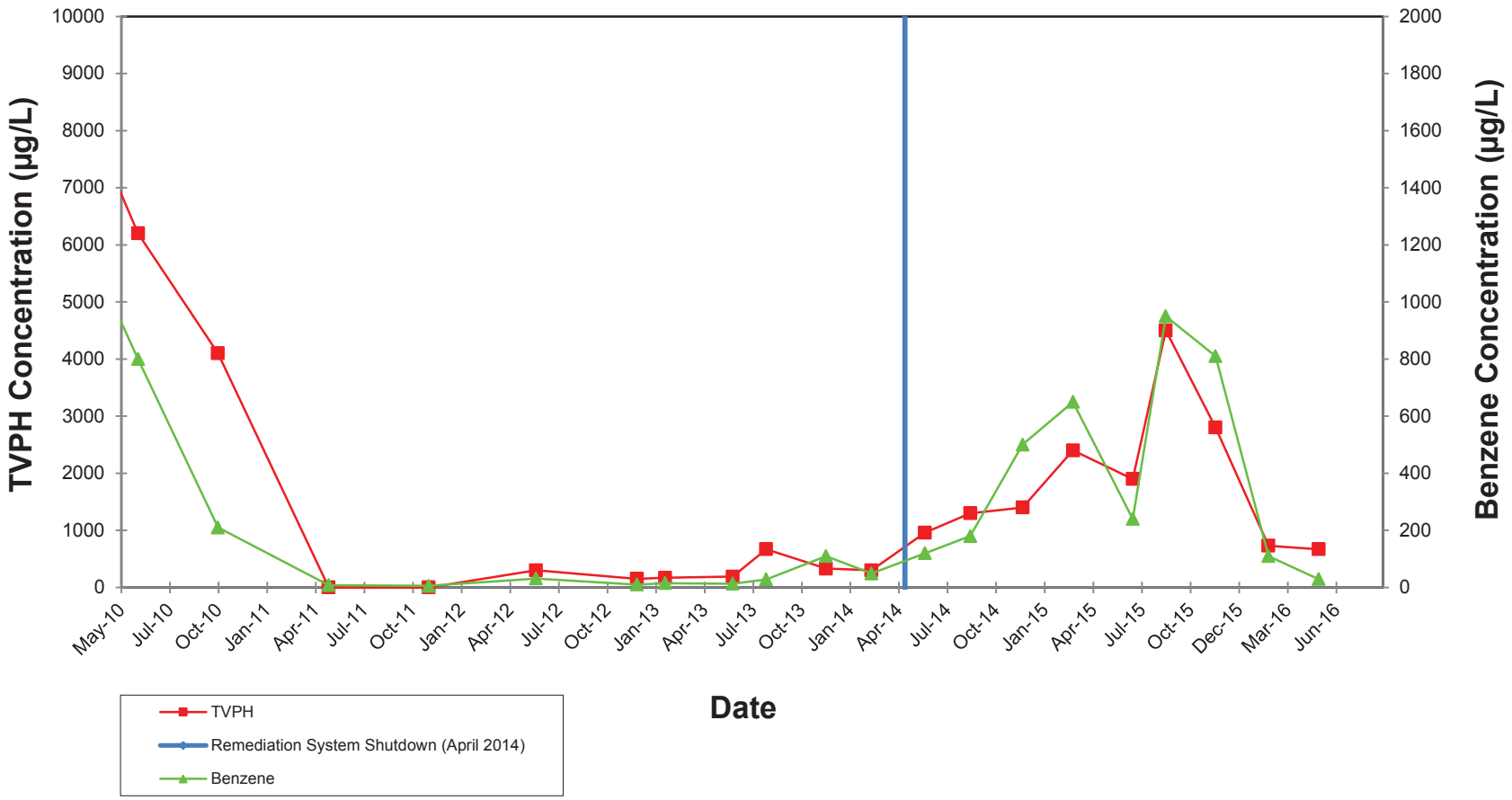
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-26



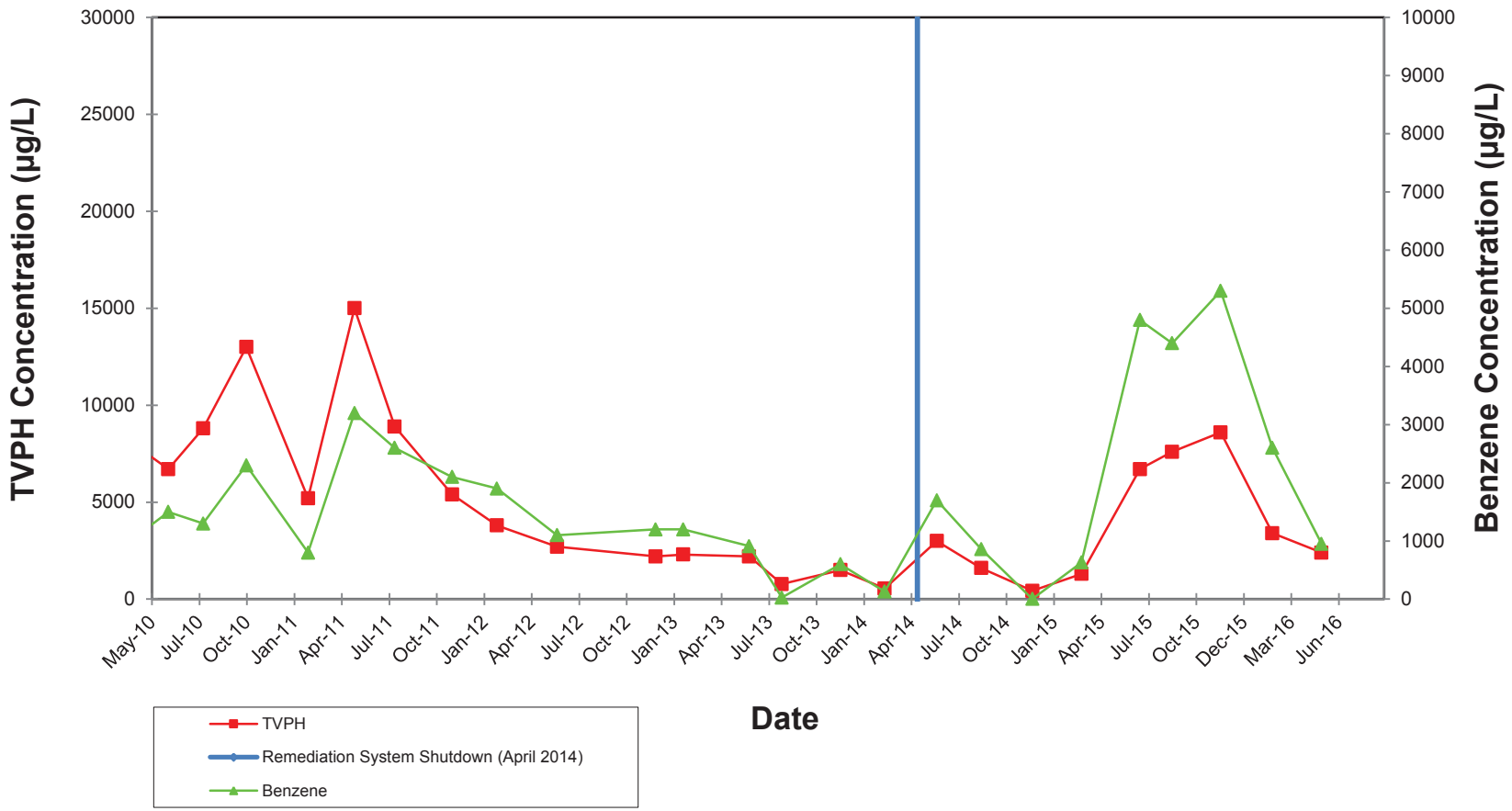
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-27



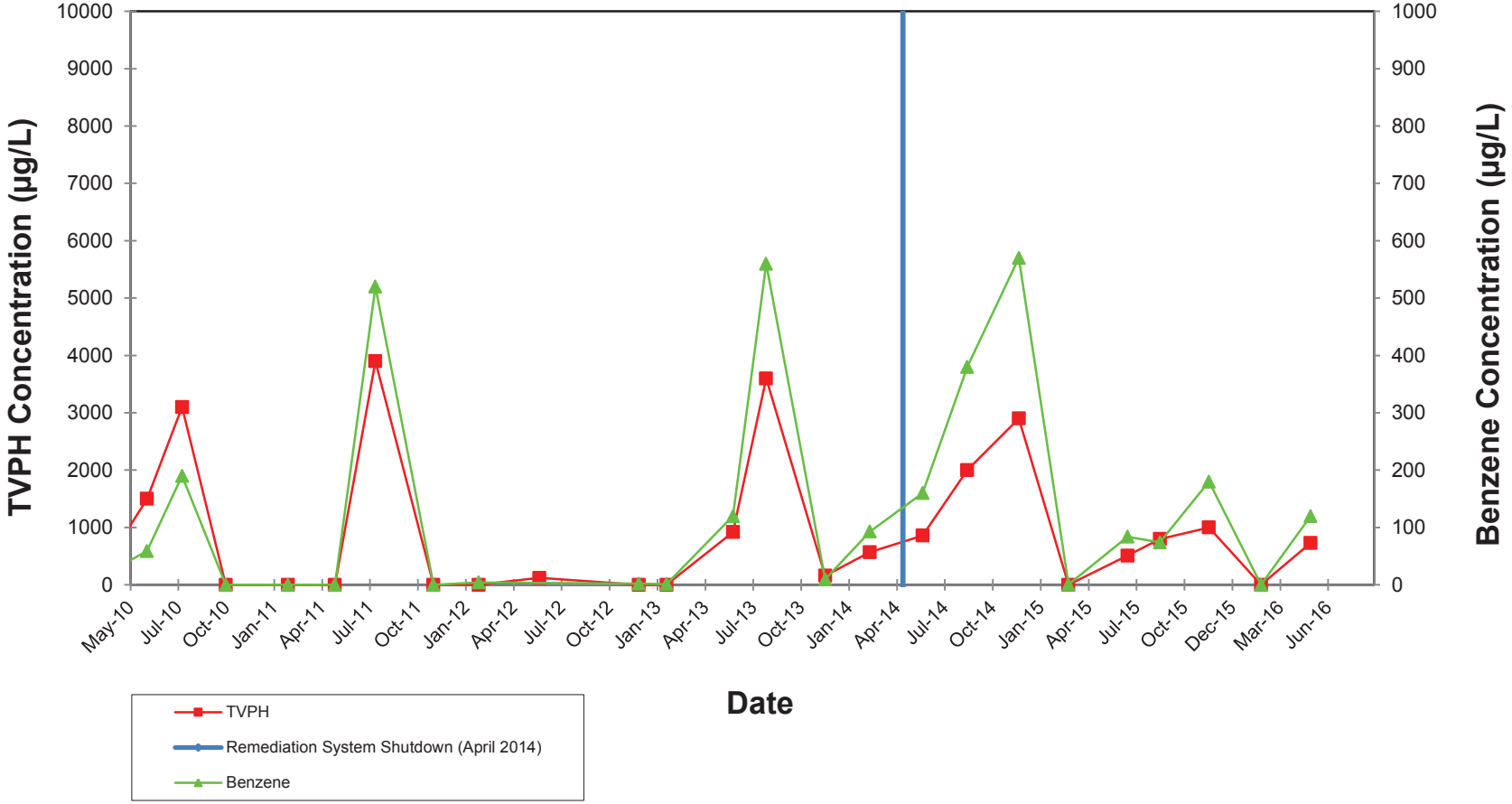
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-28



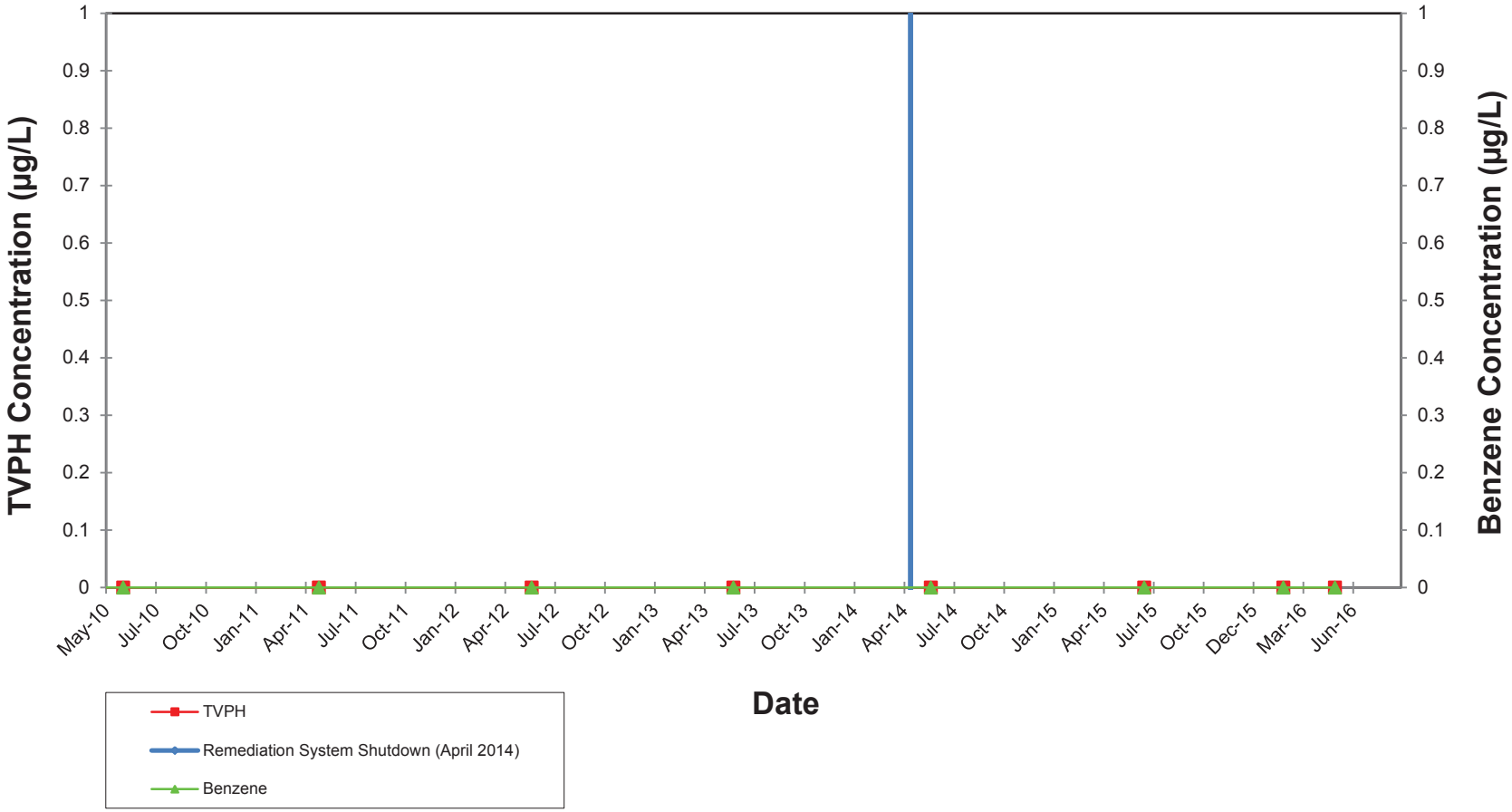
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-29



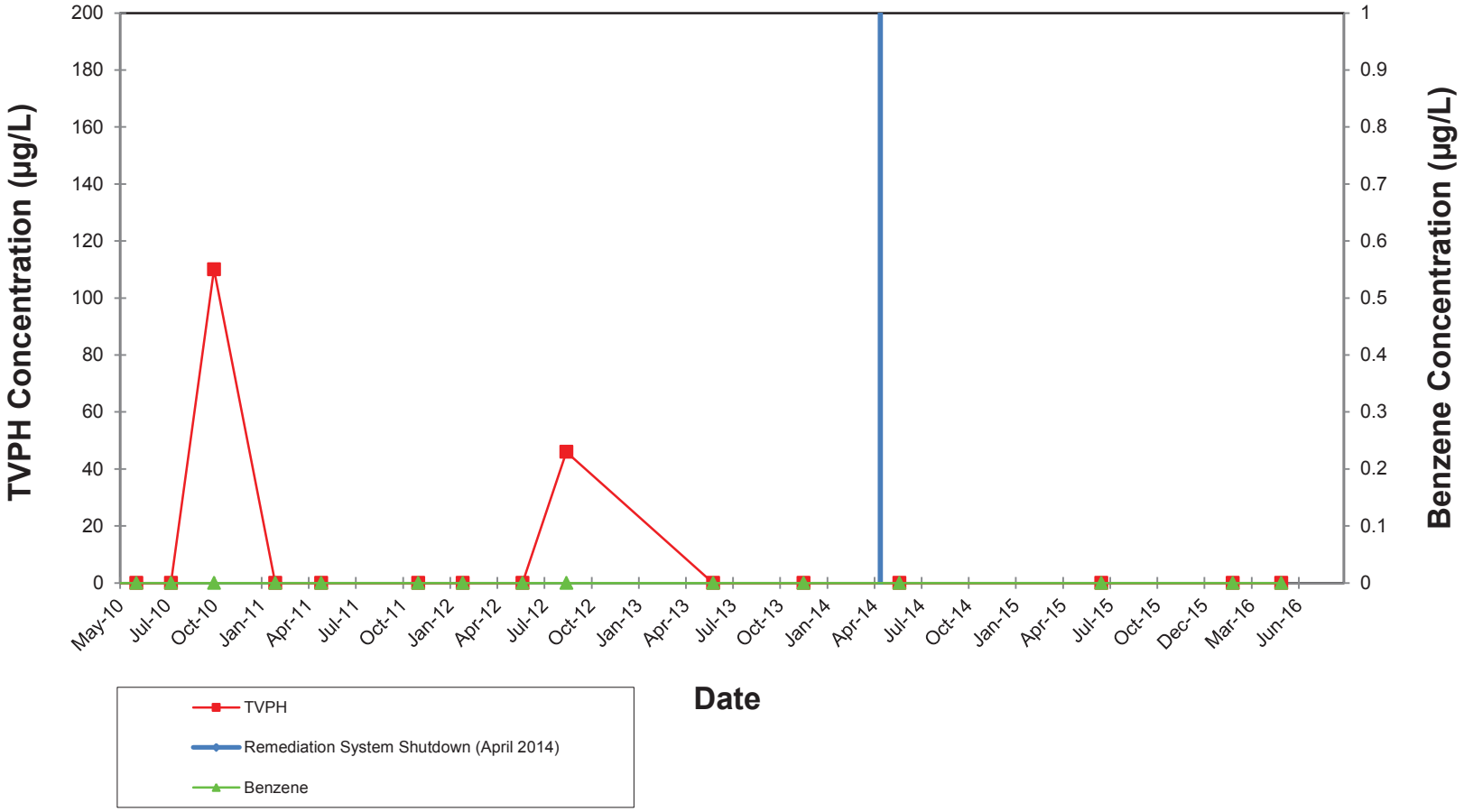
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-30



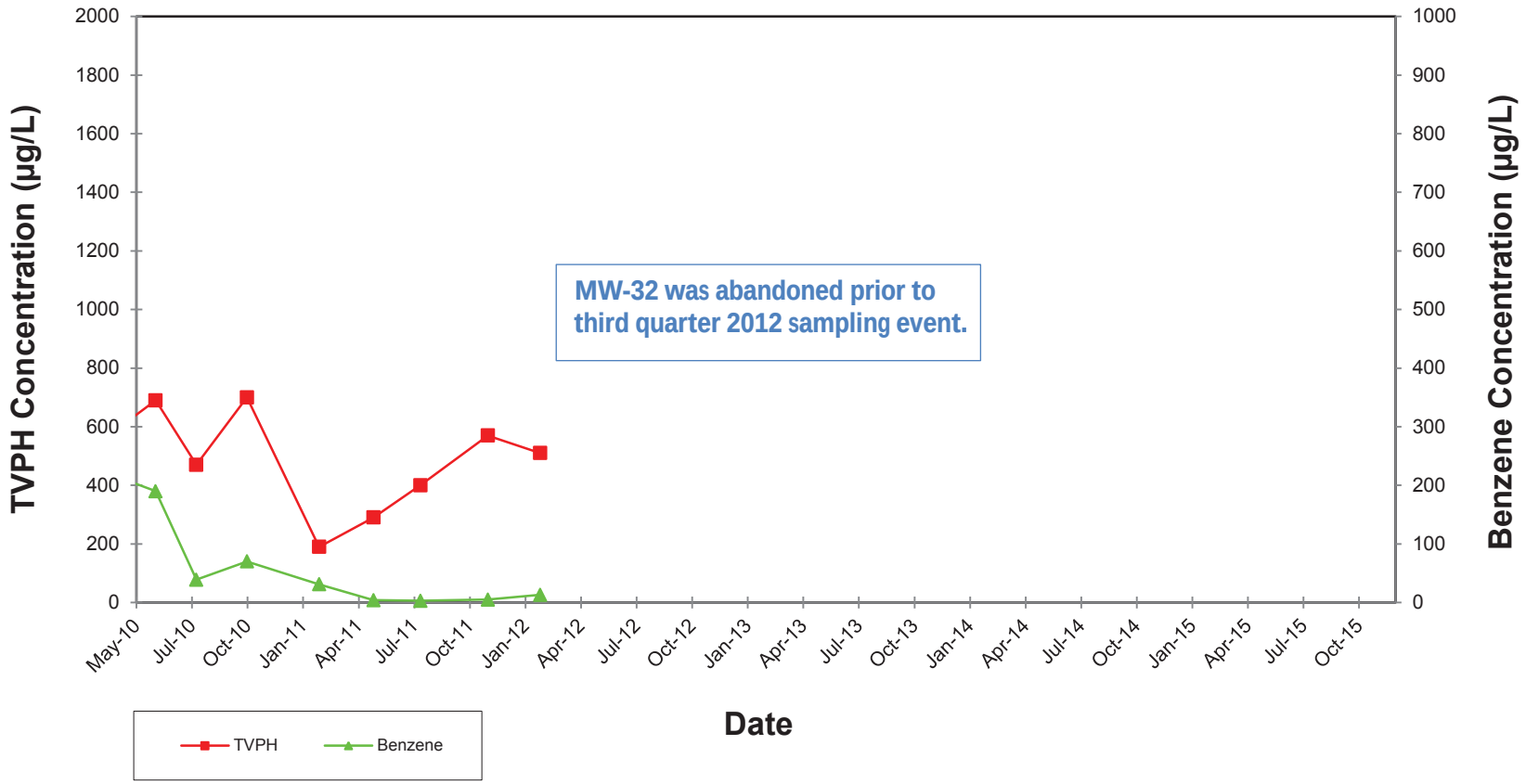
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-31



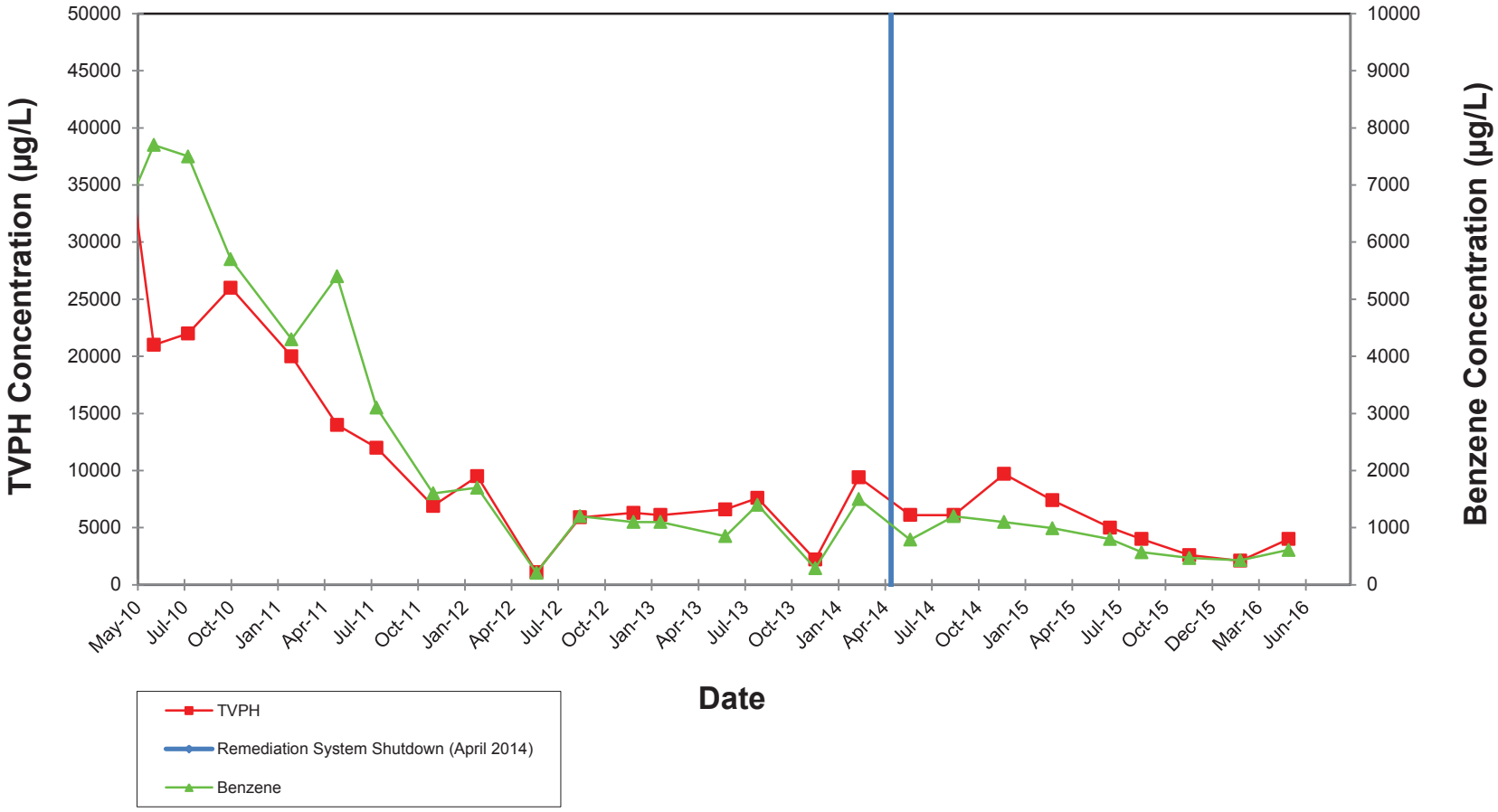
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-32



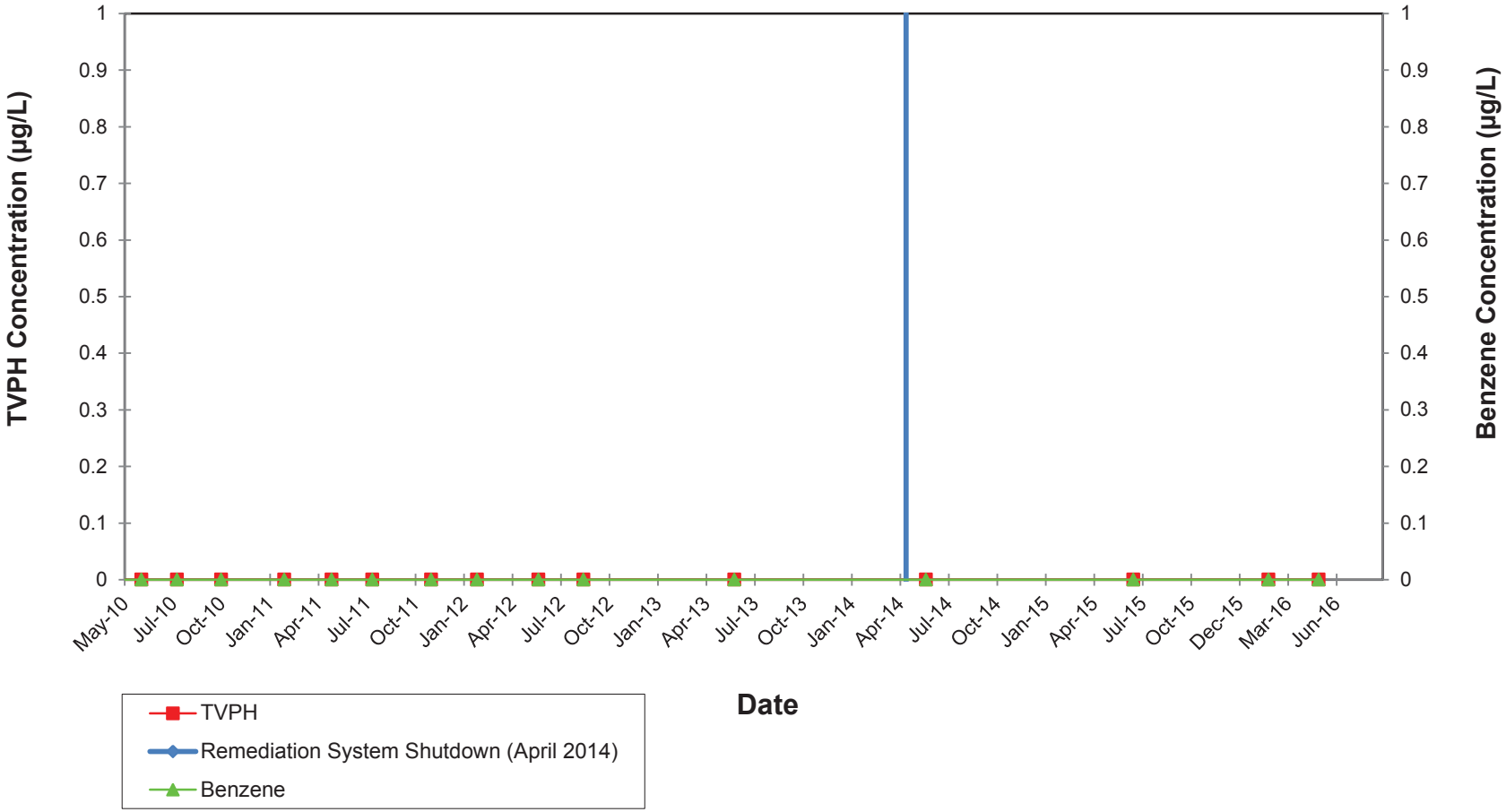
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-33



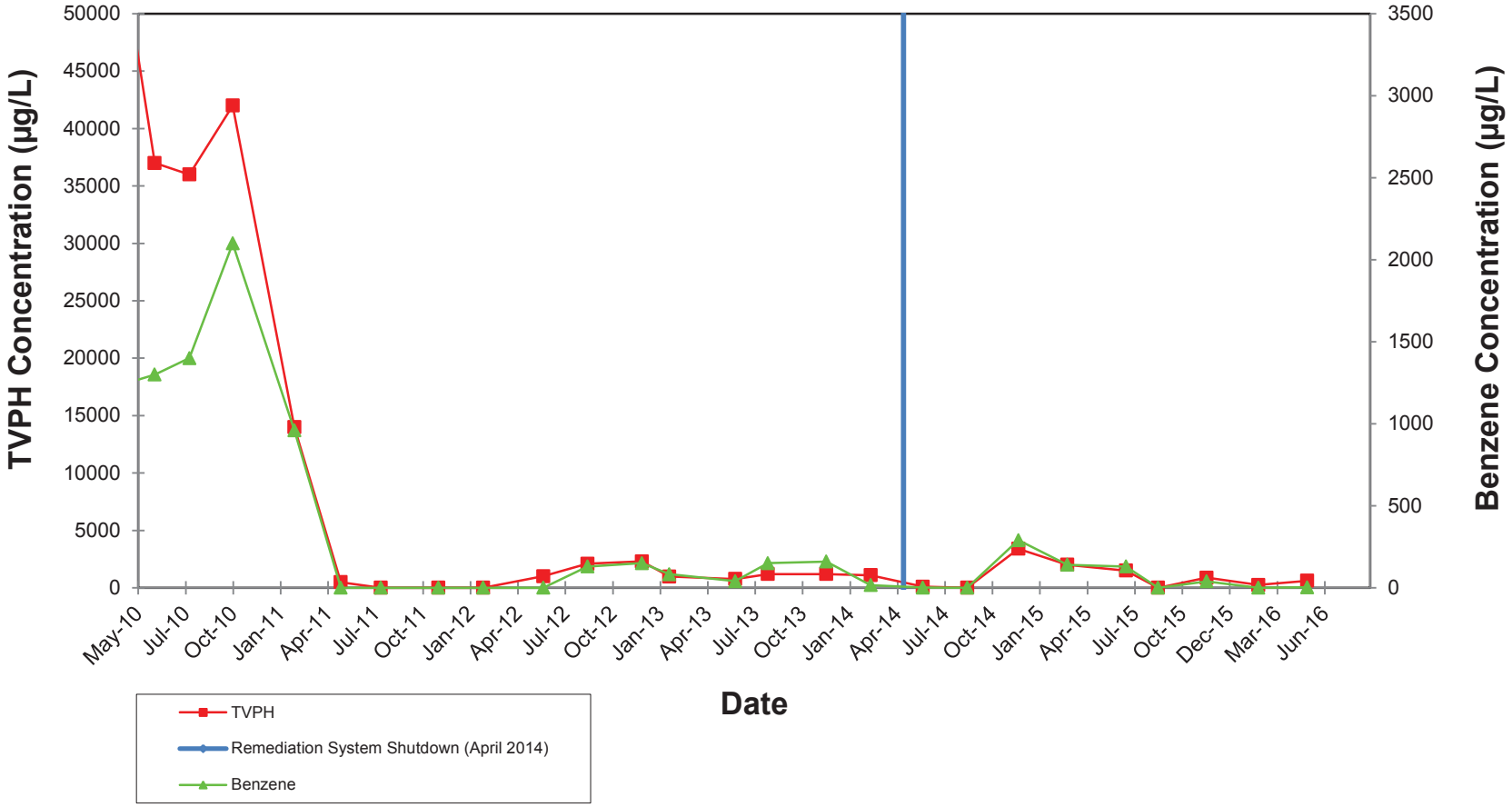
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-34



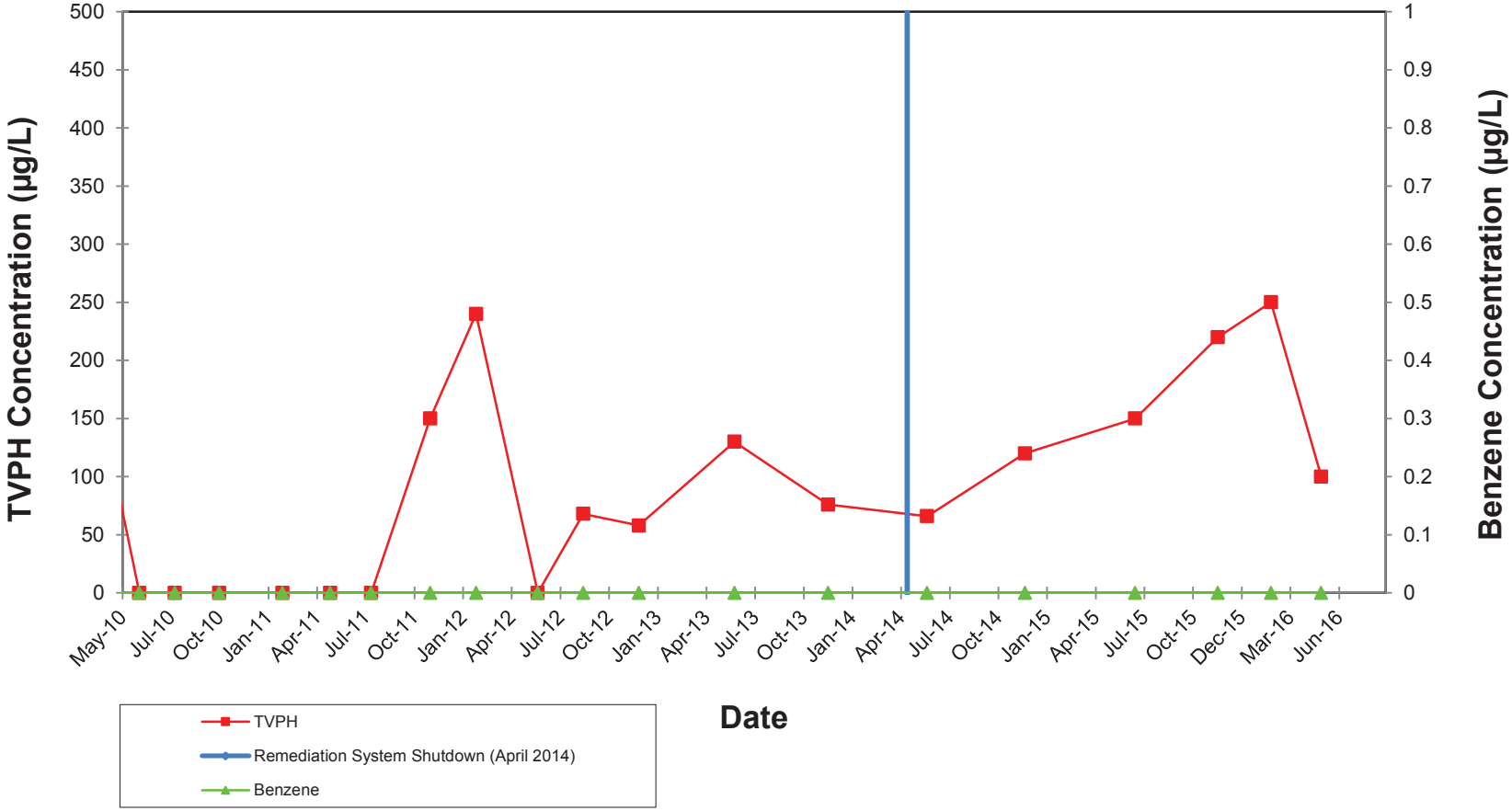
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-35



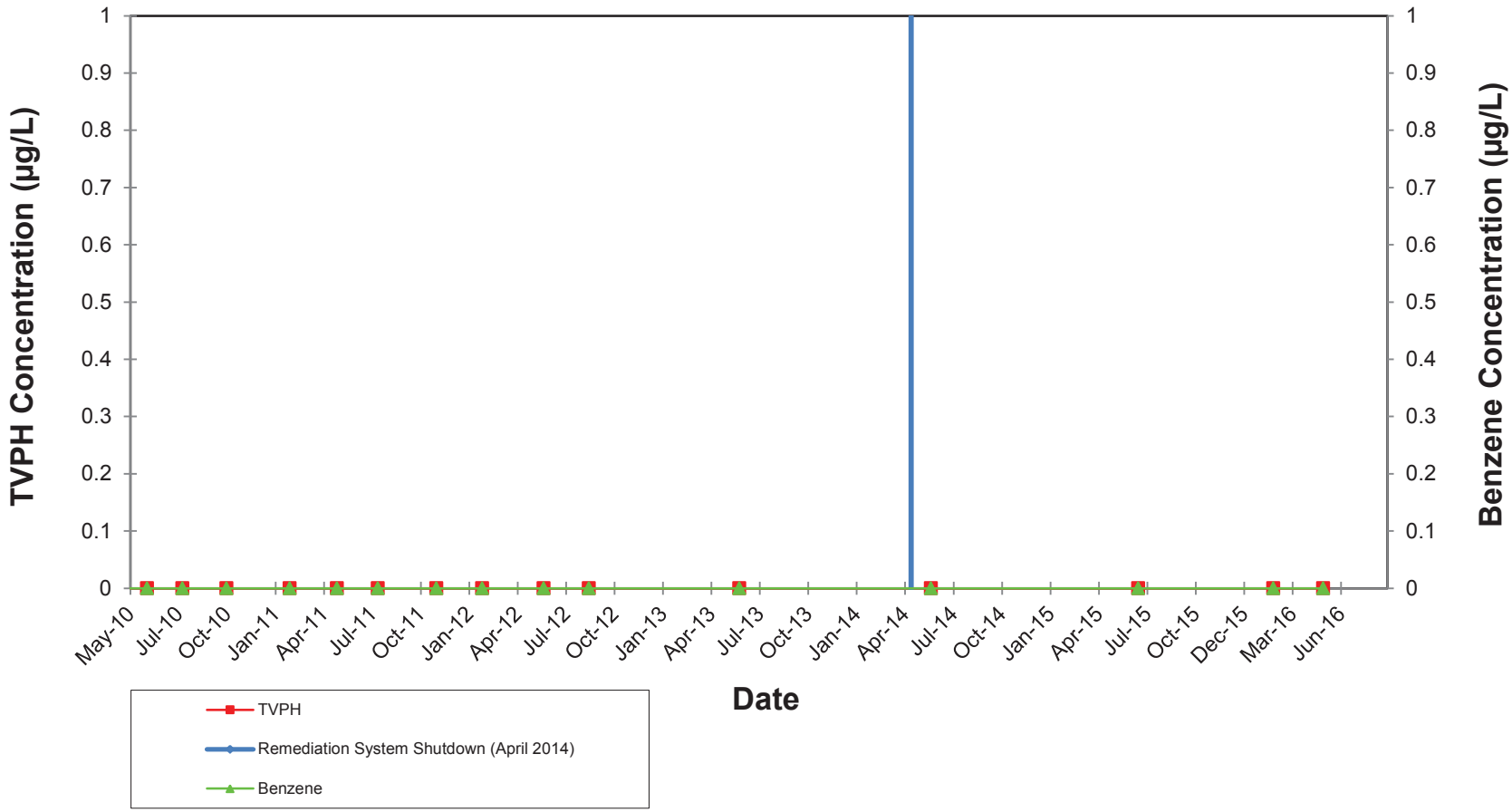
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-36



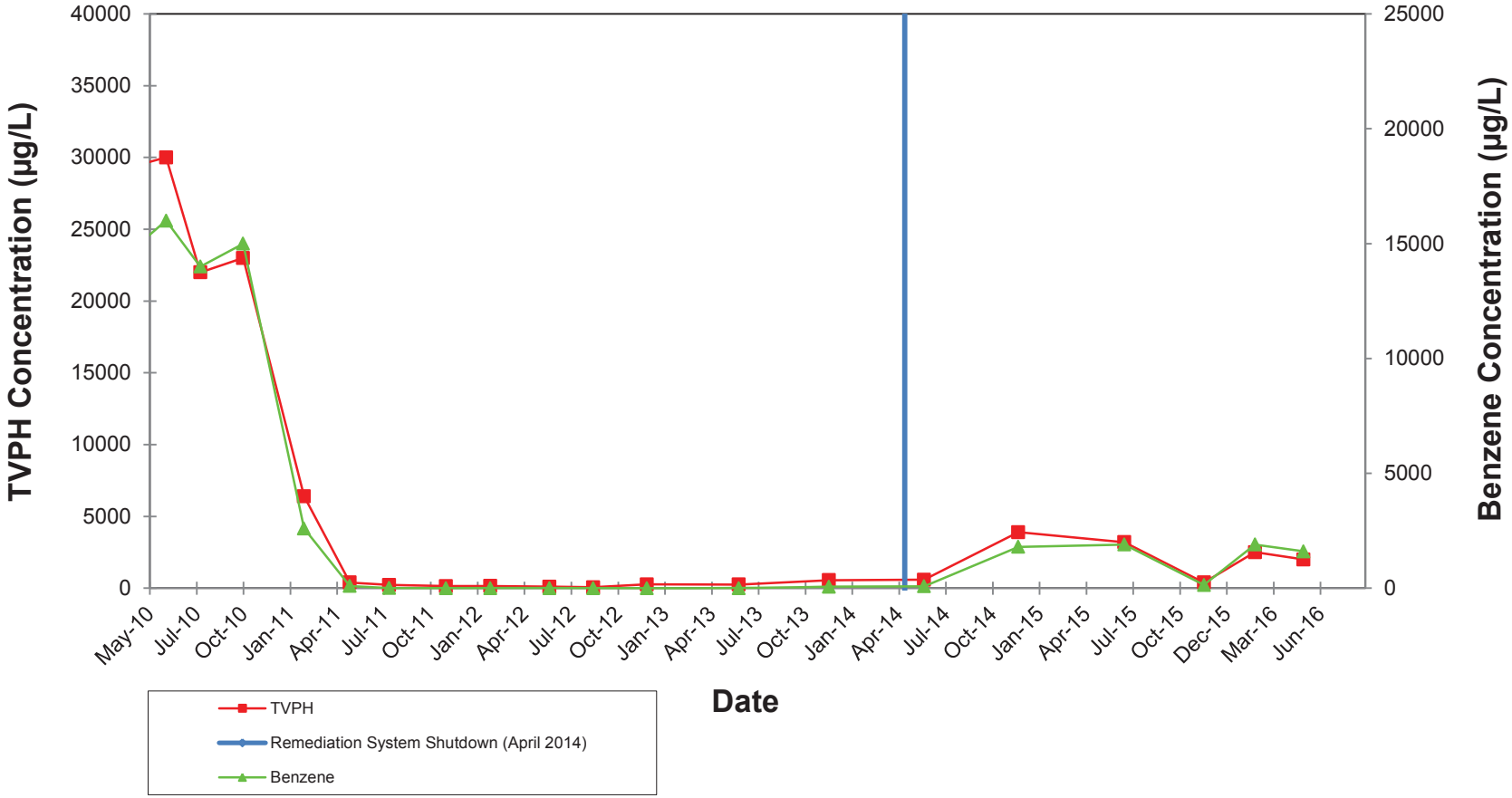
Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-37



Note: Non-detect concentrations were entered as "0".

TVPH and Benzene Concentration Plots
Monitoring Well MW-38



Note: Non-detect concentrations were entered as "0".

APPENDIX C

TRAFFIC IMPACT ANALYSIS

Tribune Property Traffic Analysis

City of Costa Mesa

Prepared for:
Gibson, Dunn & Crutcher LLP

Prepared by:
Stantec Consulting Services Inc.

August 16, 2016 Draft Report

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1.0 INTRODUCTION AND OVERVIEW

These technical notes summarize the results of a traffic analysis for the Tribune property in the northern portion of the City of Costa Mesa, California. The scope and approach for this analysis has been reviewed by City of Costa Mesa Transportation Department staff, and this report is intended for submittal to the City of Costa Mesa for the City's review of the proposed project and for use as a supporting document for the project's Environmental Impact Report (EIR) Addendum. As part of the updated Costa Mesa General Plan that was adopted by the City in June 2016, the Tribune project site was designated to allow for a mix of office and retail uses, which is consistent with the proposed project. This study is intended to satisfy the analysis needed for the corresponding zone change and entitlement.

The project area is generally bounded by South Coast Drive to the south, Sunflower Avenue to the north, Harbor Boulevard to the west and railroad right-of-way to the east. The Tribune site itself consists of the Los Angeles Time facility, which is a light industrial use, and an outdoor baseball and basketball facility to the west of the Los Angeles Times facility. Both of these existing land uses would be replaced in their entirety by the proposed project. The first phase of the project development plan is anticipated to consist of approximately 300,000 square feet of office use, and full development of the project consists of 655,000 square feet of office use.

1.1 TRAFFIC ANALYSIS SCENARIOS

The following timeframes and scenarios are analyzed in this study:

Existing Conditions

Existing traffic conditions are analyzed in this study based on observed traffic counts collected in 2015 and 2016 for the intersections in the study area.

Phase 1 Analysis (Opening Day Setting)

Trips generated by the project's first phase (300,000 square feet of office use) were distributed across the study area intersections based on a trip distribution pattern derived from the City's General Plan travel demand model. The distribution pattern is based on a select zone assignment conducted for the traffic model zone in which the project site is located using the base year (existing) version of the traffic model. Existing traffic counts were increased by an ambient growth rate of 1% per year to reflect opening day (year 2018) conditions without the project, and then the project trips were incrementally added to 2018 no-project conditions to derive opening day (year 2018) with-project conditions. Additionally, year 2018 conditions with and without the project were analyzed with the inclusion of traffic for two projects proposed in close proximity to the Tribune property; 1) the Vans corporate headquarters, which will occupy the currently vacant building located at the northeast corner of the intersection of South Coast

Drive and Hyland Avenue, and 2) the Steelwave development plan proposed on the former Emulex site, which is located immediately east of the Tribune property.

The comparison of opening day (year 2018) conditions with and without the project's first phase is utilized to determine the potential near-term impact of the project on the study area intersections. Potential impacts were identified based on level of service standards and impact thresholds established by the cities of Costa Mesa and Santa Ana, and mitigation is identified for significantly impacted locations if necessary.

Full Project Analysis (Long-Range Setting)

The potential long-term impacts with full development of the project are analyzed based on long-range (year 2035) traffic conditions. Year 2035 cumulative traffic forecasts with and without the proposed project were derived using the long-range version of the City's General Plan travel demand model based on the citywide land uses that correspond to the City's recent General Plan update. Full development of the proposed project (655,000 square feet of office use) is assumed in the City's General Plan update; therefore the long-range proposed General Plan traffic forecasts (committed highway network) from the General Plan Update Traffic Study served as the with-project conditions. Long-range no-project traffic conditions were then prepared by deleting the project traffic from the with-project forecasts based on a trip distribution pattern from a select zone assignment using the long-range (year 2035) version of the traffic model.

A comparison of General Plan build-out conditions with and without full development of the project is used to identify the potential impact of the project on the study area intersections. Potential impacts were identified based on level of service standards and impact thresholds established by the cities of Costa Mesa and Santa Ana, and mitigation is identified for significantly impacted locations if necessary. Non-committed long-range improvements have been identified in the General Plan update for intersection locations within the traffic analysis study area. The proposed project's fair share contribution towards the implementation of Costa Mesa General Plan roadway improvements both within and beyond the study area will be satisfied through the project's payment of Costa Mesa Traffic Impact Fees.

1.2 TRAFFIC ANALYSIS STUDY AREA

The traffic analysis study area consists of the following 18 intersections (16 intersections in Costa Mesa and two intersections in Santa Ana):

1. Harbor & MacArthur (Santa Ana)
2. Harbor & Scenic/Lake Center
3. Harbor & Sunflower
4. Harbor & South Coast
5. Hyland & South Coast/I-405 NB On-Ramp
6. Harbor & I-405 NB Ramps
7. Harbor & I-405 SB Ramps
8. Harbor & Gisler
9. Harbor & Baker
10. Susan & Sunflower

11. Susan & South Coast
12. Fairview & MacArthur (Santa Ana)
13. Fairview & Sunflower
14. Fairview & South Coast
15. Fairview & I-405 NB Ramps
16. Fairview & I-405 SB Ramps
17. Fairview & Paularino
18. Fairview & Baker

1.3 PERFORMANCE CRITERIA

A set of performance criteria is utilized in this analysis to determine existing and future operating levels of service (LOS) for the intersections in the study area. Traffic LOS is designated "A" through "F" with LOS "A" representing free flow conditions and LOS "F" representing severe traffic congestion. Table 1 summarizes general LOS descriptions for urban streets and intersections as well as the volume/capacity (V/C) ranges that correspond to LOS "A" through "F". The V/C ranges listed in the table are designated in the Costa Mesa General Plan Circulation Element as well as the Orange County Congestion Management Program (CMP). The performance criteria applied in this study for the intersections in the study area are based on LOS calculation methodologies and performance standards adopted by the Cities of Costa Mesa and Santa Ana.

The intersection performance criteria applied in this study involve the use of peak hour intersection capacity utilization (ICU) values. The ICU calculation methodology adopted by the Cities of Costa Mesa and Santa Ana applies a saturation flow rate of 1,700 vehicles per hour per intersection lane and a 0.05 clearance interval, which is consistent with the Orange County CMP. The ICU ranges that correspond to LOS "A" through "F" are the same as the V/C ranges shown in Table 1. LOS "D" (ICU not to exceed .90) is the performance standard for City of Costa Mesa and Santa Ana intersections.

Caltrans freeway ramp intersections are analyzed in this study using the Highway Capacity Manual (HCM) LOS methodology for signalized intersections in addition to the ICU methodology. In the HCM signalized intersection analysis methodology, the LOS at an intersection location is determined based on the estimated average delay experienced by all traffic using the intersection. The vehicle delay ranges that correspond to LOS "A" through "F" as specified in the HCM are summarized in Table 2.

Table 1 Level of Service Descriptions – Urban Streets and Intersections

Level of Service (LOS)	Description	Volume/Capacity (V/C) Range
A	LOS A describes primarily free-flow operations. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.	.00 – .60
B	LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.	.61 – .70
C	LOS C describes stable operation. The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at the intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.	.71 – .80
D	LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the intersections. The travel speed is between 40% and 50% of the base free-flow speed.	.81 – .90
E	LOS E is characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the intersections. The travel speed is between 30% and 40% of the base free-flow speed.	.91 – 1.00
F	LOS F is characterized by flow at extremely low speed. Congestion is likely occurring at the intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed.	Above 1.00
Source: Orange County CMP and the Highway Capacity Manual 2010, Transportation Research Board, National Research Council		

Table 2 Intersection Level of Service Ranges (ICU and HCM Delay)

Level of Service (LOS)	Intersection Capacity Utilization (ICU)	Highway Capacity Manual (HCM) Average Delay
A	0.00 – 0.60	0.00 – 10.0 seconds
B	0.61 – 0.70	10.1 – 20.0 seconds
C	0.71 – 0.80	20.1 – 35.0 seconds
D	0.81 – 0.90	35.1 – 55.0 seconds
E	0.91 – 1.00	55.1 – 80.0 seconds
F	Above 1.00	Above 80.0 seconds

2.0 PROJECT TRIP GENERATION AND DISTRIBUTION

Vehicle trip generation estimates are provided here for the proposed future land uses on the project site. The trip generation estimates were calculated based on Institute of Transportation Engineers (ITE) trip generation rates used in the Costa Mesa travel demand model that was applied in the City's General Plan update. The daily and peak hour (AM and PM) trip generation estimates for the 300,000 square feet of office use with the initial phase of the project and the 655,000 square feet of office use with full General Plan buildout of the project are summarized in Table 3.

As mentioned in the introduction, traffic distribution patterns for the project were developed based on select zone assignments for the project site using the base year (existing) and long-range (year 2035) versions of the Costa Mesa travel demand model. The resulting project trip distribution patterns for opening day (year 2018) and long-range (year 2035) are summarized in Table 4. The opening day (year 2018) distribution pattern was used to add the trip generation estimates for the 300,000 square-foot initial development phase to year 2018 no-project traffic forecasts, and the long-range (year 2035) distribution pattern was used to delete the trip generation estimates for the 655,000 square-foot full development of the project from year 2035 with-project traffic forecasts based on the recently adopted Costa Mesa updated General Plan.

Table 3 Trip Generation Estimates for the Tribune Site

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
TRIBUNE PROJECT									
Initial Development Phase (300,000 Square Feet)									
General Office	TSF	300	411	57	468	75	372	447	3,309
Full General Plan Development (655,000 Square Feet)									
General Office	TSF	655	897	124	1,021	164	812	976	7,225
TRIP GENERATION RATES									
General Office (710)	TSF	--	1.37	0.19	1.56	0.25	1.24	1.49	11.03

Trip Rate Source: Institute of Transportation Engineers (ITE) 9th Edition, 2012, with ITE Code in parenthesis.

Abbreviations: ADT – Average Daily Trips
IB – Inbound Trips
OB – Outbound Trips
TSF – Thousand Square Feet

Table 4 Project Trip Distribution Pattern

Roadway Location	Percentage of Project Site Trip Generation	
	Opening Day (Year 2018)	**Long-Range (Year 2035)**
Fairview Road north of Sunflower Avenue	6%	6%
Fairview Road south of I-405 Freeway	2%	2%
Harbor Boulevard north of Sunflower Avenue	16%	19%
Harbor Boulevard south of I-405 Freeway	14%	12%
I-405 Freeway north of Harbor Boulevard	14%	17%
I-405 Freeway south of Fairview Road	25%	21%
South Coast Drive east of Fairview Road	3%	3%
Sunflower Avenue west of Harbor Boulevard	2%	3%
Sunflower Avenue east of Fairview Road	16%	14%
Susan Street north of Sunflower Avenue	2%	3%
Total	100%	100%

3.0 SHORT-RANGE TRAFFIC CONDITIONS

Table 5 summarizes AM and PM peak hour intersection capacity utilization (ICU) values and levels of service for the intersections in the study area based on existing (2015/2016) conditions and 2018 opening day conditions with and without the 300,000 square-foot initial development phase of the Tribune project (actual ICU worksheets are provided in Appendix A). Table 6 summarizes existing and 2018 AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the Highway Capacity Manual (HCM) signalized intersection level of service (LOS) methodology (HCM intersection LOS calculation worksheets are provided in Appendix B).

Vehicle trip generation estimates for the Vans corporate headquarters project located at the northeast corner of the South Coast Drive/Hyland Avenue intersection and the Steelwave project located on the former Emulex site are summarized in Tables 7 and 8, respectively. The traffic generated by these two projects was distributed to the study area intersections based on Costa Mesa traffic model select zone assignments for their respective project sites. Table 9 summarizes year 2018 AM and PM peak hour ICU values and levels of service with the Vans and Steelwave projects without and with the 300,000 square-foot initial development phase of the Tribune project (actual ICU worksheets are provided in Appendix A), and Table 10 summarizes the corresponding year 2018 AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the HCM signalized intersection LOS methodology (HCM intersection LOS calculation worksheets are provided in Appendix B).

As the LOS summary tables indicate, each of the intersections analyzed is forecast to operate at an acceptable LOS "D" or better under 2018 opening day conditions with development of the initial phase of the project (i.e., the 300,000 square-foot initial development phase of the Tribune project does not significantly impact any of the study area intersections based on 2018 opening day conditions).

Table 5 Existing and Opening Day (2018) Intersection LOS Summary (ICU Methodology)

	Existing (2015/2016)				Opening Day (2018) No-Project				Opening Day (2018) With 300,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**
1. Harbor & MacArthur	.73	C	.83	D	.77	C	.85	D	.77	C	.85	D
2. Harbor & Scenic/Lake Center	.66	B	.57	A	.67	B	.58	A	.68	B	.59	A
3. Harbor & Sunflower	.64	B	.68	B	.66	B	.70	B	.66	B	.70	B
4. Harbor & South Coast	.50	A	.69	B	.51	A	.72	C	.52	A	.74	C
5. Hyland & South Coast/I-405 NB On	.26	A	.58	A	.26	A	.59	A	.27	A	.59	A
6. Harbor & I-405 NB Ramps	.64	B	.77	C	.66	B	.79	C	.67	B	.81	D
7. Harbor & I-405 SB Ramps	.44	A	.62	B	.46	A	.64	B	.48	A	.65	B
8. Harbor & Gisler	.58	A	.70	B	.59	A	.72	C	.59	A	.73	C
9. Harbor & Baker	.49	A	.62	B	.51	A	.63	B	.52	A	.63	B
10. Susan & Sunflower	.30	A	.72	C	.31	A	.74	C	.34	A	.75	C
11. Susan & South Coast	.24	A	.52	A	.26	A	.52	A	.27	A	.54	A
12. Fairview & MacArthur	.68	B	.76	C	.69	B	.79	C	.69	B	.79	C
13. Fairview & Sunflower	.55	A	.65	B	.56	A	.66	B	.57	A	.68	B
14. Fairview & South Coast	.68	B	.86	D	.69	B	.87	D	.69	B	.87	D
15. Fairview & I-405 NB Ramps	.52	A	.63	B	.54	A	.65	B	.54	A	.66	B
16. Fairview & I-405 SB Ramps	.58	A	.49	A	.59	A	.51	A	.59	A	.51	A
17. Fairview & Paularino	.46	A	.45	A	.46	A	.47	A	.47	A	.47	A
18. Fairview & Baker	.64	B	.60	A	.66	B	.62	B	.66	B	.62	B

Abbreviations: ICU – intersection capacity utilization
LOS – level of service
NB – northbound
SB – southbound

Table 6 Existing and Opening Day (2018) Intersect ion LOS Summary (HCM Methodology)

	Existing (2015/2016)				Opening Day (2018) No-Project				Opening Day (2018) With 300,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**
5. Hyland & South Coast/I-405 NB On	1.7	A	1.2	A	1.7	A	1.2	A	1.7	A	1.2	A
6. Harbor & I-405 NB Ramps	15.4	B	20.1	C	15.9	B	21.1	C	16.5	B	21.5	C
7. Harbor & I-405 SB Ramps	10.4	B	14.2	B	10.4	B	14.8	B	11.1	B	15.1	B
15. Fairview & I-405 NB Ramps	18.8	B	28.4	C	19.4	B	30.0	C	19.5	B	30.2	C
16. Fairview & I-405 SB Ramps	20.0	C	18.0	B	20.1	C	18.4	B	20.1	C	18.3	B

Abbreviations: HCM – Highway Capacity Manual
LOS – level of service
NB – northbound
SB – southbound

(a) Average vehicle delay in seconds.

Table 7 Trip Generation Estimates for the Vans Corporate Headquarters Project

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
VANS PROJECT									
Corporate Headquarters	TSF	178.893	252	20	272	25	227	252	1,428
TRIP GENERATION RATES									
Corporate Headquarters (714)	TSF	--	1.41	.11	1.52	.14	1.27	1.41	7.98

Trip Rate Source: Institute of Transportation Engineers (ITE) 9th Edition, 2012, with ITE Code in parenthesis.

Abbreviations: ADT – Average Daily Trips
IB – Inbound Trips
OB – Outbound Trips
TSF – Thousand Square Feet

Table 8 Trip Generation Estimates for the Steelwave Project

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
STEELWAVE PROJECT									
Existing Development									
Industrial Park	TSF	172	115	26	141	31	115	146	1,175
Proposed Steelwave Development Plan									
Office (Existing Buildings)	TSF	172	236	33	269	43	213	256	1,897
Hotel	Room	128	40	28	68	40	37	77	1,046
Quality Restaurant	TSF	7.72	3	3	6	39	19	58	694
High Turnover Restaurant	TSF	5.58	33	27	60	33	22	55	709
Retail	TSF	2.00	1	1	2	4	5	9	107
Trip Generation Summary									
Total (Before Trip Reduction)			313	92	405	159	296	455	4,453
10% Internal Capture Trip Reduction			-20	-20	-40	-23	-23	-46	-445
Total (After Trip Reduction)			293	72	365	136	273	409	4,008
Difference (Proposed Steelwave Development Plan Versus Existing Development)									
Net Trip Generation Increase			178	46	224	105	158	263	2,833
TRIP GENERATION RATES									
Industrial Park (130)	TSF	--	.67	.15	.82	.18	.67	.85	6.83
Office (710)	TSF	--	1.37	.19	1.56	.25	1.24	1.49	11.03
Hotel (310)	Room	--	.31	.22	.53	.31	.29	.60	8.17
Quality Restaurant (931)	TSF	--	.41	.40	.81	5.02	2.47	7.49	89.95
High Turnover Restaurant (932)	TSF	--	5.95	4.86	10.81	5.91	3.94	9.85	127.15
Retail (820)	TSF	--	.73	.45	1.18	2.23	2.41	4.64	53.28

Trip Rate Source: Institute of Transportation Engineers (ITE) 9th Edition, 2012, with ITE Code in parenthesis.

Abbreviations: ADT – Average Daily Trips
IB – Inbound Trips
OB – Outbound Trips
TSF – Thousand Square Feet

Table 9 Opening Day (2018) Intersection LOS Summary with the Vans and Steelwave Projects (ICU Methodology)

	No-Project				With 300,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**
1. Harbor & MacArthur	.77	C	.87	D	.79	C	.87	D
2. Harbor & Scenic/Lake Center	.68	B	.59	A	.69	B	.60	A
3. Harbor & Sunflower	.68	B	.71	C	.68	B	.71	C
4. Harbor & South Coast	.55	A	.76	C	.55	A	.78	C
5. Hyland & South Coast/I-405 NB On	.28	A	.61	B	.28	A	.64	B
6. Harbor & I-405 NB Ramps	.67	B	.80	C	.69	B	.82	D
7. Harbor & I-405 SB Ramps	.48	A	.65	B	.49	A	.65	B
8. Harbor & Gisler	.60	A	.73	C	.60	A	.73	C
9. Harbor & Baker	.51	A	.63	B	.52	A	.63	B
10. Susan & Sunflower	.32	A	.75	C	.34	A	.76	C
11. Susan & South Coast	.30	A	.56	A	.31	A	.56	A
12. Fairview & MacArthur	.69	B	.79	C	.69	B	.79	C
13. Fairview & Sunflower	.57	A	.67	B	.57	A	.69	B
14. Fairview & South Coast	.69	B	.87	D	.70	B	.87	D
15. Fairview & I-405 NB Ramps	.54	A	.66	B	.54	A	.66	B
16. Fairview & I-405 SB Ramps	.59	A	.52	A	.59	A	.52	A
17. Fairview & Paularino	.47	A	.47	A	.47	A	.47	A
18. Fairview & Baker	.66	B	.62	B	.66	B	.62	B

Abbreviations: ICU – intersection capacity utilization
LOS – level of service
NB – northbound
SB – southbound

Table 10 Opening Day (2018) Intersection LOS Summary with the Vans and Steelwave Projects (HCM Methodology)

Intersection	No-Project				With 300,000 SF Initial Project Phase			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (a)	LOS	Delay (a)	LOS	Delay (a)	LOS	Delay (a)	LOS
5. Hyland & South Coast/I-405 NB On	1.3	A	1.2	A	1.3	A	1.2	A
6. Harbor & I-405 NB Ramps	16.5	B	21.3	C	17.6	B	22.0	C
7. Harbor & I-405 SB Ramps	11.2	B	15.1	B	12.1	B	15.3	B
15. Fairview & I-405 NB Ramps	19.4	B	31.1	C	19.4	B	31.2	C
16. Fairview & I-405 SB Ramps	20.2	C	18.5	B	20.3	C	18.5	B

Abbreviations: HCM – Highway Capacity Manual
LOS – level of service
NB – northbound
SB – southbound

(a) Average vehicle delay in seconds.

4.0 LONG-RANGE TRAFFIC CONDITIONS

Table 11 summarizes year 2035 long-range AM and PM peak hour intersection capacity utilization (ICU) values and levels of service for the intersections in the study area based on no-project conditions (i.e., no development of the proposed project) and conditions with full development of the proposed project (655,000 square feet of office use). Table 12 summarizes 2035 no-project and with-project AM and PM peak hour levels of service for the Caltrans freeway ramp intersections in the study area based on the Highway Capacity Manual (HCM) signalized intersection level of service (LOS) methodology (HCM intersection LOS calculation worksheets are provided in Appendix B).

As the LOS summary tables indicate, each of the intersections analyzed is forecast to operate at an acceptable LOS "D" or better under 2035 conditions with full development of the project with the exception of the Harbor Boulevard/MacArthur Boulevard intersection in the City of Santa Ana, which is forecast to operate at LOS "E" during the PM peak hour. However, the proposed project does not significantly impact that intersection because the PM peak hour ICU is the same (0.93) under 2035 no-project and with-project conditions. In other words, full development of the 655,000 square-foot Tribune project does not significantly impact any of the study area intersections based on 2035 long-range conditions.

The recently adopted Costa Mesa General Plan identifies non-committed long-range improvements that are planned at four of the Costa Mesa intersections in the study area. Those improvements, which are listed in Table 13, are included in the 2035 long-range intersection LOS results discussed above. The proposed project's fair share contribution towards the implementation of Costa Mesa General Plan roadway improvements both within and beyond the study area will be satisfied through the project's payment of Costa Mesa Traffic Impact Fees.

Table 11 Long-Range (2035) Intersect ion LOS Summary (ICU Methodology)

	No-Project				With 655,000 SF Full Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**
1. Harbor & MacArthur	.85	D	.93	E	.86	D	.93	E
2. Harbor & Scenic/Lake Center	.61	B	.66	B	.64	B	.69	B
3. Harbor & Sunflower	.60	A	.71	C	.61	B	.72	C
4. Harbor & South Coast	.56	A	.80	C	.56	A	.84	D
5. Hyland & South Coast/I-405 NB On	.26	A	.52	A	.26	A	.56	A
6. Harbor & I-405 NB Ramps	.79	C	.89	D	.81	D	.89	D
7. Harbor & I-405 SB Ramps	.57	A	.71	C	.62	B	.73	C
8. Harbor & Gisler	.58	A	.77	C	.58	A	.78	C
9. Harbor & Baker	.54	A	.78	C	.55	A	.79	C
10. Susan & Sunflower	.43	A	.62	B	.49	A	.64	B
11. Susan & South Coast	.46	A	.68	B	.46	A	.68	B
12. Fairview & MacArthur	.74	C	.83	D	.74	C	.83	D
13. Fairview & Sunflower	.71	C	.66	B	.73	C	.70	B
14. Fairview & South Coast	.68	B	.77	C	.69	B	.79	C
15. Fairview & I-405 NB Ramps	.66	B	.74	C	.68	B	.75	C
16. Fairview & I-405 SB Ramps	.65	B	.70	B	.65	B	.70	B
17. Fairview & Paularino	.58	A	.56	A	.58	A	.57	A
18. Fairview & Baker	.77	C	.81	D	.77	C	.81	D

Abbreviations: ICU – intersection capacity utilization
LOS – level of service
NB – northbound
SB – southbound

Denotes a peak hour deficiency.

Table 12 Long-Range (2035) Intersect ion LOS Summary (HCM Methodology)

	No-Project				With 655,000 SF Full Project			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**	**Delay (a)**	**LOS**
5. Hyland & South Coast/I-405 NB On	1.3	A	1.2	A	1.3	A	1.2	A
6. Harbor & I-405 NB Ramps	15.6	B	21.4	C	17.7	B	22.1	C
7. Harbor & I-405 SB Ramps	20.7	C	19.2	B	22.5	C	20.1	C
15. Fairview & I-405 NB Ramps	40.3	D	39.5	D	41.5	D	40.1	D
16. Fairview & I-405 SB Ramps	22.0	C	26.0	C	22.1	C	25.4	C

Abbreviations: HCM – Highway Capacity Manual
LOS – level of service
NB – northbound
SB – southbound

(a) Average vehicle delay in seconds.

Table 13 Non-Committed General Plan Improvements in the Study Area

Intersection	Non-Committed General Plan Improvement
3. Harbor & Sunflower	Add eastbound and westbound right-turn lanes.
4. Harbor & South Coast	Widen the eastbound approach to provide one left-turn lane, one through lane and two right-turn lanes.
5. Hyland & South Coast/I-405 NB On-Ramp	Add a second westbound through lane.
8. Harbor & Gisler	Add a southbound right-turn lane and a third eastbound left-turn lane.

Appendix A INTERSECTION CAPACITY UTILIZATION (ICU) WORKSHEETS

1. Harbor & MacArthur

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	110	.03*	470	.14
NBT	3	5100	740	.15	1490	.29*
NBR	1	1700	70	.04	100	.06
SBL	2	3400	330	.10	190	.06*
SBT	3	5100	1860	.36*	1010	.20
SBR	1	1700	140	.08	140	.08
EBL	1	1700	100	.06	200	.12*
EBT	3	5100	1170	.23*	450	.09
EBR	1	1700	370	.22	220	.13
WBL	1	1700	110	.06*	90	.05
WBT	3	5100	410	.08	1590	.31*
WBR	1	1700	120	.07	300	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.73**		**.83**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	113	.03*	484	.14
NBT	3	5100	762	.15	1535	.30*
NBR	1	1700	72	.04	103	.06
SBL	2	3400	340	.10	196	.06*
SBT	3	5100	1916	.38*	1040	.20
SBR	1	1700	144	.08	144	.08
EBL	1	1700	103	.06	206	.12*
EBT	3	5100	1205	.24*	464	.09
EBR	1	1700	381	.22	227	.13
WBL	1	1700	113	.07*	93	.05
WBT	3	5100	422	.08	1638	.32*
WBR	1	1700	124	.07	309	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.77**		**.85**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	117	.03*	510	.15
NBT	3	5100	764	.15	1550	.30*
NBR	1	1700	74	.04	114	.07
SBL	2	3400	340	.10	196	.06*
SBT	3	5100	1932	.38*	1043	.20
SBR	1	1700	144	.08	144	.08
EBL	1	1700	103	.06	206	.12*
EBT	3	5100	1205	.24*	464	.09
EBR	1	1700	410	.24	232	.14
WBL	1	1700	125	.07*	95	.06
WBT	3	5100	422	.08	1638	.32*
WBR	1	1700	124	.07	309	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.77**		**.85**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	114	.03*	487	.14
NBT	3	5100	767	.15	1571	.31*
NBR	1	1700	72	.04	105	.06
SBL	2	3400	340	.10	196	.06*
SBT	3	5100	1956	.38*	1047	.21
SBR	1	1700	154	.09	145	.09
EBL	1	1700	104	.06	215	.13*
EBT	3	5100	1205	.24*	464	.09
EBR	1	1700	385	.23	229	.13
WBL	1	1700	116	.07*	93	.05
WBT	3	5100	422	.08	1638	.32*
WBR	1	1700	124	.07	309	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.77**		**.87**

1. Harbor & MacArthur

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	118	.03*	513	.15
NBT	3	5100	769	.15	1586	.31*
NBR	1	1700	74	.04	116	.07
SBL	2	3400	340	.10	196	.06*
SBT	3	5100	1972	.39*	1050	.21
SBR	1	1700	154	.09	145	.09
EBL	1	1700	104	.06	215	.13*
EBT	3	5100	1205	.24*	464	.09
EBR	1	1700	414	.24	234	.14
WBL	1	1700	128	.08*	95	.06
WBT	3	5100	422	.08	1638	.32*
WBR	1	1700	124	.07	309	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.79**		**.87**

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	98	.03*	357	.11
NBT	3	5100	814	.16	1659	.33*
NBR	1	1700	77	.05	76	.04
SBL	2	3400	390	.11	170	.05*
SBT	3	5100	2170	.43*	1112	.22
SBR	1	1700	70	.04	120	.07
EBL	1	1700	110	.06	210	.12*
EBT	3	5100	1360	.27*	520	.10
EBR	1	1700	285	.17	195	.11
WBL	1	1700	118	.07*	105	.06
WBT	3	5100	390	.08	1920	.38*
WBR	1	1700	110	.06	350	.21
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.85**		**.93**

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	110	.03*	430	.13
NBT	3	5100	820	.16	1700	.33*
NBR	1	1700	80	.05	100	.06
SBL	2	3400	390	.11	170	.05*
SBT	3	5100	2210	.43*	1120	.22
SBR	1	1700	70	.04	120	.07
EBL	1	1700	110	.06	210	.12*
EBT	3	5100	1360	.27*	520	.10
EBR	1	1700	370	.22	210	.12
WBL	1	1700	140	.08*	110	.06
WBT	3	5100	390	.08	1920	.38*
WBR	1	1700	110	.06	350	.21
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.86**		**.93**

2. Harbor & Scenic/Lake Center

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	90	.05*	30	.02
NBT	3	5100	1120	.23	1890	.38*
NBR	0	0	60		40	
SBL	1	1700	70	.04	40	.02*
SBT	3	5100	2500	.51*	1250	.25
SBR	0	0	80		20	
EBL	1	1700	10	.01*	50	.03*
EBT	1	1700	30	.02	40	.02
EBR	1	1700	40	.02	70	.04
WBL	1	1700	20	.01	50	.03
WBT	1	1700	30	.04*	80	.09*
WBR	0	0	40		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .57

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	93	.05*	31	.02
NBT	3	5100	1154	.24	1947	.39*
NBR	0	0	62		41	
SBL	1	1700	72	.04	41	.02*
SBT	3	5100	2575	.52*	1288	.26
SBR	0	0	82		21	
EBL	1	1700	10	.01*	52	.03*
EBT	1	1700	31	.02	41	.02
EBR	1	1700	41	.02	72	.04
WBL	1	1700	21	.01	52	.03
WBT	1	1700	31	.04*	82	.09*
WBR	0	0	41		72	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .67 .58

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	93	.05*	31	.02
NBT	3	5100	1163	.24	2003	.40*
NBR	0	0	62		41	
SBL	1	1700	72	.04	41	.02*
SBT	3	5100	2637	.53*	1299	.26
SBR	0	0	82		21	
EBL	1	1700	10	.01*	52	.03*
EBT	1	1700	31	.02	41	.02
EBR	1	1700	41	.02	72	.04
WBL	1	1700	21	.01	52	.03
WBT	1	1700	31	.04*	82	.09*
WBR	0	0	41		72	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .59

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	93	.05*	31	.02
NBT	3	5100	1159	.24	1981	.40*
NBR	0	0	62		41	
SBL	1	1700	72	.04	41	.02*
SBT	3	5100	2614	.53*	1297	.26
SBR	0	0	90		22	
EBL	1	1700	11	.01*	59	.03*
EBT	1	1700	31	.02	41	.02
EBR	1	1700	41	.02	72	.04
WBL	1	1700	21	.01	52	.03
WBT	1	1700	31	.04*	82	.09*
WBR	0	0	41		72	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .59

2. Harbor & Scenic/Lake Center

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	93	.05*	31	.02
NBT	3	5100	1168	.24	2037	.41*
NBR	0	0	62		41	
SBL	1	1700	72	.04	41	.02*
SBT	3	5100	2676	.54*	1308	.26
SBR	0	0	90		22	
EBL	1	1700	11	.01*	59	.03*
EBT	1	1700	31	.02	41	.02
EBR	1	1700	41	.02	72	.04
WBL	1	1700	21	.01	52	.03
WBT	1	1700	31	.04*	82	.09*
WBR	0	0	41		72	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .69 .60

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04*	30	.02
NBT	3	5100	998	.20	2224	.45*
NBR	0	0	40		70	
SBL	1	1700	90	.05	20	.01*
SBT	3	5100	2399	.49*	1610	.32
SBR	0	0	110		20	
EBL	1	1700	10	.01*	90	.05*
EBT	1	1700	20	.01	50	.03
EBR	1	1700	20	.01	130	.08
WBL	1	1700	20	.01	60	.04
WBT	1	1700	30	.02*	100	.10*
WBR	0	0	10		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .61 .66

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04*	30	.02
NBT	3	5100	1020	.21	2370	.48*
NBR	0	0	40		70	
SBL	1	1700	90	.05	20	.01*
SBT	3	5100	2560	.52*	1640	.33
SBR	0	0	110		20	
EBL	1	1700	10	.01*	90	.05*
EBT	1	1700	20	.01	50	.03
EBR	1	1700	20	.01	130	.08
WBL	1	1700	20	.01	60	.04
WBT	1	1700	30	.02*	100	.10*
WBR	0	0	10		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .64 .69

3. Harbor & Sunflower

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	220	.06*	240	.07
NBT	3	5100	1270	.25	1750	.34*
NBR	1	1700	150	.09	140	.08
SBL	2	3400	260	.08	120	.04*
SBT	3	5100	2090	.41*	1360	.27
SBR	1	1700	40	.02	20	.01
EBL	1	1700	10	.01	80	.05
EBT	2	3400	100	.04*	160	.09*
EBR	0	0	30		160	
WBL	1.5		150	{.08}*	270	{.16}*
WBT	1.5	5100	150	.08	440	.17
WBR	0		100		180	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .64 .68

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	227	.07*	247	.07
NBT	3	5100	1308	.26	1803	.35*
NBR	1	1700	155	.09	144	.08
SBL	2	3400	268	.08	124	.04*
SBT	3	5100	2153	.42*	1401	.27
SBR	1	1700	41	.02	21	.01
EBL	1	1700	10	.01	82	.05
EBT	2	3400	103	.04*	165	.10*
EBR	0	0	31		165	
WBL	1.5		155	{.08}*	278	{.16}*
WBT	1.5	5100	155	.08	453	.18
WBR	0		103		185	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .70

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	227	.07*	247	.07
NBT	3	5100	1309	.26	1807	.35*
NBR	1	1700	157	.09	155	.09
SBL	2	3400	321	.09	134	.04*
SBT	3	5100	2165	.42*	1403	.28
SBR	1	1700	41	.02	21	.01
EBL	1	1700	10	.01	82	.05
EBT	2	3400	107	.04*	166	.10*
EBR	0	0	35		166	
WBL	1.5		155	{.08}*	278	{.16}*
WBT	1.5	5100	156	.08	457	.19
WBR	0		110		233	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .70

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	227	.07*	247	.07
NBT	3	5100	1310	.26	1821	.36*
NBR	1	1700	157	.09	162	.10
SBL	2	3400	279	.08	130	.04*
SBT	3	5100	2173	.43*	1403	.28
SBR	1	1700	49	.03	22	.01
EBL	1	1700	11	.01	89	.05
EBT	2	3400	106	.04*	173	.10*
EBR	0	0	31		165	
WBL	1.5		175	{.09}*	280	{.16}*
WBT	1.5	5100	163	.09	456	.18
WBR	0		106		194	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .71

3. Harbor & Sunflower

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	227	.07*	247	.07
NBT	3	5100	1311	.26	1825	.36*
NBR	1	1700	159	.09	173	.10
SBL	2	3400	332	.10	140	.04*
SBT	3	5100	2185	.43*	1405	.28
SBR	1	1700	49	.03	22	.01
EBL	1	1700	11	.01	89	.05
EBT	2	3400	110	.04*	174	.10*
EBR	0	0	35		166	
WBL	1.5		175	{.09}*	280	{.16}*
WBT	1.5	5100	164	.09	460	.19
WBR	0		113		242	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .71

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	370	.11*	80	.02
NBT	3	5100	1229	.24	2072	.41*
NBR	1	1700	235	.14	148	.09
SBL	2	3400	105	.03	135	.04*
SBT	3	5100	1684	.33*	1703	.33
SBR	1	1700	90	.05	30	.02
EBL	1	1700	10	.01	40	.02*
EBT	2	3400	191	.06*	168	.05
EBR	1	1700	31	.02	238	.14
WBL	1.5		120	{.05}*	200	.12
WBT	1.5	5100	139	.05	642	.19*
WBR	1	1700	61	.04	78	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .60 .71

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	370	.11*	80	.02
NBT	3	5100	1230	.24	2080	.41*
NBR	1	1700	240	.14	180	.11
SBL	2	3400	240	.07	160	.05*
SBT	3	5100	1720	.34*	1710	.34
SBR	1	1700	90	.05	30	.02
EBL	1	1700	10	.01	40	.02*
EBT	2	3400	200	.06*	170	.05
EBR	1	1700	40	.02	240	.14
WBL	1.5		120	{.05}*	200	.12
WBT	1.5	5100	140	.05	650	.19*
WBR	1	1700	80	.05	200	.12
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .61 .72

4. Harbor & South Coast

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	240	.07*	390	.11*
NBT	3.5	8500	1640	.24	1890	.28
NBR	1.5		270	.16	240	.14
SBL	2	3400	100	.03	110	.03
SBT	4	6800	2050	.30*	1650	.24*
SBR	1	1700	60	.04	90	.05
EBL	1	1700	20	.01	20	.01*
EBT	0.5	3400	60	{.06}*	50	{.08}
EBR	1.5		240		370	
WBL	2	3400	80	.02*	320	.09
WBT	2	3400	150	.04	960	.28*
WBR	1	1700	50	.03	230	.14
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.50**		**.69**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	247	.07*	402	.12*
NBT	3.5	8500	1689	.25	1947	.29
NBR	1.5		278	.16	247	.15
SBL	2	3400	103	.03	113	.03
SBT	4	6800	2112	.31*	1700	.25*
SBR	1	1700	62	.04	93	.05
EBL	1	1700	21	.01	21	.01*
EBT	0.5	3400	62	{.06}*	52	{.08}
EBR	1.5		247		381	
WBL	2	3400	82	.02*	330	.10
WBT	2	3400	155	.05	989	.29*
WBR	1	1700	52	.03	237	.14
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.51**		**.72**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	247	.07*	402	.12*
NBT	3.5	8500	1755	.26	1959	.29
NBR	1.5		360	.21	262	.15
SBL	2	3400	103	.03	113	.03
SBT	4	6800	2121	.31*	1760	.26*
SBR	1	1700	63	.04	100	.06
EBL	1	1700	21	.01	21	.01*
EBT	0.5	3400	62	{.06}*	52	{.08}
EBR	1.5		247		381	
WBL	2	3400	95	.03*	412	.12
WBT	2	3400	161	.05	1026	.30*
WBR	1	1700	52	.03	237	.14
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.52**		**.74**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	343	.10*	412	.12*
NBT	3.5	8500	1689	.25	1947	.29
NBR	1.5		330	.19	277	.16
SBL	2	3400	103	.03	113	.03
SBT	4	6800	2112	.31*	1700	.25*
SBR	1	1700	105	.06	97	.06
EBL	1	1700	24	.01	60	.04*
EBT	0.5	3400	63	{.06}*	61	{.10}
EBR	1.5		252		440	
WBL	2	3400	88	.03*	349	.10
WBT	2	3400	173	.05	1017	.30*
WBR	1	1700	52	.03	237	.14
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.55**		**.76**

4. Harbor & South Coast

2018 w/300 TSF Initial Phase + Steelwave & Vans

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	343	.10*	412	.12*
NBT	3.5	8500	1755	.26	1959	.29
NBR	1.5		412	.24	292	.17
SBL	2	3400	103	.03	113	.03
SBT	4	6800	2121	.31*	1760	.26*
SBR	1	1700	106	.06	104	.06
EBL	1	1700	24	.01	60	.04*
EBT	0.5	3400	63	{.06}*	61	{.10}
EBR	1.5		252		440	
WBL	2	3400	101	.03*	431	.13
WBT	2	3400	179	.05	1054	.31*
WBR	1	1700	52	.03	237	.14
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.55**		**.78**

2035 No-Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	350	.10*	220	.06
NBT	3.5	8500	2155	.32	2285	.34*
NBR	1.5		483	.28	194	
SBL	2	3400	150	.04	130	.04*
SBT	4	6800	2023	.30*	2076	.31
SBR	1	1700	106	.06	76	.04
EBL	1	1700	10	.01	20	.01*
EBT	1	1700	150	.09*	50	.03
EBR	2	3400	190	.06	350	.10
WBL	2	3400	59	.02*	392	.12
WBT	2	3400	163	.05	1236	.36*
WBR	1	1700	40	.02	350	.21
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.56**		**.80**

2035 With 655 TSF Full Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	350	.10*	220	.06
NBT	3.5	8500	2290	.35	2310	.34*
NBR	1.5		680		230	
SBL	2	3400	150	.04	130	.04*
SBT	4	6800	2040	.30*	2190	.32
SBR	1	1700	110	.06	100	.06
EBL	1	1700	10	.01	20	.01*
EBT	1	1700	150	.09*	50	.03
EBR	2	3400	190	.06	350	.10
WBL	2	3400	80	.02*	530	.16
WBT	2	3400	180	.05	1350	.40*
WBR	1	1700	40	.02	350	.21
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.56**		**.84**

5. Hyland & South Coast/I-405 NB On-Ramp

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	270	.16*	350	.21*
SBT	0	0	0		0	
SBR	f		60		410	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1700	90	.05*	490	.29*
WBR	1	1700	250	.15	810	.48
Right Turn Adjustment					WBR	.03*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .26 .58

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	278	.16*	361	.21*
SBT	0	0	0		0	
SBR	f		62		422	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1700	93	.05*	505	.30*
WBR	1	1700	258	.15	834	.49
Right Turn Adjustment					WBR	.03*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .26 .59

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	278	.16*	361	.21*
SBT	0	0	0		0	
SBR	f		62		422	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1700	100	.06*	550	.32*
WBR	1	1700	258	.15	834	.49
Right Turn Adjustment					WBR	.01*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .27 .59

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	283	.17*	413	.24*
SBT	0	0	0		0	
SBR	f		63		436	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1700	102	.06*	546	.32*
WBR	1	1700	331	.19	841	.49
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .28 .61

5. Hyland & South Coast/I-405 NB On-Ramp

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	283	.17*	413	.24*
SBT	0	0	0		0	
SBR	f		63		436	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1700	109	.06*	591	.35*
WBR	1	1700	331	.19	841	.49
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .28 .64

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	250	.15*	340	.20*
SBT	0	0	0		0	
SBR	f		50		730	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3400	199	.06*	912	.27*
WBR	1	1700	260	.15	500	.29
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .26 .52

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1700	250	.15*	340	.20*
SBT	0	0	0		0	
SBR	f		50		730	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3400	220	.06*	1050	.31*
WBR	1	1700	260	.15	500	.29
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .26 .56

6. Harbor & I-405 NB Ramps

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		10	{.01}*
NBT	4	6800	1320	.26	1580	.31
NBR	0	0	440		500	
SBL	0	0	0		0	
SBT	4	6800	2450	.36*	2420	.36*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		480		880	
WBT	0	5100	0	{.23}*	0	{.35}*
WBR	1.5		820		990	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.64**		**.77**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		10	{.01}*
NBT	4	6800	1360	.27	1627	.32
NBR	0	0	453		515	
SBL	0	0	0		0	
SBT	4	6800	2524	.37*	2493	.37*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		494		906	
WBT	0	5100	0	{.24}*	0	{.36}*
WBR	1.5		845		1020	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.66**		**.79**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		10	{.01}*
NBT	4	6800	1467	.28	1647	.32
NBR	0	0	453		515	
SBL	0	0	0		0	
SBT	4	6800	2546	.37*	2634	.39*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		494		906	
WBT	0	5100	0	{.25}*	0	{.36}*
WBR	1.5		886		1028	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.67**		**.81**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		10	{.01}*
NBT	4	6800	1465	.28	1662	.32
NBR	0	0	453		515	
SBL	0	0	0		0	
SBT	4	6800	2535	.37*	2571	.38*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		494		906	
WBT	0	5100	0	{.25}*	0	{.36}*
WBR	1.5		888		1024	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.67**		**.80**

6. Harbor & I-405 NB Ramps

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		10	{.01}*
NBT	4	6800	1572	.30	1682	.32
NBR	0	0	453		515	
SBL	0	0	0		0	
SBT	4	6800	2557	.38*	2712	.40*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		494		906	
WBT	0	5100	0	{.26}*	0	{.36}*
WBR	1.5		929		1032	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.82**

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	2040	.40*	1622	.32
NBR	0	0	1170	.69	1270	.75
SBL	0	0	0		0	
SBT	4	6800	2262	.33	2818	.41*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		370	.22*	940	
WBT	0	5100	0		0	{.35}*
WBR	1.5		748	.22	967	
Right Turn Adjustment			NBR	.12*	NBR	.08*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.79**		**.89**

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	2300	.45*	1670	.33
NBR	0	0	1170	.69	1270	.75
SBL	0	0	0		0	
SBT	4	6800	2300	.34	3070	.45*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		370	.22*	940	
WBT	0	5100	0		0	{.35}*
WBR	1.5		820	.24	980	
Right Turn Adjustment			Multi	.09*	NBR	.04*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.81**		**.89**

7. Harbor & I-405 SB Ramps

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1380	.27*	1810	.35
NBR	f		1290		750	
SBL	0	0	0		10	
SBT	4	6800	1700	.25	2440	.36*
SBR	f		1040		930	
EBL	1.5		290	{.12}*	170	.10*
EBT	0	5100	0	{.12}	0	
EBR	1.5		370		720	.21
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.11*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.44**		**.62**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1421	.28*	1864	.37*
NBR	f		1329		773	
SBL	0	0	0		10	{.01}*
SBT	4	6800	1751	.26	2513	.37
SBR	f		1071		958	
EBL	1.5		299	{.13}*	175	.10*
EBT	0	5100	0	.13	0	
EBR	1.5		381		742	.22
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.11*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.46**		**.64**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1479	.29*	1875	.37*
NBR	f		1329		773	
SBL	0	0	0		10	{.01}*
SBT	4	6800	1759	.26	2565	.38
SBR	f		1085		1047	
EBL	1.5		348	{.14}*	184	.11*
EBT	0	5100	0	.14	0	
EBR	1.5		381		742	.22
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.11*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.48**		**.65**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1465	.29*	1879	.37*
NBR	f		1329		773	
SBL	0	0	0		10	{.01}*
SBT	4	6800	1759	.26	2552	.38
SBR	f		1074		997	
EBL	1.5		359	{.14}*	196	.12*
EBT	0	5100	0	{.14}	0	
EBR	1.5		381		742	.22
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.10*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.48**		**.65**

7. Harbor & I-405 SB Ramps

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1523	.30*	1890	.37*
NBR	f		1329		773	
SBL	0	0	0		10	{.01}*
SBT	4	6800	1767	.26	2604	.38
SBR	f		1088		1086	
EBL	1.5		408	{.14}*	205	.12*
EBT	0	5100	0	{.14}	0	
EBR	1.5		381		742	.22
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.10*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .49 .65

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1282	.25*	1720	.34
NBR	f		270		490	
SBL	0	0	0		0	
SBT	4	6800	1495	.22	2663	.39*
SBR	f		1166		1086	
EBL	1.5		678	{.27}*	192	.11*
EBT	0	5100	0	{.27}	0	
EBR	1.5		760		930	.27
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.16*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .71

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1390	.27*	1740	.34
NBR	f		270		490	
SBL	0	0	0		0	
SBT	4	6800	1510	.22	2760	.41*
SBR	f		1190		1240	
EBL	1.5		830	{.30}*	220	.13*
EBT	0	5100	0	{.30}	0	
EBR	1.5		760		930	.27
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.14*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .73

8. Harbor & Gisler

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	80	.05*	130	.08*
NBT	5	8500	1960	.23	2090	.25
NBR	0	0	20		30	
SBL	1	1700	90	.05	160	.09
SBT	4	6800	1790	.28*	2540	.44*
SBR	0	0	120		430	
EBL	2	3400	610	.18*	350	.10*
EBT	1	1700	50	.08	40	.09
EBR	0	0	80		120	
WBL	1	1700	40	.02	40	.02
WBT	1	1700	30	.02*	50	.03*
WBR	1	1700	150	.09	150	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.58**		**.70**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	82	.05*	134	.08*
NBT	5	8500	2019	.24	2153	.26
NBR	0	0	21		31	
SBL	1	1700	93	.05	165	.10
SBT	4	6800	1844	.29*	2616	.45*
SBR	0	0	124		443	
EBL	2	3400	628	.18*	361	.11*
EBT	1	1700	52	.08	41	.10
EBR	0	0	82		124	
WBL	1	1700	41	.02	41	.02
WBT	1	1700	31	.02*	52	.03*
WBR	1	1700	155	.09	155	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.59**		**.72**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	82	.05*	134	.08*
NBT	5	8500	2077	.25	2164	.26
NBR	0	0	21		31	
SBL	1	1700	93	.05	165	.10
SBT	4	6800	1852	.29*	2668	.46*
SBR	0	0	124		443	
EBL	2	3400	628	.18*	361	.11*
EBT	1	1700	52	.08	41	.10
EBR	0	0	82		124	
WBL	1	1700	41	.02	41	.02
WBT	1	1700	31	.02*	52	.03*
WBR	1	1700	155	.09	155	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.59**		**.73**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	82	.05*	134	.08*
NBT	5	8500	2060	.24	2168	.26
NBR	0	0	21		31	
SBL	1	1700	93	.05	165	.10
SBT	4	6800	1852	.29*	2653	.46*
SBR	0	0	124		445	
EBL	2	3400	631	.19*	361	.11*
EBT	1	1700	52	.08	41	.10
EBR	0	0	82		124	
WBL	1	1700	41	.02	41	.02
WBT	1	1700	31	.02*	52	.03*
WBR	1	1700	155	.09	155	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.60**		**.73**

8. Harbor & Gisler

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	82	.05*	134	.08*
NBT	5	8500	2118	.25	2179	.26
NBR	0	0	21		31	
SBL	1	1700	93	.05	165	.10
SBT	4	6800	1860	.29*	2705	.46*
SBR	0	0	124		445	
EBL	2	3400	631	.19*	361	.11*
EBT	1	1700	52	.08	41	.10
EBR	0	0	82		124	
WBL	1	1700	41	.02	41	.02
WBT	1	1700	31	.02*	52	.03*
WBR	1	1700	155	.09	155	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.60**		**.73**

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	110	.06*	150	.09*
NBT	5	8500	2212	.26	2450	.29
NBR	0	0	10		30	
SBL	1	1700	100	.06	200	.12
SBT	4	6800	2305	.34*	3373	.50*
SBR	1	1700	160	.09	460	.27
EBL	3	5100	540	.11	500	.10*
EBT	1	1700	60	.11*	30	.08
EBR	0	0	130		110	
WBL	1	1700	30	.02*	60	.04
WBT	1	1700	20	.01	50	.03*
WBR	1	1700	160	.09	130	.08
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.58**		**.77**

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	110	.06*	150	.09*
NBT	5	8500	2320	.27	2470	.29
NBR	0	0	10		30	
SBL	1	1700	100	.06	200	.12
SBT	4	6800	2320	.34*	3470	.51*
SBR	1	1700	160	.09	460	.27
EBL	3	5100	540	.11	500	.10*
EBT	1	1700	60	.11*	30	.08
EBR	0	0	130		110	
WBL	1	1700	30	.02*	60	.04
WBT	1	1700	20	.01	50	.03*
WBR	1	1700	160	.09	130	.08
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.58**		**.78**

9. Harbor & Baker

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	70	.02	110	.03
NBT	4	6800	1640	.24*	1720	.25*
NBR	1	1700	230	.14	210	.12
SBL	2	3400	240	.07*	230	.07*
SBT	4	6800	1510	.22	1940	.29
SBR	1	1700	150	.09	270	.16
EBL	2	3400	240	.07*	230	.07*
EBT	2	3400	250	.07	230	.07
EBR	d	1700	60	.04	70	.04
WBL	2	3400	200	.06	420	.12
WBT	2	3400	210	.06*	600	.18*
WBR	1	1700	120	.07	290	.17
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.49**		**.62**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	72	.02	113	.03
NBT	4	6800	1689	.25*	1772	.26*
NBR	1	1700	237	.14	216	.13
SBL	2	3400	247	.07*	237	.07*
SBT	4	6800	1555	.23	1998	.29
SBR	1	1700	155	.09	278	.16
EBL	2	3400	247	.07	237	.07*
EBT	2	3400	258	.08*	237	.07
EBR	d	1700	62	.04	72	.04
WBL	2	3400	206	.06*	433	.13
WBT	2	3400	216	.06	618	.18*
WBR	1	1700	124	.07	299	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.51**		**.63**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	72	.02	113	.03*
NBT	4	6800	1734	.26*	1780	.26
NBR	1	1700	237	.14	216	.13
SBL	2	3400	248	.07*	241	.07
SBT	4	6800	1561	.23	2039	.30*
SBR	1	1700	156	.09	282	.17
EBL	2	3400	251	.07	238	.07*
EBT	2	3400	258	.08*	237	.07
EBR	d	1700	62	.04	72	.04
WBL	2	3400	206	.06*	433	.13
WBT	2	3400	216	.06	618	.18*
WBR	1	1700	128	.08	300	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.52**		**.63**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	72	.02	113	.03*
NBT	4	6800	1723	.25*	1783	.26
NBR	1	1700	237	.14	216	.13
SBL	2	3400	247	.07*	237	.07
SBT	4	6800	1560	.23	2028	.30*
SBR	1	1700	155	.09	282	.17
EBL	2	3400	252	.07	238	.07*
EBT	2	3400	258	.08*	237	.07
EBR	d	1700	62	.04	72	.04
WBL	2	3400	206	.06*	433	.13
WBT	2	3400	216	.06	618	.18*
WBR	1	1700	124	.07	299	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.51**		**.63**

9. Harbor & Baker

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	72	.02	113	.03*
NBT	4	6800	1768	.26*	1791	.26
NBR	1	1700	237	.14	216	.13
SBL	2	3400	248	.07*	241	.07
SBT	4	6800	1566	.23	2069	.30*
SBR	1	1700	156	.09	286	.17
EBL	2	3400	256	.08*	239	.07*
EBT	2	3400	258	.08	237	.07
EBR	d	1700	62	.04	72	.04
WBL	2	3400	206	.06	433	.13
WBT	2	3400	216	.06*	618	.18*
WBR	1	1700	128	.08	300	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.52**		**.63**

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	50	.01	120	.04*
NBT	4	6800	1980	.29*	2104	.31
NBR	1	1700	270	.16	210	.12
SBL	2	3400	189	.06*	292	.09
SBT	4	6800	1868	.27	2719	.40*
SBR	1	1700	169	.10	412	.24
EBL	2	3400	261	.08*	278	.08*
EBT	2	3400	230	.07	230	.07
EBR	d	1700	60	.04	70	.04
WBL	2	3400	180	.05	590	.17
WBT	2	3400	190	.06*	710	.21*
WBR	1	1700	111	.07	228	.13
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.54**		**.78**

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	50	.01	120	.04*
NBT	4	6800	2070	.30*	2120	.31
NBR	1	1700	270	.16	210	.12
SBL	2	3400	190	.06*	300	.09
SBT	4	6800	1880	.28	2800	.41*
SBR	1	1700	170	.10	420	.25
EBL	2	3400	270	.08*	280	.08*
EBT	2	3400	230	.07	230	.07
EBR	d	1700	60	.04	70	.04
WBL	2	3400	180	.05	590	.17
WBT	2	3400	190	.06*	710	.21*
WBR	1	1700	120	.07	230	.14
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.55**		**.79**

10. Susan & Sunflower

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	20	.01	100	.06
NBT	1	1700	210	.12*	570	.34*
NBR	1	1700	90	.05	200	.12
SBL	1	1700	70	.04*	80	.05*
SBT	1	1700	70	.05	150	.12
SBR	0	0	20		60	
EBL	1	1700	20	.01	70	.04*
EBT	2	3400	240	.07*	380	.11
EBR	1	1700	30	.02	30	.02
WBL	1	1700	30	.02*	30	.02
WBT	2	3400	200	.08	600	.24*
WBR	0	0	60		210	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.30**		**.72**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	21	.01	103	.06
NBT	1	1700	216	.13*	587	.35*
NBR	1	1700	93	.05	206	.12
SBL	1	1700	72	.04*	82	.05*
SBT	1	1700	72	.05	155	.13
SBR	0	0	21		62	
EBL	1	1700	21	.01	72	.04*
EBT	2	3400	247	.07*	391	.12
EBR	1	1700	31	.02	31	.02
WBL	1	1700	31	.02*	31	.02
WBT	2	3400	206	.08	618	.25*
WBR	0	0	62		216	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.31**		**.74**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	21	.01	103	.06
NBT	1	1700	216	.13*	587	.35*
NBR	1	1700	93	.05	206	.12
SBL	1	1700	72	.04*	82	.05*
SBT	1	1700	72	.06	155	.13
SBR	0	0	29		64	
EBL	1	1700	22	.01*	79	.05*
EBT	2	3400	260	.08	473	.14
EBR	1	1700	31	.02	31	.02
WBL	1	1700	31	.02	31	.02
WBT	2	3400	296	.11*	635	.25*
WBR	0	0	62		216	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.34**		**.75**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	24	.01	114	.07
NBT	1	1700	223	.13*	611	.36*
NBR	1	1700	99	.06	225	.13
SBL	1	1700	72	.04*	82	.05*
SBT	1	1700	99	.07	171	.14
SBR	0	0	24		62	
EBL	1	1700	21	.01*	74	.04*
EBT	2	3400	249	.07	414	.12
EBR	1	1700	43	.03	38	.02
WBL	1	1700	52	.03	44	.03
WBT	2	3400	231	.09*	621	.25*
WBR	0	0	62		216	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.32**		**.75**

10. Susan & Sunflower

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	24	.01	114	.07
NBT	1	1700	223	.13*	611	.36*
NBR	1	1700	99	.06	225	.13
SBL	1	1700	72	.04*	82	.05*
SBT	1	1700	99	.08	171	.14
SBR	0	0	32		64	
EBL	1	1700	22	.01*	81	.05*
EBT	2	3400	262	.08	496	.15
EBR	1	1700	43	.03	38	.02
WBL	1	1700	52	.03	44	.03
WBT	2	3400	321	.11*	638	.25*
WBR	0	0	62		216	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.34**		**.76**

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	80	.05	150	.09
NBT	1	1700	250	.15*	430	.25*
NBR	1	1700	20	.01	140	.08
SBL	1	1700	170	.10*	70	.04*
SBT	1	1700	70	.04	180	.16
SBR	0	0	-7		85	
EBL	1	1700	76	.04*	36	.02*
EBT	2	3400	305	.09	418	.12
EBR	1	1700	120	.07	50	.03
WBL	1	1700	30	.02	40	.02
WBT	2	3400	221	.09*	667	.26*
WBR	0	0	90		200	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.43**		**.62**

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	80	.05	150	.09
NBT	1	1700	250	.15*	430	.25*
NBR	1	1700	20	.01	140	.08
SBL	1	1700	170	.10*	70	.04*
SBT	1	1700	70	.05	180	.16
SBR	0	0	20		90	
EBL	1	1700	80	.05*	60	.04*
EBT	2	3400	330	.10	580	.17
EBR	1	1700	120	.07	50	.03
WBL	1	1700	30	.02	40	.02
WBT	2	3400	400	.14*	700	.26*
WBR	0	0	90		200	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.49**		**.64**

11. Susan & South Coast

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	100	.03	700	.21
NBT	2	3400	370	.12*	630	.21*
NBR	0	0	50		80	
SBL	2	3400	50	.01*	160	.05*
SBT	2	3400	10	.01	20	.01
SBR	0	0	70	.04	140	.08
EBL	2	3400	100	.03*	70	.02*
EBT	2	3400	190	.06	250	.07
EBR	1	1700	10	.01	10	.01
WBL	2	3400	10	.00	60	.02
WBT	2	3400	100	.03*	610	.18*
WBR	1	1700	30	.02	100	.06
Right Turn Adjustment					SBR	.01*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .24 .52

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	103	.03	721	.21
NBT	2	3400	381	.13*	649	.22*
NBR	0	0	52		82	
SBL	2	3400	52	.02*	165	.05*
SBT	2	3400	10	.01	21	.01
SBR	0	0	72	.04	144	.08
EBL	2	3400	103	.03*	72	.02*
EBT	2	3400	196	.06	258	.08
EBR	1	1700	10	.01	10	.01
WBL	2	3400	10	.00	62	.02
WBT	2	3400	103	.03*	628	.18*
WBR	1	1700	31	.02	103	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .26 .52

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	161	.05	732	.22
NBT	2	3400	381	.13*	649	.22*
NBR	0	0	52		82	
SBL	2	3400	52	.02*	165	.05*
SBT	2	3400	10	.01	21	.01
SBR	0	0	72	.04	144	.08
EBL	2	3400	103	.03*	72	.02*
EBT	2	3400	201	.06	288	.08
EBR	1	1700	10	.01	10	.01
WBL	2	3400	10	.00	62	.02
WBT	2	3400	136	.04*	634	.19*
WBR	1	1700	31	.02	103	.06
Right Turn Adjustment					SBR	.01*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .27 .54

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	112	.03	726	.21
NBT	2	3400	408	.14*	665	.22*
NBR	0	0	52		82	
SBL	2	3400	69	.02*	222	.07*
SBT	2	3400	10	.01	21	.01
SBR	0	0	77	.05	160	.09
EBL	2	3400	156	.05*	104	.03*
EBT	2	3400	197	.06	267	.08
EBR	1	1700	10	.01	10	.01
WBL	2	3400	10	.00	62	.02
WBT	2	3400	122	.04*	634	.19*
WBR	1	1700	51	.03	115	.07
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .30 .56

11. Susan & South Coast

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	170	.05	737	.22
NBT	2	3400	408	.14*	665	.22*
NBR	0	0	52		82	
SBL	2	3400	69	.02*	222	.07*
SBT	2	3400	10	.01	21	.01
SBR	0	0	77	.05	160	.09
EBL	2	3400	156	.05*	104	.03*
EBT	2	3400	202	.06	297	.09
EBR	1	1700	10	.01	10	.01
WBL	2	3400	10	.00	62	.02
WBT	2	3400	155	.05*	640	.19*
WBR	1	1700	51	.03	115	.07
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .31 .56

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	141	.04	532	.16
NBT	2	3400	470	.16*	490	.17*
NBR	0	0	70		80	
SBL	2	3400	100	.03*	140	.04*
SBT	2	3400	10	.01	10	.01
SBR	0	0	50	.03	330	.19
EBL	2	3400	130	.04*	50	.01*
EBT	2	3400	140	.04	135	.04
EBR	1	1700	620	.36	130	.08
WBL	2	3400	10	.00	30	.01
WBT	2	3400	48	.01*	947	.28*
WBR	1	1700	30	.02	20	.01
Right Turn Adjustment			EBR	.17*	SBR	.13*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .46 .68

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	240	.07	550	.16
NBT	2	3400	470	.16*	490	.17*
NBR	0	0	70		80	
SBL	2	3400	100	.03*	140	.04*
SBT	2	3400	10	.01	10	.01
SBR	0	0	50	.03	330	.19
EBL	2	3400	130	.04*	50	.01*
EBT	2	3400	150	.04	200	.06
EBR	1	1700	620	.36	130	.08
WBL	2	3400	10	.00	30	.01
WBT	2	3400	120	.04*	960	.28*
WBR	1	1700	30	.02	20	.01
Right Turn Adjustment			EBR	.14*	SBR	.13*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .46 .68

12. Fairview & MacArthur

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	370	.11	210	.06*
NBT	3	5100	1420	.31*	910	.20
NBR	0	0	160		130	
SBL	2	3400	140	.04*	230	.07
SBT	3	5100	710	.14	1570	.31*
SBR	1	1700	40	.02	100	.06
EBL	2	3400	190	.06*	110	.03
EBT	3	5100	430	.08	1370	.27*
EBR	1	1700	120	.07	250	.15
WBL	2	3400	140	.04	250	.07*
WBT	3	5100	1100	.22*	720	.14
WBR	1	1700	180	.11	220	.13
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.68**		**.76**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	381	.11	216	.06*
NBT	3	5100	1463	.32*	937	.21
NBR	0	0	165		134	
SBL	2	3400	144	.04*	237	.07
SBT	3	5100	731	.14	1617	.32*
SBR	1	1700	41	.02	103	.06
EBL	2	3400	196	.06*	113	.03
EBT	3	5100	443	.09	1411	.28*
EBR	1	1700	124	.07	258	.15
WBL	2	3400	144	.04	258	.08*
WBT	3	5100	1133	.22*	742	.15
WBR	1	1700	185	.11	227	.13
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.79**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	381	.11	216	.06*
NBT	3	5100	1465	.32*	952	.21
NBR	0	0	165		134	
SBL	2	3400	144	.04*	237	.07
SBT	3	5100	747	.15	1620	.32*
SBR	1	1700	41	.02	103	.06
EBL	2	3400	196	.06*	113	.03
EBT	3	5100	443	.09	1411	.28*
EBR	1	1700	124	.07	258	.15
WBL	2	3400	144	.04	258	.08*
WBT	3	5100	1133	.22*	742	.15
WBR	1	1700	185	.11	227	.13
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.79**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	381	.11	216	.06*
NBT	3	5100	1465	.32*	945	.21
NBR	0	0	165		134	
SBL	2	3400	144	.04*	237	.07
SBT	3	5100	741	.15	1621	.32*
SBR	1	1700	41	.02	103	.06
EBL	2	3400	196	.06*	113	.03
EBT	3	5100	443	.09	1411	.28*
EBR	1	1700	124	.07	258	.15
WBL	2	3400	144	.04	258	.08*
WBT	3	5100	1133	.22*	742	.15
WBR	1	1700	185	.11	227	.13
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.79**

12. Fairview & MacArthur

2018 w/300 TSF Initial Phase + Steelwave & Vans

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	381	.11	216	.06*
NBT	3	5100	1467	.32*	960	.21
NBR	0	0	165		134	
SBL	2	3400	144	.04*	237	.07
SBT	3	5100	757	.15	1624	.32*
SBR	1	1700	41	.02	103	.06
EBL	2	3400	196	.06*	113	.03
EBT	3	5100	443	.09	1411	.28*
EBR	1	1700	124	.07	258	.15
WBL	2	3400	144	.04	258	.08*
WBT	3	5100	1133	.22*	742	.15
WBR	1	1700	185	.11	227	.13
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.79**

2035 No-Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	370	.11	250	.07*
NBT	3	5100	1543	.34*	1061	.24
NBR	0	0	180		140	
SBL	2	3400	210	.06*	260	.08
SBT	3	5100	796	.16	1620	.32*
SBR	1	1700	40	.02	100	.06
EBL	2	3400	190	.06*	100	.03
EBT	3	5100	530	.10	1570	.31*
EBR	1	1700	120	.07	240	.14
WBL	2	3400	130	.04	280	.08*
WBT	3	5100	1180	.23*	1020	.20
WBR	1	1700	190	.11	300	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.74**		**.83**

2035 With 655 TSF Full Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	370	.11	250	.07*
NBT	3	5100	1550	.34*	1110	.25
NBR	0	0	180		140	
SBL	2	3400	210	.06*	260	.08
SBT	3	5100	850	.17	1630	.32*
SBR	1	1700	40	.02	100	.06
EBL	2	3400	190	.06*	100	.03
EBT	3	5100	530	.10	1570	.31*
EBR	1	1700	120	.07	240	.14
WBL	2	3400	130	.04	280	.08*
WBT	3	5100	1180	.23*	1020	.20
WBR	1	1700	190	.11	300	.18
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.74**		**.83**

13. Fairview & Sunflower

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	110	.03*	120	.04
NBT	3	5100	720	.14	1690	.33*
NBR	1	1700	90	.05	310	.18
SBL	2	3400	150	.04	110	.03*
SBT	3	5100	1530	.32*	1030	.21
SBR	0	0	120		60	
EBL	2	3400	30	.01	170	.05
EBT	2	3400	220	.08*	410	.15*
EBR	0	0	40		90	
WBL	2	3400	240	.07*	300	.09*
WBT	2	3400	220	.06	610	.18
WBR	1	1700	70	.04	170	.10
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .55 .65

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	113	.03*	124	.04
NBT	3	5100	742	.15	1741	.34*
NBR	1	1700	93	.05	319	.19
SBL	2	3400	155	.05	113	.03*
SBT	3	5100	1576	.33*	1061	.22
SBR	0	0	124		62	
EBL	2	3400	31	.01	175	.05
EBT	2	3400	227	.08*	422	.15*
EBR	0	0	41		93	
WBL	2	3400	247	.07*	309	.09*
WBT	2	3400	227	.07	628	.18
WBR	1	1700	72	.04	175	.10
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .56 .66

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	113	.03*	124	.04
NBT	3	5100	742	.15	1741	.34*
NBR	1	1700	93	.05	319	.19
SBL	2	3400	155	.05	113	.03*
SBT	3	5100	1576	.34*	1061	.22
SBR	0	0	145		66	
EBL	2	3400	34	.01	194	.06
EBT	2	3400	236	.08*	478	.17*
EBR	0	0	41		93	
WBL	2	3400	247	.07*	309	.09*
WBT	2	3400	289	.09	639	.19
WBR	1	1700	72	.04	175	.10
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .68

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	113	.03*	124	.04
NBT	3	5100	742	.15	1741	.34*
NBR	1	1700	93	.05	319	.19
SBL	2	3400	155	.05	113	.03*
SBT	3	5100	1576	.34*	1061	.22
SBR	0	0	134		66	
EBL	2	3400	33	.01	183	.05
EBT	2	3400	232	.08*	453	.16*
EBR	0	0	41		93	
WBL	2	3400	247	.07*	309	.09*
WBT	2	3400	262	.08	637	.19
WBR	1	1700	72	.04	175	.10
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .67

13. Fairview & Sunflower

2018 w/300 TSF Initial Phase + Steelwave & Vans

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	113	.03*	124	.04
NBT	3	5100	742	.15	1741	.34*
NBR	1	1700	93	.05	319	.19
SBL	2	3400	155	.05	113	.03*
SBT	3	5100	1576	.34*	1061	.22
SBR	0	0	155		70	
EBL	2	3400	36	.01	202	.06
EBT	2	3400	241	.08*	509	.18*
EBR	0	0	41		93	
WBL	2	3400	247	.07*	309	.09*
WBT	2	3400	324	.10	648	.19
WBR	1	1700	72	.04	175	.10
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .69

2035 No-Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	200	.06*	190	.06
NBT	3	5100	1160	.23	1750	.34*
NBR	1	1700	120	.07	310	.18
SBL	2	3400	220	.06	150	.04*
SBT	3	5100	1790	.36*	1300	.27
SBR	0	0	46		90	
EBL	2	3400	63	.02	411	.12
EBT	2	3400	314	.13*	454	.17*
EBR	0	0	130		140	
WBL	2	3400	370	.11*	200	.06*
WBT	2	3400	393	.12	299	.09
WBR	1	1700	140	.08	100	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .71 .66

2035 With 655 TSF Full Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	200	.06*	190	.06
NBT	3	5100	1160	.23	1750	.34*
NBR	1	1700	120	.07	310	.18
SBL	2	3400	220	.06	150	.04*
SBT	3	5100	1790	.37*	1300	.27
SBR	0	0	100		100	
EBL	2	3400	70	.02	460	.14
EBT	2	3400	330	.14*	560	.21*
EBR	0	0	130		140	
WBL	2	3400	370	.11*	200	.06*
WBT	2	3400	510	.15	320	.09
WBR	1	1700	140	.08	100	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .73 .70

14. Fairview & South Coast

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	40	.01	80	.02*
NBT	3	5100	1920	.38*	1460	.29
NBR	1	1700	60	.04	60	.04
SBL	2	3400	230	.07*	120	.04
SBT	3	5100	1230	.27	1960	.46*
SBR	0	0	160		370	
EBL	1	1700	270	.16*	300	.18*
EBT	1.5	5100	100	.03	270	.08
EBR	1.5		70		160	{.08}
WBL	2	3400	10	.00	80	.02
WBT	2	3400	70	.02*	210	.06*
WBR	1	1700	90	.05	500	.29
Right Turn Adjustment					WBR	.09*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.68**		**.86**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	41	.01	82	.02*
NBT	3	5100	1978	.39*	1504	.29
NBR	1	1700	62	.04	62	.04
SBL	2	3400	237	.07*	124	.04
SBT	3	5100	1267	.28	2019	.47*
SBR	0	0	165		381	
EBL	1	1700	278	.16*	309	.18*
EBT	1.5	5100	103	.03	278	{.08}
EBR	1.5		72		165	{.08}
WBL	2	3400	10	.00	82	.02
WBT	2	3400	72	.02*	216	.06*
WBR	1	1700	93	.05	515	.30
Right Turn Adjustment					WBR	.09*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.87**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	62	.02	86	.03*
NBT	3	5100	1978	.39*	1504	.29
NBR	1	1700	62	.04	62	.04
SBL	2	3400	237	.07*	124	.04
SBT	3	5100	1267	.28	2019	.47*
SBR	0	0	165		381	
EBL	1	1700	278	.16*	309	.18*
EBT	1.5	5100	105	{.03}	289	.09
EBR	1.5		75		184	
WBL	2	3400	10	.00	82	.02
WBT	2	3400	84	.02*	218	.06*
WBR	1	1700	93	.05	515	.30
Right Turn Adjustment					WBR	.08*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.87**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	70	.02	96	.03*
NBT	3	5100	1978	.39*	1504	.29
NBR	1	1700	62	.04	62	.04
SBL	2	3400	237	.07*	124	.04
SBT	3	5100	1267	.28	2019	.47*
SBR	0	0	165		381	
EBL	1	1700	278	.16*	309	.18*
EBT	1.5	5100	105	{.03}	286	{.09}
EBR	1.5		88		223	
WBL	2	3400	10	.00	82	.02
WBT	2	3400	82	.02*	220	.06*
WBR	1	1700	93	.05	515	.30
Right Turn Adjustment					WBR	.08*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.69**		**.87**

14. Fairview & South Coast

2018 w/300 TSF Initial Phase + Steelwave & Vans

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	91	.03	100	.03*
NBT	3	5100	1978	.39*	1504	.29
NBR	1	1700	62	.04	62	.04
SBL	2	3400	237	.07*	124	.04
SBT	3	5100	1267	.28	2019	.47*
SBR	0	0	165		381	
EBL	1	1700	278	.16*	309	.18*
EBT	1.5	5100	107	{.03}	297	{.10}
EBR	1.5		91		242	
WBL	2	3400	10	.00	82	.02
WBT	2	3400	94	.03*	222	.07*
WBR	1	1700	93	.05	515	.30
Right Turn Adjustment					WBR	.07*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .70 .87

2035 No-Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	544	.16*	283	.08*
NBT	3	5100	1480	.29	1820	.36
NBR	1	1700	290	.17	470	.28
SBL	2	3400	30	.01	70	.02
SBT	3	5100	1780	.38*	1620	.33*
SBR	0	0	180		50	
EBL	1	1700	30	.02	240	.14
EBT	1.5	5100	66	{.02}*	356	{.20}*
EBR	1.5		115		758	
WBL	2	3400	240	.07*	360	.11*
WBT	2	3400	193	.06	415	.12
WBR	1	1700	50	.03	100	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .77

2035 With 655 TSF Full Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	580	.17*	290	.09*
NBT	3	5100	1480	.29	1820	.36
NBR	1	1700	290	.17	470	.28
SBL	2	3400	30	.01	70	.02
SBT	3	5100	1780	.38*	1620	.33*
SBR	0	0	180		50	
EBL	1	1700	30	.02	240	.14
EBT	1.5	5100	70	{.02}*	380	{.21}*
EBR	1.5		120		790	
WBL	2	3400	240	.07*	360	.11*
WBT	2	3400	220	.06	420	.12
WBR	1	1700	50	.03	100	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .69 .79

15. Fairview & I-405 NB Ramps

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	240	.14*	140	.08*
NBT	3	5100	690	.14	1220	.24
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1860	.18*	1850	.18*
SBR	1	1700	200	.12	310	.18
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	500	.15*	760	.22*
WBT	0	0	0		0	
WBR	2	3400	660	.19	1170	.34
Right Turn Adjustment					WBR	.10*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .52 .63

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	247	.15*	144	.08*
NBT	3	5100	711	.14	1257	.25
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1916	.19*	1906	.19*
SBR	1	1700	206	.12	319	.19
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	515	.15*	783	.23*
WBT	0	0	0		0	
WBR	2	3400	680	.20	1205	.35
Right Turn Adjustment					WBR	.10*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .54 .65

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	247	.15*	144	.08*
NBT	3	5100	719	.14	1259	.25
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1919	.19*	1925	.19*
SBR	1	1700	206	.12	319	.19
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	515	.15*	783	.23*
WBT	0	0	0		0	
WBR	2	3400	692	.20	1207	.36
Right Turn Adjustment					WBR	.11*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .54 .66

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	247	.15*	144	.08*
NBT	3	5100	728	.14	1265	.25
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1932	.19*	1964	.19*
SBR	1	1700	206	.12	319	.19
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	515	.15*	783	.23*
WBT	0	0	0		0	
WBR	2	3400	692	.20	1210	.36
Right Turn Adjustment					WBR	.11*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .54 .66

15. Fairview & I-405 NB Ramps

2018 w/300 TSF Initial Phase + Steelwave & Vans

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	1	1700	247	.15*	144	.08*
NBT	3	5100	736	.14	1267	.25
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1935	.19*	1983	.19*
SBR	1	1700	206	.12	319	.19
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	515	.15*	783	.23*
WBT	0	0	0		0	
WBR	2	3400	704	.21	1212	.36
Right Turn Adjustment					WBR	.11*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .54 .66

2035 No-Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	1	1700	270	.16*	320	.19*
NBT	3	5100	1142	.22	1577	.31
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1865	.18*	2468	.24*
SBR	1	1700	300	.18	260	.15
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	520	.15*	900	.26*
WBT	0	0	0		0	
WBR	2	3400	1232	.36	977	.29
Right Turn Adjustment			WBR	.12*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .74

2035 With 655 TSF Full Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	1	1700	270	.16*	320	.19*
NBT	3	5100	1160	.23	1580	.31
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	6	10200	1870	.18*	2500	.25*
SBR	1	1700	300	.18	260	.15
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	520	.15*	900	.26*
WBT	0	0	0		0	
WBR	2	3400	1250	.37	980	.29
Right Turn Adjustment			WBR	.14*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .75

16. Fairview & I-405 SB Ramps

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	740	.15*	1050	{.15}*
NBR	1.5		960	.28	380	
SBL	3	5100	1200	.24*	1040	.20*
SBT	3	5100	1130	.22	1490	.29
SBR	0	0	0		0	
EBL	2	3400	170	.05*	310	.09*
EBT	0	0	0		0	
EBR	2	3400	240	.07	310	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.09*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .49

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	762	.15*	1082	{.16}*
NBR	1.5		989	.29	391	
SBL	3	5100	1236	.24*	1071	.21*
SBT	3	5100	1164	.23	1535	.30
SBR	0	0	0		0	
EBL	2	3400	175	.05*	319	.09*
EBT	0	0	0		0	
EBR	2	3400	247	.07	319	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.10*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .59 .51

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	770	.15*	1084	{.16}*
NBR	1.5		989	.29	391	
SBL	3	5100	1238	.24*	1082	.21*
SBT	3	5100	1165	.23	1542	.30
SBR	0	0	0		0	
EBL	2	3400	175	.05*	319	.09*
EBT	0	0	0		0	
EBR	2	3400	247	.07	319	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.10*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .59 .51

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	779	.15*	1090	{.16}*
NBR	1.5		989	.29	391	
SBL	3	5100	1247	.24*	1114	.22*
SBT	3	5100	1168	.23	1550	.30
SBR	0	0	0		0	
EBL	2	3400	175	.05*	319	.09*
EBT	0	0	0		0	
EBR	2	3400	247	.07	319	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.10*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .59 .52

16. Fairview & I-405 SB Ramps

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	787	.15*	1092	{.16}*
NBR	1.5		989	.29	391	
SBL	3	5100	1249	.24*	1125	.22*
SBT	3	5100	1169	.23	1557	.31
SBR	0	0	0		0	
EBL	2	3400	175	.05*	319	.09*
EBT	0	0	0		0	
EBR	2	3400	247	.07	319	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.10*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .59 .52

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	1132	.22*	1397	{.21}*
NBR	1.5		1180	.35	510	{.19}
SBL	3	5100	1148	.23*	1474	.29*
SBT	3	5100	1208	.24	1884	.37
SBR	0	0	0		0	
EBL	2	3400	310	.09*	510	.15*
EBT	0	0	0		0	
EBR	2	3400	370	.11	440	.13
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.06*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .70

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3.5	8500	1150	.23*	1400	{.21}*
NBR	1.5		1180	.35	510	{.19}
SBL	3	5100	1150	.23*	1490	.29*
SBT	3	5100	1210	.24	1900	.37
SBR	0	0	0		0	
EBL	2	3400	310	.09*	510	.15*
EBT	0	0	0		0	
EBR	2	3400	370	.11	440	.13
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			NBR	.05*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .70

17. Fairview & Paularino

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1410	.30*	1260	.27*
NBR	0	0	100		110	
SBL	1	1700	100	.06*	160	.09*
SBT	3	5100	1270	.25	1650	.32
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	90	.05*	70	.04*
WBT	0	0	0		0	
WBR	1	1700	160	.09	90	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .46 .45

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1452	.30*	1298	.28*
NBR	0	0	103		113	
SBL	1	1700	103	.06*	165	.10*
SBT	3	5100	1308	.26	1700	.33
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	93	.05*	72	.04*
WBT	0	0	0		0	
WBR	1	1700	165	.10	93	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .46 .47

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1456	.31*	1299	.28*
NBR	0	0	103		113	
SBL	1	1700	103	.06*	165	.10*
SBT	3	5100	1309	.26	1704	.33
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	93	.05*	72	.04*
WBT	0	0	0		0	
WBR	1	1700	165	.10	93	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .47 .47

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1466	.31*	1304	.28*
NBR	0	0	103		113	
SBL	1	1700	103	.06*	167	.10*
SBT	3	5100	1311	.26	1711	.34
SBR	0	0	0		2	
EBL	0	0	2		1	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	93	.05*	72	.04*
WBT	0	0	0		0	
WBR	1	1700	167	.10	94	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .47 .47

17. Fairview & Paularino

2018 w/300 TSF Initial Phase + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1470	.31*	1305	.28*
NBR	0	0	103		113	
SBL	1	1700	103	.06*	167	.10*
SBT	3	5100	1312	.26	1715	.34
SBR	0	0	0		2	
EBL	0	0	2		1	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	93	.05*	72	.04*
WBT	0	0	0		0	
WBR	1	1700	167	.10	94	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .47 .47

2035 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1971	.41*	1738	.37
NBR	0	0	110		150	
SBL	1	1700	110	.06*	150	.09
SBT	3	5100	1529	.30	2422	.47*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	80	.05*	70	.04*
WBT	0	0	0		0	
WBR	1	1700	190	.11	160	.09
Right Turn Adjustment			WBR	.01*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .56

2035 With 655 TSF Full Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1980	.41*	1740	.37
NBR	0	0	110		150	
SBL	1	1700	110	.06*	150	.09
SBT	3	5100	1530	.30	2430	.48*
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1700	80	.05*	70	.04*
WBT	0	0	0		0	
WBR	1	1700	190	.11	160	.09
Right Turn Adjustment			WBR	.01*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .57

18. Fairview & Baker

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	120	.04	200	.06
NBT	3	5100	1290	.25*	930	.18*
NBR	1	1700	630	.37	320	.19
SBL	2	3400	220	.06*	200	.06*
SBT	4	6800	820	.12	1120	.16
SBR	1	1700	240	.14	300	.18
EBL	2	3400	190	.06	290	.09
EBT	2	3400	470	.14*	450	.13*
EBR	1	1700	120	.07	150	.09
WBL	2	3400	240	.07*	600	.18*
WBT	3	5100	270	.05	1070	.21
WBR	1	1700	150	.09	210	.12
Right Turn Adjustment			NBR	.07*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.64**		**.60**

2018 No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	124	.04	206	.06
NBT	3	5100	1329	.26*	958	.19*
NBR	1	1700	649	.38	330	.19
SBL	2	3400	227	.07*	206	.06*
SBT	4	6800	845	.12	1154	.17
SBR	1	1700	247	.15	309	.18
EBL	2	3400	196	.06	299	.09
EBT	2	3400	484	.14*	464	.14*
EBR	1	1700	124	.07	155	.09
WBL	2	3400	247	.07*	618	.18*
WBT	3	5100	278	.05	1102	.22
WBR	1	1700	155	.09	216	.13
Right Turn Adjustment			NBR	.07*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.66**		**.62**

2018 With 300 TSF Initial Phase

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	124	.04	206	.06
NBT	3	5100	1333	.26*	959	.19*
NBR	1	1700	649	.38	330	.19
SBL	2	3400	227	.07*	206	.06*
SBT	4	6800	846	.12	1158	.17
SBR	1	1700	247	.15	309	.18
EBL	2	3400	196	.06	299	.09
EBT	2	3400	484	.14*	464	.14*
EBR	1	1700	124	.07	155	.09
WBL	2	3400	247	.07*	618	.18*
WBT	3	5100	278	.05	1102	.22
WBR	1	1700	155	.09	216	.13
Right Turn Adjustment			NBR	.07*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.66**		**.62**

2018 No-Project + Steelwave & Vans

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	124	.04	206	.06
NBT	3	5100	1343	.26*	964	.19*
NBR	1	1700	649	.38	330	.19
SBL	2	3400	227	.07*	206	.06*
SBT	4	6800	848	.12	1165	.17
SBR	1	1700	247	.15	309	.18
EBL	2	3400	196	.06	299	.09
EBT	2	3400	484	.14*	464	.14*
EBR	1	1700	124	.07	155	.09
WBL	2	3400	247	.07*	618	.18*
WBT	3	5100	278	.05	1102	.22
WBR	1	1700	155	.09	216	.13
Right Turn Adjustment			NBR	.07*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.66**		**.62**

18. Fairview & Baker

2018 w/300 TSF Initial Phase + Steelwave & Vans

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	124	.04	206	.06
NBT	3	5100	1347	.26*	965	.19*
NBR	1	1700	649	.38	330	.19
SBL	2	3400	227	.07*	206	.06*
SBT	4	6800	849	.12	1169	.17
SBR	1	1700	247	.15	309	.18
EBL	2	3400	196	.06	299	.09
EBT	2	3400	484	.14*	464	.14*
EBR	1	1700	124	.07	155	.09
WBL	2	3400	247	.07*	618	.18*
WBT	3	5100	278	.05	1102	.22
WBR	1	1700	155	.09	216	.13
Right Turn Adjustment			NBR	.07*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .62

2035 No-Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	130	.04	230	.07
NBT	3	5100	1641	.32*	1448	.28*
NBR	1	1700	790	.46	520	.31
SBL	2	3400	280	.08*	300	.09*
SBT	4	6800	1149	.17	1722	.25
SBR	1	1700	190	.11	430	.25
EBL	2	3400	330	.10	260	.08*
EBT	2	3400	520	.15*	620	.18
EBR	1	1700	130	.08	160	.09
WBL	2	3400	390	.11*	540	.16
WBT	3	5100	320	.06	1600	.31*
WBR	1	1700	90	.05	130	.08
Right Turn Adjustment			NBR	.06*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .81

2035 With 655 TSF Full Project

			AM PK HOUR		PM PK HOUR	
	LANES	CAPACITY	VOL	V/C	VOL	V/C
NBL	2	3400	130	.04	230	.07
NBT	3	5100	1650	.32*	1450	.28*
NBR	1	1700	790	.46	520	.31
SBL	2	3400	280	.08*	300	.09*
SBT	4	6800	1150	.17	1730	.25
SBR	1	1700	190	.11	430	.25
EBL	2	3400	330	.10	260	.08*
EBT	2	3400	520	.15*	620	.18
EBR	1	1700	130	.08	160	.09
WBL	2	3400	390	.11*	540	.16
WBT	3	5100	320	.06	1600	.31*
WBR	1	1700	90	.05	130	.08
Right Turn Adjustment			NBR	.06*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .81

Appendix B HIGHWAY CAPACITY MANUAL (HCM) ANALYSIS WORKSHEETS

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	90	250	270	60
Future Volume (veh/h)	0	0	90	250	270	60
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			95	31	284	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			583	495	0	0
Arrive On Green			0.31	0.31	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			95	31	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.2	0.1		
Cycle Q Clear(g_c), s			0.2	0.1		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			583	495		
V/C Ratio(X)			0.16	0.06		
Avail Cap(c_a), veh/h			10383	8826		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.6	1.6		
Incr Delay (d2), s/veh			0.1	0.1		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.0		
LnGrp Delay(d),s/veh			1.8	1.6		
LnGrp LOS			A	A		
Approach Vol, veh/h			126			
Approach Delay, s/veh			1.7			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								6.5
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								36.5
Max Q Clear Time (g_c+I1), s								2.2
Green Ext Time (p_c), s								0.6

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	480	0	820	0	1320	440	0	1410	1040
Future Volume (veh/h)	0	0	0	480	0	820	0	1320	440	0	1410	1040
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				337	0	1024	0	1389	0	0	1484	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				710	0	1268	0	3047	753	0	3047	753
Arrive On Green				0.40	0.00	0.40	0.00	0.48	0.00	0.00	0.48	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				337	0	1024	0	1389	0	0	1484	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				10.2	0.0	20.8	0.0	10.5	0.0	0.0	11.5	0.0
Cycle Q Clear(g_c), s				10.2	0.0	20.8	0.0	10.5	0.0	0.0	11.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				710	0	1268	0	3047	753	0	3047	753
V/C Ratio(X)				0.47	0.00	0.81	0.00	0.46	0.00	0.00	0.49	0.00
Avail Cap(c_a), veh/h				1137	0	2030	0	3047	753	0	3047	753
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				16.1	0.0	19.3	0.0	12.7	0.0	0.0	13.0	0.0
Incr Delay (d2), s/veh				0.5	0.0	1.3	0.0	0.5	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.1	0.0	9.2	0.0	4.7	0.0	0.0	5.2	0.0
LnGrp Delay(d),s/veh				16.6	0.0	20.6	0.0	13.2	0.0	0.0	13.5	0.0
LnGrp LOS				B		C		B			B	
Approach Vol, veh/h					1361			1389			1484	
Approach Delay, s/veh					19.6			13.2			13.5	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		39.0				39.0		33.6
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		34.5				34.5		46.5
Max Q Clear Time (g_c+I1), s		12.5				13.5		22.8
Green Ext Time (p_c), s		19.3				18.5		6.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	290	370	0	1380	1290	0	1700	1040	0	0
Future Volume (veh/h)	290	370	0	1380	1290	0	1700	1040	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	431	220	0	1453	0	0	1789	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	614	274	0	3669	1142	0	4623	1142		
Arrive On Green	0.17	0.17	0.00	0.72	0.00	0.00	0.72	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	431	220	0	1453	0	0	1789	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	9.7	11.4	0.0	9.5	0.0	0.0	9.2	0.0		
Cycle Q Clear(g_c), s	9.7	11.4	0.0	9.5	0.0	0.0	9.2	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	614	274	0	3669	1142	0	4623	1142		
V/C Ratio(X)	0.70	0.80	0.00	0.40	0.00	0.00	0.39	0.00		
Avail Cap(c_a), veh/h	812	362	0	3669	1142	0	4623	1142		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	33.2	33.9	0.0	4.6	0.0	0.0	4.6	0.0		
Incr Delay (d2), s/veh	1.8	9.3	0.0	0.3	0.0	0.0	0.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.9	5.7	0.0	4.4	0.0	0.0	4.1	0.0		
LnGrp Delay(d),s/veh	35.0	43.2	0.0	5.0	0.0	0.0	4.8	0.0		
LnGrp LOS	C	D		A			A			
Approach Vol, veh/h	651			1453			1789			
Approach Delay, s/veh	37.8			5.0			4.8			
Approach LOS	D			A			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		66.0		19.2		66.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		61.5		19.5		61.5		
Max Q Clear Time (g_c+I1), s		11.5		13.4		11.2		
Green Ext Time (p_c), s		42.5		1.4		42.7		

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	500	0	660	240	690	0	0	1860	200
Future Volume (veh/h)	0	0	0	500	0	660	240	690	0	0	1860	200
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				526	0	343	253	726	0	0	1958	83
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				693	0	561	298	3503	0	0	3956	737
Arrive On Green				0.20	0.00	0.20	0.17	0.69	0.00	0.00	0.47	0.47
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				526	0	343	253	726	0	0	1958	83
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				11.8	0.0	9.2	11.3	4.2	0.0	0.0	13.1	2.4
Cycle Q Clear(g_c), s				11.8	0.0	9.2	11.3	4.2	0.0	0.0	13.1	2.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				693	0	561	298	3503	0	0	3956	737
V/C Ratio(X)				0.76	0.00	0.61	0.85	0.21	0.00	0.00	0.49	0.11
Avail Cap(c_a), veh/h				1028	0	832	487	3503	0	0	3956	737
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.9	0.0	29.8	33.1	4.6	0.0	0.0	15.2	12.4
Incr Delay (d2), s/veh				1.9	0.0	1.1	7.5	0.1	0.0	0.0	0.4	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.8	0.0	3.6	6.2	2.0	0.0	0.0	5.2	1.1
LnGrp Delay(d),s/veh				32.8	0.0	30.9	40.6	4.8	0.0	0.0	15.7	12.7
LnGrp LOS				C		C	D	A			B	B
Approach Vol, veh/h					869			979			2041	
Approach Delay, s/veh					32.0			14.0			15.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.0			18.3	42.7		21.0
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		56.5			22.5	29.5		24.5
Max Q Clear Time (g_c+I1), s		6.2			13.3	15.1		13.8
Green Ext Time (p_c), s		37.3			0.5	13.0		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	0	240	0	0	0	0	740	960	1200	1130	0
Future Volume (veh/h)	170	0	240	0	0	0	0	740	960	1200	1130	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	179	0	16				0	779	703	1263	1189	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	380	0	308				0	2533	1435	1431	4014	0
Arrive On Green	0.11	0.00	0.11				0.00	0.45	0.45	0.29	0.79	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	179	0	16				0	779	703	1263	1189	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	4.4	0.0	0.5				0.0	8.0	14.0	21.7	5.8	0.0
Cycle Q Clear(g_c), s	4.4	0.0	0.5				0.0	8.0	14.0	21.7	5.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	380	0	308				0	2533	1435	1431	4014	0
V/C Ratio(X)	0.47	0.00	0.05				0.00	0.31	0.49	0.88	0.30	0.00
Avail Cap(c_a), veh/h	387	0	313				0	2533	1435	1532	4014	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	35.7				0.0	15.6	17.3	30.6	2.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.1				0.0	0.3	1.2	6.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.2				0.0	4.2	6.3	10.8	2.7	0.0
LnGrp Delay(d),s/veh	38.4	0.0	35.8				0.0	15.9	18.5	36.8	2.8	0.0
LnGrp LOS	D		D					B	B	D	A	
Approach Vol, veh/h		195						1482			2452	
Approach Delay, s/veh		38.2						17.1			20.3	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	30.2	45.2		14.4		75.4		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	27.5	38.9		10.1		70.9		
Max Q Clear Time (g_c+I1), s	23.7	16.0		6.4		7.8		
Green Ext Time (p_c), s	2.0	17.9		0.2		35.7		

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	490	810	350	410
Future Volume (veh/h)	0	0	490	810	350	410
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			516	345	368	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1271	1080	0	0
Arrive On Green			0.68	0.68	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			516	345	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			1.7	1.3		
Cycle Q Clear(g_c), s			1.7	1.3		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1271	1080		
V/C Ratio(X)			0.41	0.32		
Avail Cap(c_a), veh/h			6379	5422		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.0	0.9		
Incr Delay (d2), s/veh			0.2	0.2		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.8	0.5		
LnGrp Delay(d),s/veh			1.2	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			861			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								14.2
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								48.5
Max Q Clear Time (g_c+I1), s								3.7
Green Ext Time (p_c), s								5.3

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	880	0	990	0	1580	500	0	1490	930
Future Volume (veh/h)	0	0	0	880	0	990	0	1580	500	0	1490	930
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1260	0	667	0	1663	0	0	1568	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1774	0	792	0	2474	611	0	2474	611
Arrive On Green				0.50	0.00	0.50	0.00	0.39	0.00	0.00	0.39	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1260	0	667	0	1663	0	0	1568	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				21.8	0.0	28.8	0.0	17.0	0.0	0.0	15.7	0.0
Cycle Q Clear(g_c), s				21.8	0.0	28.8	0.0	17.0	0.0	0.0	15.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1774	0	792	0	2474	611	0	2474	611
V/C Ratio(X)				0.71	0.00	0.84	0.00	0.67	0.00	0.00	0.63	0.00
Avail Cap(c_a), veh/h				2268	0	1012	0	2474	611	0	2474	611
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.3	0.0	17.1	0.0	20.1	0.0	0.0	19.7	0.0
Incr Delay (d2), s/veh				0.7	0.0	5.3	0.0	1.5	0.0	0.0	1.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.7	0.0	13.6	0.0	7.8	0.0	0.0	7.2	0.0
LnGrp Delay(d),s/veh				16.1	0.0	22.3	0.0	21.6	0.0	0.0	21.0	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1927			1663			1568	
Approach Delay, s/veh					18.2			21.6			21.0	
Approach LOS					B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		35.0				35.0		44.0
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		30.5				30.5		50.5
Max Q Clear Time (g_c+I1), s		19.0				17.7		30.8
Green Ext Time (p_c), s		11.0				12.1		8.8

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	170	720	0	1810	750	0	2440	930	0	0
Future Volume (veh/h)	170	720	0	1810	750	0	2440	930	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	179	731	0	1905	0	0	2568	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	491	877	0	3121	972	0	3932	972		
Arrive On Green	0.28	0.28	0.00	0.61	0.00	0.00	0.61	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	179	731	0	1905	0	0	2568	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	6.7	17.9	0.0	19.0	0.0	0.0	21.3	0.0		
Cycle Q Clear(g_c), s	6.7	17.9	0.0	19.0	0.0	0.0	21.3	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	491	877	0	3121	972	0	3932	972		
V/C Ratio(X)	0.36	0.83	0.00	0.61	0.00	0.00	0.65	0.00		
Avail Cap(c_a), veh/h	658	1174	0	3121	972	0	3932	972		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	23.9	28.0	0.0	9.8	0.0	0.0	10.2	0.0		
Incr Delay (d2), s/veh	0.5	4.0	0.0	0.9	0.0	0.0	0.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.3	8.3	0.0	9.1	0.0	0.0	9.5	0.0		
LnGrp Delay(d),s/veh	24.4	32.0	0.0	10.7	0.0	0.0	11.1	0.0		
LnGrp LOS	C	C		B			B			
Approach Vol, veh/h	910			1905			2568			
Approach Delay, s/veh	30.5			10.7			11.1			
Approach LOS	C			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		55.0		27.3		55.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		50.5		30.5		50.5		
Max Q Clear Time (g_c+I1), s		21.0		19.9		23.3		
Green Ext Time (p_c), s		29.0		2.9		26.9		

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	760	0	1170	140	1220	0	0	1850	310
Future Volume (veh/h)	0	0	0	760	0	1170	140	1220	0	0	1850	310
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				800	0	1190	147	1284	0	0	1947	79
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1570	0	1271	194	2252	0	0	2406	448
Arrive On Green				0.46	0.00	0.46	0.11	0.44	0.00	0.00	0.28	0.28
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				800	0	1190	147	1284	0	0	1947	79
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				14.7	0.0	36.1	7.2	16.8	0.0	0.0	19.0	3.4
Cycle Q Clear(g_c), s				14.7	0.0	36.1	7.2	16.8	0.0	0.0	19.0	3.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1570	0	1271	194	2252	0	0	2406	448
V/C Ratio(X)				0.51	0.00	0.94	0.76	0.57	0.00	0.00	0.81	0.18
Avail Cap(c_a), veh/h				1602	0	1297	209	2252	0	0	2406	448
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.2	0.0	23.0	38.6	18.5	0.0	0.0	29.7	24.1
Incr Delay (d2), s/veh				0.3	0.0	12.6	13.9	1.1	0.0	0.0	3.1	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.9	0.0	15.9	4.3	8.1	0.0	0.0	7.7	1.6
LnGrp Delay(d),s/veh				17.4	0.0	35.6	52.5	19.6	0.0	0.0	32.8	25.0
LnGrp LOS				B		D	D	B			C	C
Approach Vol, veh/h					1990			1431			2026	
Approach Delay, s/veh					28.3			22.9			32.5	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.0			14.2	29.8		45.2
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		39.5			10.5	24.5		41.5
Max Q Clear Time (g_c+I1), s		18.8			9.2	21.0		38.1
Green Ext Time (p_c), s		19.3			0.0	3.4		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	310	0	0	0	0	1050	380	1040	1490	0
Future Volume (veh/h)	310	0	310	0	0	0	0	1050	380	1040	1490	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	326	0	234				0	1105	212	1095	1568	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	447	0	362				0	3285	698	1348	3882	0
Arrive On Green	0.13	0.00	0.13				0.00	0.44	0.44	0.27	0.76	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	326	0	234				0	1105	212	1095	1568	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	7.7	0.0	6.7				0.0	8.2	7.3	17.3	8.9	0.0
Cycle Q Clear(g_c), s	7.7	0.0	6.7				0.0	8.2	7.3	17.3	8.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	447	0	362				0	3285	698	1348	3882	0
V/C Ratio(X)	0.73	0.00	0.65				0.00	0.34	0.30	0.81	0.40	0.00
Avail Cap(c_a), veh/h	672	0	544				0	3285	698	1747	3882	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	0.0	34.9				0.0	15.5	15.2	28.9	3.4	0.0
Incr Delay (d2), s/veh	2.3	0.0	1.9				0.0	0.3	1.1	2.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	2.7				0.0	4.3	3.4	8.2	4.2	0.0
LnGrp Delay(d),s/veh	37.6	0.0	36.8				0.0	15.8	16.4	31.2	3.7	0.0
LnGrp LOS	D		D					B	B	C	A	
Approach Vol, veh/h		560						1317			2663	
Approach Delay, s/veh		37.3						15.9			15.0	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	27.3	41.7		15.5		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	29.5	30.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	19.3	10.2		9.7		10.9		
Green Ext Time (p_c), s	3.5	17.7		1.3		39.1		

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	93	258	278	62
Future Volume (veh/h)	0	0	93	258	278	62
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			98	33	293	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			602	512	0	0
Arrive On Green			0.32	0.32	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			98	33	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.2	0.1		
Cycle Q Clear(g_c), s			0.2	0.1		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			602	512		
V/C Ratio(X)			0.16	0.06		
Avail Cap(c_a), veh/h			10226	8692		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.6	1.6		
Incr Delay (d2), s/veh			0.1	0.1		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.0		
LnGrp Delay(d),s/veh			1.7	1.6		
LnGrp LOS			A	A		
Approach Vol, veh/h			131			
Approach Delay, s/veh			1.7			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								6.6
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								36.5
Max Q Clear Time (g_c+I1), s								2.2
Green Ext Time (p_c), s								0.6

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	494	0	845	0	1360	453	0	1453	1071
Future Volume (veh/h)	0	0	0	494	0	845	0	1360	453	0	1453	1071
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				347	0	1056	0	1432	0	0	1529	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				727	0	1298	0	2999	741	0	2999	741
Arrive On Green				0.41	0.00	0.41	0.00	0.47	0.00	0.00	0.47	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				347	0	1056	0	1432	0	0	1529	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				10.6	0.0	21.8	0.0	11.3	0.0	0.0	12.3	0.0
Cycle Q Clear(g_c), s				10.6	0.0	21.8	0.0	11.3	0.0	0.0	12.3	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				727	0	1298	0	2999	741	0	2999	741
V/C Ratio(X)				0.48	0.00	0.81	0.00	0.48	0.00	0.00	0.51	0.00
Avail Cap(c_a), veh/h				1119	0	1998	0	2999	741	0	2999	741
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				16.0	0.0	19.3	0.0	13.4	0.0	0.0	13.7	0.0
Incr Delay (d2), s/veh				0.5	0.0	1.6	0.0	0.5	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.2	0.0	9.7	0.0	5.1	0.0	0.0	5.5	0.0
LnGrp Delay(d),s/veh				16.4	0.0	20.8	0.0	14.0	0.0	0.0	14.3	0.0
LnGrp LOS				B		C		B			B	
Approach Vol, veh/h					1403			1432			1529	
Approach Delay, s/veh					19.7			14.0			14.3	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		39.0				39.0		34.7
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		34.5				34.5		46.5
Max Q Clear Time (g_c+I1), s		13.3				14.3		23.8
Green Ext Time (p_c), s		18.9				18.1		6.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	299	381	0	1421	1329	0	1751	1071	0	0
Future Volume (veh/h)	299	381	0	1421	1329	0	1751	1071	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	436	223	0	1496	0	0	1843	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	620	277	0	3661	1140	0	4614	1140		
Arrive On Green	0.17	0.17	0.00	0.72	0.00	0.00	0.72	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	436	223	0	1496	0	0	1843	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	9.9	11.6	0.0	10.0	0.0	0.0	9.7	0.0		
Cycle Q Clear(g_c), s	9.9	11.6	0.0	10.0	0.0	0.0	9.7	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	620	277	0	3661	1140	0	4614	1140		
V/C Ratio(X)	0.70	0.81	0.00	0.41	0.00	0.00	0.40	0.00		
Avail Cap(c_a), veh/h	810	361	0	3661	1140	0	4614	1140		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	33.2	33.9	0.0	4.7	0.0	0.0	4.7	0.0		
Incr Delay (d2), s/veh	1.9	9.7	0.0	0.3	0.0	0.0	0.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.0	5.8	0.0	4.7	0.0	0.0	4.3	0.0		
LnGrp Delay(d),s/veh	35.0	43.6	0.0	5.1	0.0	0.0	5.0	0.0		
LnGrp LOS	D	D		A			A			
Approach Vol, veh/h	659			1496			1843			
Approach Delay, s/veh	37.9			5.1			5.0			
Approach LOS	D			A			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		66.0		19.4		66.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		61.5		19.5		61.5		
Max Q Clear Time (g_c+I1), s		12.0		13.6		11.7		
Green Ext Time (p_c), s		43.0		1.4		43.2		

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	515	0	680	247	711	0	0	1916	206
Future Volume (veh/h)	0	0	0	515	0	680	247	711	0	0	1916	206
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				542	0	385	260	748	0	0	2017	83
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				714	0	578	305	3473	0	0	3875	722
Arrive On Green				0.21	0.00	0.21	0.17	0.68	0.00	0.00	0.46	0.46
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				542	0	385	260	748	0	0	2017	83
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				12.2	0.0	10.5	11.7	4.5	0.0	0.0	13.9	2.5
Cycle Q Clear(g_c), s				12.2	0.0	10.5	11.7	4.5	0.0	0.0	13.9	2.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				714	0	578	305	3473	0	0	3875	722
V/C Ratio(X)				0.76	0.00	0.67	0.85	0.22	0.00	0.00	0.52	0.11
Avail Cap(c_a), veh/h				1037	0	840	489	3473	0	0	3875	722
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.7	0.0	30.0	33.0	4.8	0.0	0.0	16.0	12.8
Incr Delay (d2), s/veh				2.0	0.0	1.3	8.0	0.1	0.0	0.0	0.5	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.0	0.0	4.1	6.4	2.1	0.0	0.0	5.5	1.1
LnGrp Delay(d),s/veh				32.6	0.0	31.3	41.0	5.0	0.0	0.0	16.5	13.2
LnGrp LOS				C		C	D	A			B	B
Approach Vol, veh/h					927			1008			2100	
Approach Delay, s/veh					32.1			14.3			16.3	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		60.7			18.7	42.0		21.6
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		56.2			22.7	29.0		24.8
Max Q Clear Time (g_c+I1), s		6.5			13.7	15.9		14.2
Green Ext Time (p_c), s		38.1			0.5	12.0		2.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	0	247	0	0	0	0	762	989	1236	1164	0
Future Volume (veh/h)	175	0	247	0	0	0	0	762	989	1236	1164	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	184	0	28				0	802	734	1301	1225	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	381	0	309				0	2481	1406	1476	4013	0
Arrive On Green	0.11	0.00	0.11				0.00	0.44	0.44	0.30	0.79	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	184	0	28				0	802	734	1301	1225	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	4.5	0.0	0.8				0.0	8.4	15.1	22.3	6.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	0.8				0.0	8.4	15.1	22.3	6.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	381	0	309				0	2481	1406	1476	4013	0
V/C Ratio(X)	0.48	0.00	0.09				0.00	0.32	0.52	0.88	0.31	0.00
Avail Cap(c_a), veh/h	387	0	313				0	2481	1406	1587	4013	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	35.9				0.0	16.2	18.1	30.2	2.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.1				0.0	0.3	1.4	5.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.3				0.0	4.4	6.8	11.0	2.8	0.0
LnGrp Delay(d),s/veh	38.5	0.0	36.0				0.0	16.6	19.5	36.0	2.8	0.0
LnGrp LOS	D		D					B	B	D	A	
Approach Vol, veh/h		212						1536			2526	
Approach Delay, s/veh		38.2						18.0			19.9	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	31.0	44.4		14.4		75.4		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	28.5	37.9		10.1		70.9		
Max Q Clear Time (g_c+I1), s	24.3	17.1		6.5		8.0		
Green Ext Time (p_c), s	2.3	17.0		0.2		37.5		

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	505	834	361	422
Future Volume (veh/h)	0	0	505	834	361	422
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			532	360	380	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1273	1082	0	0
Arrive On Green			0.68	0.68	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			532	360	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			1.8	1.3		
Cycle Q Clear(g_c), s			1.8	1.3		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1273	1082		
V/C Ratio(X)			0.42	0.33		
Avail Cap(c_a), veh/h			6387	5429		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.0	0.9		
Incr Delay (d2), s/veh			0.2	0.2		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.8	0.6		
LnGrp Delay(d),s/veh			1.2	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			892			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								14.2
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								48.7
Max Q Clear Time (g_c+I1), s								3.8
Green Ext Time (p_c), s								5.5

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	906	0	1020	0	1627	515	0	1535	958
Future Volume (veh/h)	0	0	0	906	0	1020	0	1627	515	0	1535	958
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1299	0	688	0	1713	0	0	1616	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1809	0	807	0	2425	599	0	2425	599
Arrive On Green				0.51	0.00	0.51	0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1299	0	688	0	1713	0	0	1616	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				22.8	0.0	30.4	0.0	18.3	0.0	0.0	16.9	0.0
Cycle Q Clear(g_c), s				22.8	0.0	30.4	0.0	18.3	0.0	0.0	16.9	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1809	0	807	0	2425	599	0	2425	599
V/C Ratio(X)				0.72	0.00	0.85	0.00	0.71	0.00	0.00	0.67	0.00
Avail Cap(c_a), veh/h				2223	0	992	0	2425	599	0	2425	599
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.3	0.0	17.1	0.0	21.2	0.0	0.0	20.8	0.0
Incr Delay (d2), s/veh				0.9	0.0	6.1	0.0	1.8	0.0	0.0	1.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.2	0.0	14.6	0.0	8.4	0.0	0.0	7.7	0.0
LnGrp Delay(d),s/veh				16.1	0.0	23.2	0.0	23.0	0.0	0.0	22.3	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1987			1713			1616	
Approach Delay, s/veh					18.6			23.0			22.3	
Approach LOS					B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		35.0				35.0		45.6
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		30.5				30.5		50.5
Max Q Clear Time (g_c+I1), s		20.3				18.9		32.4
Green Ext Time (p_c), s		9.8				11.1		8.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	175	742	0	1864	773	0	2513	958	0	0
Future Volume (veh/h)	175	742	0	1864	773	0	2513	958	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	184	756	0	1962	0	0	2645	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	508	906	0	3071	956	0	3870	956		
Arrive On Green	0.29	0.29	0.00	0.60	0.00	0.00	0.60	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	184	756	0	1962	0	0	2645	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	6.8	18.3	0.0	20.4	0.0	0.0	22.8	0.0		
Cycle Q Clear(g_c), s	6.8	18.3	0.0	20.4	0.0	0.0	22.8	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	508	906	0	3071	956	0	3870	956		
V/C Ratio(X)	0.36	0.83	0.00	0.64	0.00	0.00	0.68	0.00		
Avail Cap(c_a), veh/h	682	1217	0	3071	956	0	3870	956		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	23.3	27.4	0.0	10.5	0.0	0.0	10.9	0.0		
Incr Delay (d2), s/veh	0.4	3.9	0.0	1.0	0.0	0.0	1.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.4	8.5	0.0	9.7	0.0	0.0	10.2	0.0		
LnGrp Delay(d),s/veh	23.7	31.3	0.0	11.5	0.0	0.0	11.9	0.0		
LnGrp LOS	C	C		B			B			
Approach Vol, veh/h	940			1962			2645			
Approach Delay, s/veh	29.8			11.5			11.9			
Approach LOS	C			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		54.0		28.0		54.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		49.5		31.5		49.5		
Max Q Clear Time (g_c+I1), s		22.4		20.3		24.8		
Green Ext Time (p_c), s		26.8		3.1		24.4		

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	783	0	1205	144	1257	0	0	1906	319
Future Volume (veh/h)	0	0	0	783	0	1205	144	1257	0	0	1906	319
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				824	0	1226	152	1323	0	0	2006	80
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1582	0	1281	193	2238	0	0	2388	445
Arrive On Green				0.46	0.00	0.46	0.11	0.44	0.00	0.00	0.28	0.28
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				824	0	1226	152	1323	0	0	2006	80
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				15.3	0.0	38.1	7.5	17.7	0.0	0.0	19.9	3.4
Cycle Q Clear(g_c), s				15.3	0.0	38.1	7.5	17.7	0.0	0.0	19.9	3.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1582	0	1281	193	2238	0	0	2388	445
V/C Ratio(X)				0.52	0.00	0.96	0.79	0.59	0.00	0.00	0.84	0.18
Avail Cap(c_a), veh/h				1592	0	1289	208	2238	0	0	2388	445
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.2	0.0	23.4	39.0	19.0	0.0	0.0	30.4	24.4
Incr Delay (d2), s/veh				0.3	0.0	15.9	16.9	1.2	0.0	0.0	3.8	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.3	0.0	17.3	4.6	8.4	0.0	0.0	8.2	1.6
LnGrp Delay(d),s/veh				17.5	0.0	39.3	55.9	20.2	0.0	0.0	34.1	25.3
LnGrp LOS				B		D	E	C			C	C
Approach Vol, veh/h					2050			1475			2086	
Approach Delay, s/veh					30.6			23.8			33.8	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.0			14.3	29.7		45.7
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		39.5			10.5	24.5		41.5
Max Q Clear Time (g_c+I1), s		19.7			9.5	21.9		40.1
Green Ext Time (p_c), s		18.7			0.0	2.5		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	319	0	319	0	0	0	0	1082	391	1071	1535	0
Future Volume (veh/h)	319	0	319	0	0	0	0	1082	391	1071	1535	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	336	0	253				0	1139	216	1127	1616	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	458	0	371				0	3223	685	1376	3868	0
Arrive On Green	0.13	0.00	0.13				0.00	0.43	0.43	0.28	0.76	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	336	0	253				0	1139	216	1127	1616	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	8.0	0.0	7.3				0.0	8.7	7.6	17.9	9.5	0.0
Cycle Q Clear(g_c), s	8.0	0.0	7.3				0.0	8.7	7.6	17.9	9.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	458	0	371				0	3223	685	1376	3868	0
V/C Ratio(X)	0.73	0.00	0.68				0.00	0.35	0.32	0.82	0.42	0.00
Avail Cap(c_a), veh/h	670	0	542				0	3223	685	1741	3868	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	0.0	35.0				0.0	16.1	15.8	28.8	3.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	2.2				0.0	0.3	1.2	2.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	2.9				0.0	4.5	3.5	8.6	4.5	0.0
LnGrp Delay(d),s/veh	37.6	0.0	37.3				0.0	16.4	17.0	31.3	3.9	0.0
LnGrp LOS	D		D					B	B	C	A	
Approach Vol, veh/h		589						1355			2743	
Approach Delay, s/veh		37.5						16.5			15.2	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	27.8	41.2		15.8		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	29.5	30.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	19.9	10.7		10.0		11.5		
Green Ext Time (p_c), s	3.5	17.6		1.3		40.0		

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	100	258	278	62
Future Volume (veh/h)	0	0	100	258	278	62
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			105	33	293	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			629	534	0	0
Arrive On Green			0.34	0.34	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			105	33	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.3	0.1		
Cycle Q Clear(g_c), s			0.3	0.1		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			629	534		
V/C Ratio(X)			0.17	0.06		
Avail Cap(c_a), veh/h			10010	8508		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.6	1.5		
Incr Delay (d2), s/veh			0.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.0		
LnGrp Delay(d),s/veh			1.7	1.6		
LnGrp LOS			A	A		
Approach Vol, veh/h			138			
Approach Delay, s/veh			1.7			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								6.8
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								36.5
Max Q Clear Time (g_c+I1), s								2.3
Green Ext Time (p_c), s								0.7

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	494	0	886	0	1467	453	0	1461	1085
Future Volume (veh/h)	0	0	0	494	0	886	0	1467	453	0	1461	1085
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				347	0	1100	0	1544	0	0	1538	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				754	0	1345	0	2906	718	0	2906	718
Arrive On Green				0.42	0.00	0.42	0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				347	0	1100	0	1544	0	0	1538	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				10.3	0.0	22.6	0.0	12.8	0.0	0.0	12.8	0.0
Cycle Q Clear(g_c), s				10.3	0.0	22.6	0.0	12.8	0.0	0.0	12.8	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				754	0	1345	0	2906	718	0	2906	718
V/C Ratio(X)				0.46	0.00	0.82	0.00	0.53	0.00	0.00	0.53	0.00
Avail Cap(c_a), veh/h				1141	0	2036	0	2906	718	0	2906	718
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.2	0.0	18.7	0.0	14.5	0.0	0.0	14.5	0.0
Incr Delay (d2), s/veh				0.4	0.0	1.6	0.0	0.7	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.1	0.0	10.1	0.0	5.7	0.0	0.0	5.7	0.0
LnGrp Delay(d),s/veh				15.6	0.0	20.4	0.0	15.2	0.0	0.0	15.2	0.0
LnGrp LOS				B		C		B			B	
Approach Vol, veh/h					1447			1544			1538	
Approach Delay, s/veh					19.2			15.2			15.2	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		35.9
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		33.5				33.5		47.5
Max Q Clear Time (g_c+I1), s		14.8				14.8		24.6
Green Ext Time (p_c), s		17.1				17.2		6.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	348	381	0	1479	1329	0	1759	1085	0	0
Future Volume (veh/h)	348	381	0	1479	1329	0	1759	1085	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	474	241	0	1557	0	0	1852	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	663	296	0	3599	1121	0	4535	1121		
Arrive On Green	0.19	0.19	0.00	0.71	0.00	0.00	0.71	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	474	241	0	1557	0	0	1852	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	10.7	12.5	0.0	11.0	0.0	0.0	10.2	0.0		
Cycle Q Clear(g_c), s	10.7	12.5	0.0	11.0	0.0	0.0	10.2	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	663	296	0	3599	1121	0	4535	1121		
V/C Ratio(X)	0.71	0.81	0.00	0.43	0.00	0.00	0.41	0.00		
Avail Cap(c_a), veh/h	851	380	0	3599	1121	0	4535	1121		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	32.6	33.3	0.0	5.3	0.0	0.0	5.1	0.0		
Incr Delay (d2), s/veh	2.0	10.1	0.0	0.4	0.0	0.0	0.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.5	6.3	0.0	5.2	0.0	0.0	4.5	0.0		
LnGrp Delay(d),s/veh	34.7	43.5	0.0	5.6	0.0	0.0	5.4	0.0		
LnGrp LOS	C	D		A			A			
Approach Vol, veh/h	715			1557			1852			
Approach Delay, s/veh	37.6			5.6			5.4			
Approach LOS	D			A			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		65.0		20.5		65.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		60.5		20.5		60.5		
Max Q Clear Time (g_c+I1), s		13.0		14.5		12.2		
Green Ext Time (p_c), s		42.0		1.5		42.6		

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	515	0	692	247	719	0	0	1919	206
Future Volume (veh/h)	0	0	0	515	0	692	247	719	0	0	1919	206
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				542	0	410	260	757	0	0	2020	83
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				721	0	584	306	3461	0	0	3849	718
Arrive On Green				0.21	0.00	0.21	0.17	0.68	0.00	0.00	0.45	0.45
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				542	0	410	260	757	0	0	2020	83
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				12.1	0.0	11.2	11.6	4.6	0.0	0.0	14.0	2.5
Cycle Q Clear(g_c), s				12.1	0.0	11.2	11.6	4.6	0.0	0.0	14.0	2.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				721	0	584	306	3461	0	0	3849	718
V/C Ratio(X)				0.75	0.00	0.70	0.85	0.22	0.00	0.00	0.52	0.12
Avail Cap(c_a), veh/h				1064	0	861	492	3461	0	0	3849	718
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.4	0.0	30.0	32.8	4.9	0.0	0.0	16.1	12.9
Incr Delay (d2), s/veh				1.7	0.0	1.6	7.8	0.1	0.0	0.0	0.5	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.9	0.0	4.4	6.4	2.1	0.0	0.0	5.5	1.1
LnGrp Delay(d),s/veh				32.1	0.0	31.5	40.7	5.1	0.0	0.0	16.6	13.2
LnGrp LOS				C		C	D	A			B	B
Approach Vol, veh/h					952			1017			2103	
Approach Delay, s/veh					31.8			14.2			16.4	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		60.2			18.6	41.6		21.7
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		55.7			22.7	28.5		25.3
Max Q Clear Time (g_c+I1), s		6.6			13.6	16.0		14.1
Green Ext Time (p_c), s		38.0			0.5	11.5		3.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	0	247	0	0	0	0	770	989	1238	1165	0
Future Volume (veh/h)	175	0	247	0	0	0	0	770	989	1238	1165	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	184	0	29				0	811	736	1303	1226	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	381	0	309				0	2479	1405	1478	4013	0
Arrive On Green	0.11	0.00	0.11				0.00	0.44	0.44	0.30	0.79	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	184	0	29				0	811	736	1303	1226	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	4.5	0.0	0.8				0.0	8.5	15.1	22.3	6.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	0.8				0.0	8.5	15.1	22.3	6.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	381	0	309				0	2479	1405	1478	4013	0
V/C Ratio(X)	0.48	0.00	0.09				0.00	0.33	0.52	0.88	0.31	0.00
Avail Cap(c_a), veh/h	387	0	313				0	2479	1405	1587	4013	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	35.9				0.0	16.3	18.1	30.2	2.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.1				0.0	0.4	1.4	5.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.3				0.0	4.4	6.8	11.1	2.8	0.0
LnGrp Delay(d),s/veh	38.5	0.0	36.0				0.0	16.6	19.5	36.0	2.8	0.0
LnGrp LOS	D		D					B	B	D	A	
Approach Vol, veh/h		213						1547			2529	
Approach Delay, s/veh		38.1						18.0			19.9	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	31.0	44.4		14.5		75.4		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	28.5	37.9		10.1		70.9		
Max Q Clear Time (g_c+I1), s	24.3	17.1		6.5		8.0		
Green Ext Time (p_c), s	2.2	17.0		0.2		37.7		

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	550	834	361	422
Future Volume (veh/h)	0	0	550	834	361	422
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			579	378	380	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1284	1091	0	0
Arrive On Green			0.69	0.69	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			579	378	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			2.0	1.4		
Cycle Q Clear(g_c), s			2.0	1.4		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1284	1091		
V/C Ratio(X)			0.45	0.35		
Avail Cap(c_a), veh/h			6266	5326		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.0	0.9		
Incr Delay (d2), s/veh			0.2	0.2		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			1.1	0.6		
LnGrp Delay(d),s/veh			1.3	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			957			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								14.5
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								48.7
Max Q Clear Time (g_c+I1), s								4.0
Green Ext Time (p_c), s								6.2

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	906	0	1028	0	1647	515	0	1587	1047
Future Volume (veh/h)	0	0	0	906	0	1028	0	1647	515	0	1587	1047
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1303	0	692	0	1734	0	0	1671	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1815	0	810	0	2417	597	0	2417	597
Arrive On Green				0.51	0.00	0.51	0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1303	0	692	0	1734	0	0	1671	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				22.9	0.0	30.7	0.0	18.7	0.0	0.0	17.8	0.0
Cycle Q Clear(g_c), s				22.9	0.0	30.7	0.0	18.7	0.0	0.0	17.8	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1815	0	810	0	2417	597	0	2417	597
V/C Ratio(X)				0.72	0.00	0.85	0.00	0.72	0.00	0.00	0.69	0.00
Avail Cap(c_a), veh/h				2216	0	989	0	2417	597	0	2417	597
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.2	0.0	17.1	0.0	21.5	0.0	0.0	21.2	0.0
Incr Delay (d2), s/veh				0.9	0.0	6.3	0.0	1.9	0.0	0.0	1.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.3	0.0	14.7	0.0	8.5	0.0	0.0	8.1	0.0
LnGrp Delay(d),s/veh				16.1	0.0	23.4	0.0	23.4	0.0	0.0	22.9	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1995			1734			1671	
Approach Delay, s/veh					18.7			23.4			22.9	
Approach LOS					B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		35.0				35.0		45.9
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		30.5				30.5		50.5
Max Q Clear Time (g_c+I1), s		20.7				19.8		32.7
Green Ext Time (p_c), s		9.5				10.4		8.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	184	742	0	1875	773	0	2565	1047	0	0
Future Volume (veh/h)	184	742	0	1875	773	0	2565	1047	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	194	754	0	1974	0	0	2700	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	498	890	0	3113	969	0	3922	969		
Arrive On Green	0.28	0.28	0.00	0.61	0.00	0.00	0.61	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	194	754	0	1974	0	0	2700	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	7.4	18.9	0.0	20.7	0.0	0.0	23.8	0.0		
Cycle Q Clear(g_c), s	7.4	18.9	0.0	20.7	0.0	0.0	23.8	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	498	890	0	3113	969	0	3922	969		
V/C Ratio(X)	0.39	0.85	0.00	0.63	0.00	0.00	0.69	0.00		
Avail Cap(c_a), veh/h	622	1110	0	3113	969	0	3922	969		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	24.4	28.5	0.0	10.3	0.0	0.0	10.9	0.0		
Incr Delay (d2), s/veh	0.5	5.2	0.0	1.0	0.0	0.0	1.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.7	8.9	0.0	9.8	0.0	0.0	10.6	0.0		
LnGrp Delay(d),s/veh	24.9	33.7	0.0	11.3	0.0	0.0	11.9	0.0		
LnGrp LOS	C	C		B			B			
Approach Vol, veh/h	948			1974			2700			
Approach Delay, s/veh	31.9			11.3			11.9			
Approach LOS	C			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		56.0		28.1		56.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		51.5		29.5		51.5		
Max Q Clear Time (g_c+I1), s		22.7		20.9		25.8		
Green Ext Time (p_c), s		28.5		2.7		25.5		

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	783	0	1207	144	1259	0	0	1925	319
Future Volume (veh/h)	0	0	0	783	0	1207	144	1259	0	0	1925	319
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				824	0	1229	152	1325	0	0	2026	80
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1582	0	1281	193	2237	0	0	2387	445
Arrive On Green				0.46	0.00	0.46	0.11	0.44	0.00	0.00	0.28	0.28
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				824	0	1229	152	1325	0	0	2026	80
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				15.3	0.0	38.3	7.5	17.7	0.0	0.0	20.2	3.4
Cycle Q Clear(g_c), s				15.3	0.0	38.3	7.5	17.7	0.0	0.0	20.2	3.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1582	0	1281	193	2237	0	0	2387	445
V/C Ratio(X)				0.52	0.00	0.96	0.79	0.59	0.00	0.00	0.85	0.18
Avail Cap(c_a), veh/h				1591	0	1288	207	2237	0	0	2387	445
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.2	0.0	23.4	39.0	19.0	0.0	0.0	30.5	24.4
Incr Delay (d2), s/veh				0.3	0.0	16.3	17.0	1.2	0.0	0.0	4.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.3	0.0	17.4	4.6	8.5	0.0	0.0	8.3	1.6
LnGrp Delay(d),s/veh				17.5	0.0	39.7	56.0	20.2	0.0	0.0	34.5	25.3
LnGrp LOS				B		D	E	C			C	C
Approach Vol, veh/h					2053			1477			2106	
Approach Delay, s/veh					30.8			23.9			34.1	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.0			14.3	29.7		45.8
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		39.5			10.5	24.5		41.5
Max Q Clear Time (g_c+I1), s		19.7			9.5	22.2		40.3
Green Ext Time (p_c), s		18.7			0.0	2.2		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	319	0	319	0	0	0	0	1084	391	1082	1542	0
Future Volume (veh/h)	319	0	319	0	0	0	0	1084	391	1082	1542	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	336	0	254				0	1141	215	1139	1623	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	458	0	371				0	3192	678	1397	3868	0
Arrive On Green	0.13	0.00	0.13				0.00	0.43	0.43	0.28	0.76	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	336	0	254				0	1141	215	1139	1623	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	8.0	0.0	7.4				0.0	8.8	7.6	18.0	9.5	0.0
Cycle Q Clear(g_c), s	8.0	0.0	7.4				0.0	8.8	7.6	18.0	9.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	458	0	371				0	3192	678	1397	3868	0
V/C Ratio(X)	0.73	0.00	0.68				0.00	0.36	0.32	0.82	0.42	0.00
Avail Cap(c_a), veh/h	670	0	542				0	3192	678	1800	3868	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	0.0	35.1				0.0	16.4	16.0	28.5	3.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	2.2				0.0	0.3	1.2	2.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	2.9				0.0	4.6	3.5	8.5	4.5	0.0
LnGrp Delay(d),s/veh	37.6	0.0	37.3				0.0	16.7	17.3	30.9	3.9	0.0
LnGrp LOS	D		D					B	B	C	A	
Approach Vol, veh/h		590						1356			2762	
Approach Delay, s/veh		37.5						16.8			15.0	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.2	40.8		15.8		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	30.5	29.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	20.0	10.8		10.0		11.5		
Green Ext Time (p_c), s	3.7	16.7		1.3		40.1		

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	109	331	283	63
Future Volume (veh/h)	0	0	109	331	283	63
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			115	109	298	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			896	761	0	0
Arrive On Green			0.48	0.48	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			115	109	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.3	0.3		
Cycle Q Clear(g_c), s			0.3	0.3		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			896	761		
V/C Ratio(X)			0.13	0.14		
Avail Cap(c_a), veh/h			8487	7214		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.2	1.3		
Incr Delay (d2), s/veh			0.1	0.1		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.1		
LnGrp Delay(d),s/veh			1.3	1.3		
LnGrp LOS			A	A		
Approach Vol, veh/h			224			
Approach Delay, s/veh			1.3			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								8.7
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								39.5
Max Q Clear Time (g_c+I1), s								2.3
Green Ext Time (p_c), s								1.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	494	0	888	0	1465	453	0	1461	1074
Future Volume (veh/h)	0	0	0	494	0	888	0	1465	453	0	1461	1074
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				347	0	1102	0	1542	0	0	1538	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				755	0	1347	0	2903	717	0	2903	717
Arrive On Green				0.43	0.00	0.43	0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				347	0	1102	0	1542	0	0	1538	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				10.3	0.0	22.7	0.0	12.8	0.0	0.0	12.8	0.0
Cycle Q Clear(g_c), s				10.3	0.0	22.7	0.0	12.8	0.0	0.0	12.8	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				755	0	1347	0	2903	717	0	2903	717
V/C Ratio(X)				0.46	0.00	0.82	0.00	0.53	0.00	0.00	0.53	0.00
Avail Cap(c_a), veh/h				1139	0	2034	0	2903	717	0	2903	717
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.2	0.0	18.7	0.0	14.6	0.0	0.0	14.6	0.0
Incr Delay (d2), s/veh				0.4	0.0	1.7	0.0	0.7	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.1	0.0	10.1	0.0	5.8	0.0	0.0	5.7	0.0
LnGrp Delay(d),s/veh				15.6	0.0	20.4	0.0	15.3	0.0	0.0	15.3	0.0
LnGrp LOS				B		C		B			B	
Approach Vol, veh/h					1449			1542			1538	
Approach Delay, s/veh					19.2			15.3			15.3	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		36.0
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		33.5				33.5		47.5
Max Q Clear Time (g_c+I1), s		14.8				14.8		24.7
Green Ext Time (p_c), s		17.1				17.2		6.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	359	381	0	1465	1329	0	1759	1074	0	0
Future Volume (veh/h)	359	381	0	1465	1329	0	1759	1074	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	480	244	0	1542	0	0	1852	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	669	299	0	3592	1118	0	4526	1118		
Arrive On Green	0.19	0.19	0.00	0.71	0.00	0.00	0.71	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	480	244	0	1542	0	0	1852	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	10.9	12.7	0.0	10.9	0.0	0.0	10.2	0.0		
Cycle Q Clear(g_c), s	10.9	12.7	0.0	10.9	0.0	0.0	10.2	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	669	299	0	3592	1118	0	4526	1118		
V/C Ratio(X)	0.72	0.82	0.00	0.43	0.00	0.00	0.41	0.00		
Avail Cap(c_a), veh/h	849	379	0	3592	1118	0	4526	1118		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	32.6	33.3	0.0	5.3	0.0	0.0	5.2	0.0		
Incr Delay (d2), s/veh	2.1	10.5	0.0	0.4	0.0	0.0	0.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.5	6.4	0.0	5.1	0.0	0.0	4.6	0.0		
LnGrp Delay(d),s/veh	34.7	43.9	0.0	5.7	0.0	0.0	5.5	0.0		
LnGrp LOS	C	D		A			A			
Approach Vol, veh/h	724			1542			1852			
Approach Delay, s/veh	37.8			5.7			5.5			
Approach LOS	D			A			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		65.0		20.7		65.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		60.5		20.5		60.5		
Max Q Clear Time (g_c+I1), s		12.9		14.7		12.2		
Green Ext Time (p_c), s		41.9		1.5		42.5		

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	515	0	692	247	728	0	0	1932	206
Future Volume (veh/h)	0	0	0	515	0	692	247	728	0	0	1932	206
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				542	0	397	260	766	0	0	2034	83
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				720	0	583	306	3463	0	0	3852	718
Arrive On Green				0.21	0.00	0.21	0.17	0.68	0.00	0.00	0.45	0.45
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				542	0	397	260	766	0	0	2034	83
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				12.1	0.0	10.7	11.6	4.6	0.0	0.0	14.1	2.5
Cycle Q Clear(g_c), s				12.1	0.0	10.7	11.6	4.6	0.0	0.0	14.1	2.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				720	0	583	306	3463	0	0	3852	718
V/C Ratio(X)				0.75	0.00	0.68	0.85	0.22	0.00	0.00	0.53	0.12
Avail Cap(c_a), veh/h				1064	0	862	492	3463	0	0	3852	718
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				30.4	0.0	29.8	32.8	4.9	0.0	0.0	16.1	12.9
Incr Delay (d2), s/veh				1.7	0.0	1.4	7.8	0.1	0.0	0.0	0.5	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.9	0.0	4.2	6.4	2.2	0.0	0.0	5.6	1.1
LnGrp Delay(d),s/veh				32.1	0.0	31.2	40.6	5.1	0.0	0.0	16.6	13.2
LnGrp LOS				C		C	D	A			B	B
Approach Vol, veh/h					939			1026			2117	
Approach Delay, s/veh					31.7			14.1			16.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		60.2			18.6	41.6		21.6
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		55.7			22.7	28.5		25.3
Max Q Clear Time (g_c+I1), s		6.6			13.6	16.1		14.1
Green Ext Time (p_c), s		38.2			0.5	11.5		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	0	247	0	0	0	0	779	989	1247	1168	0
Future Volume (veh/h)	175	0	247	0	0	0	0	779	989	1247	1168	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	184	0	28				0	820	734	1313	1229	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	381	0	309				0	2472	1401	1484	4013	0
Arrive On Green	0.11	0.00	0.11				0.00	0.44	0.44	0.30	0.79	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	184	0	28				0	820	734	1313	1229	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	4.5	0.0	0.8				0.0	8.6	15.1	22.5	6.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	0.8				0.0	8.6	15.1	22.5	6.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	381	0	309				0	2472	1401	1484	4013	0
V/C Ratio(X)	0.48	0.00	0.09				0.00	0.33	0.52	0.88	0.31	0.00
Avail Cap(c_a), veh/h	387	0	313				0	2472	1401	1587	4013	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	35.9				0.0	16.4	18.2	30.1	2.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.1				0.0	0.4	1.4	6.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.3				0.0	4.5	6.9	11.2	2.8	0.0
LnGrp Delay(d),s/veh	38.5	0.0	36.0				0.0	16.7	19.6	36.2	2.8	0.0
LnGrp LOS	D		D					B	B	D	A	
Approach Vol, veh/h		212						1554			2542	
Approach Delay, s/veh		38.2						18.1			20.1	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	31.2	44.2		14.4		75.4		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	28.5	37.9		10.1		70.9		
Max Q Clear Time (g_c+I1), s	24.5	17.1		6.5		8.0		
Green Ext Time (p_c), s	2.2	17.0		0.2		37.9		

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	546	841	413	436
Future Volume (veh/h)	0	0	546	841	413	436
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			575	367	435	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1277	1085	0	0
Arrive On Green			0.69	0.69	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			575	367	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			2.0	1.4		
Cycle Q Clear(g_c), s			2.0	1.4		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1277	1085		
V/C Ratio(X)			0.45	0.34		
Avail Cap(c_a), veh/h			6055	5146		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.0	0.9		
Incr Delay (d2), s/veh			0.2	0.2		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			1.0	0.6		
LnGrp Delay(d),s/veh			1.3	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			942			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								14.3
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								46.5
Max Q Clear Time (g_c+I1), s								4.0
Green Ext Time (p_c), s								6.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	906	0	1024	0	1662	515	0	1538	997
Future Volume (veh/h)	0	0	0	906	0	1024	0	1662	515	0	1538	997
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1301	0	690	0	1749	0	0	1619	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1812	0	809	0	2421	598	0	2421	598
Arrive On Green				0.51	0.00	0.51	0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1301	0	690	0	1749	0	0	1619	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				22.9	0.0	30.5	0.0	18.9	0.0	0.0	17.0	0.0
Cycle Q Clear(g_c), s				22.9	0.0	30.5	0.0	18.9	0.0	0.0	17.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1812	0	809	0	2421	598	0	2421	598
V/C Ratio(X)				0.72	0.00	0.85	0.00	0.72	0.00	0.00	0.67	0.00
Avail Cap(c_a), veh/h				2219	0	990	0	2421	598	0	2421	598
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.3	0.0	17.1	0.0	21.5	0.0	0.0	20.9	0.0
Incr Delay (d2), s/veh				0.9	0.0	6.2	0.0	1.9	0.0	0.0	1.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.2	0.0	14.6	0.0	8.6	0.0	0.0	7.7	0.0
LnGrp Delay(d),s/veh				16.1	0.0	23.3	0.0	23.4	0.0	0.0	22.4	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1991			1749			1619	
Approach Delay, s/veh					18.6			23.4			22.4	
Approach LOS					B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		35.0				35.0		45.7
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		30.5				30.5		50.5
Max Q Clear Time (g_c+I1), s		20.9				19.0		32.5
Green Ext Time (p_c), s		9.3				11.1		8.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	196	742	0	1879	773	0	2552	997	0	0
Future Volume (veh/h)	196	742	0	1879	773	0	2552	997	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	206	756	0	1978	0	0	2686	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	504	900	0	3089	962	0	3892	962		
Arrive On Green	0.28	0.28	0.00	0.61	0.00	0.00	0.61	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	206	756	0	1978	0	0	2686	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	7.8	18.7	0.0	20.8	0.0	0.0	23.6	0.0		
Cycle Q Clear(g_c), s	7.8	18.7	0.0	20.8	0.0	0.0	23.6	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	504	900	0	3089	962	0	3892	962		
V/C Ratio(X)	0.41	0.84	0.00	0.64	0.00	0.00	0.69	0.00		
Avail Cap(c_a), veh/h	651	1162	0	3089	962	0	3892	962		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	24.1	28.0	0.0	10.5	0.0	0.0	11.0	0.0		
Incr Delay (d2), s/veh	0.5	4.5	0.0	1.0	0.0	0.0	1.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.9	8.6	0.0	9.8	0.0	0.0	10.5	0.0		
LnGrp Delay(d),s/veh	24.6	32.4	0.0	11.5	0.0	0.0	12.1	0.0		
LnGrp LOS	C	C		B			B			
Approach Vol, veh/h	962			1978			2686			
Approach Delay, s/veh	30.8			11.5			12.1			
Approach LOS	C			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		55.0		28.1		55.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		50.5		30.5		50.5		
Max Q Clear Time (g_c+I1), s		22.8		20.7		25.6		
Green Ext Time (p_c), s		27.4		3.0		24.7		

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	783	0	1210	144	1265	0	0	1964	319
Future Volume (veh/h)	0	0	0	783	0	1210	144	1265	0	0	1964	319
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				824	0	1232	152	1332	0	0	2067	80
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1549	0	1254	193	2288	0	0	2475	461
Arrive On Green				0.45	0.00	0.45	0.11	0.45	0.00	0.00	0.29	0.29
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				824	0	1232	152	1332	0	0	2067	80
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				15.6	0.0	39.2	7.5	17.6	0.0	0.0	20.5	3.4
Cycle Q Clear(g_c), s				15.6	0.0	39.2	7.5	17.6	0.0	0.0	20.5	3.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1549	0	1254	193	2288	0	0	2475	461
V/C Ratio(X)				0.53	0.00	0.98	0.79	0.58	0.00	0.00	0.84	0.17
Avail Cap(c_a), veh/h				1549	0	1254	207	2288	0	0	2475	461
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.9	0.0	24.4	39.1	18.4	0.0	0.0	29.9	23.8
Incr Delay (d2), s/veh				0.4	0.0	21.2	17.2	1.1	0.0	0.0	3.5	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.4	0.0	18.6	4.6	8.4	0.0	0.0	8.3	1.6
LnGrp Delay(d),s/veh				18.2	0.0	45.6	56.3	19.5	0.0	0.0	33.4	24.6
LnGrp LOS				B		D	E	B			C	C
Approach Vol, veh/h					2056			1484			2147	
Approach Delay, s/veh					34.6			23.3			33.1	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		45.0			14.3	30.7		45.0
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		40.5			10.5	25.5		40.5
Max Q Clear Time (g_c+I1), s		19.6			9.5	22.5		41.2
Green Ext Time (p_c), s		19.8			0.0	2.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	319	0	319	0	0	0	0	1090	391	1114	1550	0
Future Volume (veh/h)	319	0	319	0	0	0	0	1090	391	1114	1550	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	336	0	253				0	1147	216	1173	1632	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	458	0	371				0	3144	668	1429	3868	0
Arrive On Green	0.13	0.00	0.13				0.00	0.42	0.42	0.29	0.76	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	336	0	253				0	1147	216	1173	1632	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	8.0	0.0	7.3				0.0	8.9	7.7	18.6	9.6	0.0
Cycle Q Clear(g_c), s	8.0	0.0	7.3				0.0	8.9	7.7	18.6	9.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	458	0	371				0	3144	668	1429	3868	0
V/C Ratio(X)	0.73	0.00	0.68				0.00	0.36	0.32	0.82	0.42	0.00
Avail Cap(c_a), veh/h	670	0	542				0	3144	668	1800	3868	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	0.0	35.0				0.0	16.7	16.4	28.3	3.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	2.2				0.0	0.3	1.3	2.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	2.9				0.0	4.6	3.6	8.8	4.5	0.0
LnGrp Delay(d),s/veh	37.6	0.0	37.3				0.0	17.1	17.7	30.8	3.9	0.0
LnGrp LOS	D		D					B	B	C	A	
Approach Vol, veh/h		589						1363			2805	
Approach Delay, s/veh		37.5						17.2			15.2	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.7	40.3		15.8		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	30.5	29.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	20.6	10.9		10.0		11.6		
Green Ext Time (p_c), s	3.7	16.6		1.3		40.3		

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	109	331	283	63
Future Volume (veh/h)	0	0	109	331	283	63
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			115	109	298	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			896	761	0	0
Arrive On Green			0.48	0.48	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			115	109	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.3	0.3		
Cycle Q Clear(g_c), s			0.3	0.3		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			896	761		
V/C Ratio(X)			0.13	0.14		
Avail Cap(c_a), veh/h			8487	7214		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.2	1.3		
Incr Delay (d2), s/veh			0.1	0.1		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.1		
LnGrp Delay(d),s/veh			1.3	1.3		
LnGrp LOS			A	A		
Approach Vol, veh/h			224			
Approach Delay, s/veh			1.3			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								8.7
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								39.5
Max Q Clear Time (g_c+I1), s								2.3
Green Ext Time (p_c), s								1.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	494	0	929	0	1572	453	0	1469	1088
Future Volume (veh/h)	0	0	0	494	0	929	0	1572	453	0	1469	1088
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				347	0	1145	0	1655	0	0	1546	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				770	0	1375	0	2876	711	0	2876	711
Arrive On Green				0.43	0.00	0.43	0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				347	0	1145	0	1655	0	0	1546	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				10.6	0.0	24.6	0.0	14.8	0.0	0.0	13.5	0.0
Cycle Q Clear(g_c), s				10.6	0.0	24.6	0.0	14.8	0.0	0.0	13.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				770	0	1375	0	2876	711	0	2876	711
V/C Ratio(X)				0.45	0.00	0.83	0.00	0.58	0.00	0.00	0.54	0.00
Avail Cap(c_a), veh/h				1073	0	1915	0	2876	711	0	2876	711
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.3	0.0	19.3	0.0	15.7	0.0	0.0	15.4	0.0
Incr Delay (d2), s/veh				0.4	0.0	2.3	0.0	0.8	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.2	0.0	11.1	0.0	6.6	0.0	0.0	6.0	0.0
LnGrp Delay(d),s/veh				15.7	0.0	21.6	0.0	16.6	0.0	0.0	16.1	0.0
LnGrp LOS				B		C		B			B	
Approach Vol, veh/h					1492			1655			1546	
Approach Delay, s/veh					20.2			16.6			16.1	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		39.0				39.0		37.9
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		34.5				34.5		46.5
Max Q Clear Time (g_c+I1), s		16.8				15.5		26.6
Green Ext Time (p_c), s		16.5				17.7		6.7

Intersection Summary	
HCM 2010 Ctrl Delay	17.6
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	408	381	0	1523	1329	0	1767	1088	0	0
Future Volume (veh/h)	408	381	0	1523	1329	0	1767	1088	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	518	262	0	1603	0	0	1860	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	703	314	0	3549	1105	0	4472	1105		
Arrive On Green	0.20	0.20	0.00	0.70	0.00	0.00	0.70	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	518	262	0	1603	0	0	1860	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	11.9	13.8	0.0	12.1	0.0	0.0	10.7	0.0		
Cycle Q Clear(g_c), s	11.9	13.8	0.0	12.1	0.0	0.0	10.7	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	703	314	0	3549	1105	0	4472	1105		
V/C Ratio(X)	0.74	0.83	0.00	0.45	0.00	0.00	0.42	0.00		
Avail Cap(c_a), veh/h	839	374	0	3549	1105	0	4472	1105		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	32.6	33.4	0.0	5.8	0.0	0.0	5.6	0.0		
Incr Delay (d2), s/veh	2.8	13.0	0.0	0.4	0.0	0.0	0.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.1	7.2	0.0	5.6	0.0	0.0	4.7	0.0		
LnGrp Delay(d),s/veh	35.4	46.4	0.0	6.2	0.0	0.0	5.9	0.0		
LnGrp LOS	D	D		A			A			
Approach Vol, veh/h	780			1603			1860			
Approach Delay, s/veh	39.1			6.2			5.9			
Approach LOS	D			A			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		65.0		21.7		65.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		60.5		20.5		60.5		
Max Q Clear Time (g_c+I1), s		14.1		15.8		12.7		
Green Ext Time (p_c), s		41.5		1.4		42.6		

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	515	0	704	247	736	0	0	1935	206
Future Volume (veh/h)	0	0	0	515	0	704	247	736	0	0	1935	206
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				542	0	423	260	775	0	0	2037	83
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				728	0	590	306	3446	0	0	3819	712
Arrive On Green				0.21	0.00	0.21	0.17	0.68	0.00	0.00	0.45	0.45
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				542	0	423	260	775	0	0	2037	83
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				12.0	0.0	11.5	11.5	4.7	0.0	0.0	14.1	2.5
Cycle Q Clear(g_c), s				12.0	0.0	11.5	11.5	4.7	0.0	0.0	14.1	2.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				728	0	590	306	3446	0	0	3819	712
V/C Ratio(X)				0.74	0.00	0.72	0.85	0.22	0.00	0.00	0.53	0.12
Avail Cap(c_a), veh/h				1102	0	893	496	3446	0	0	3819	712
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				29.9	0.0	29.7	32.6	5.0	0.0	0.0	16.2	13.0
Incr Delay (d2), s/veh				1.5	0.0	1.7	7.6	0.2	0.0	0.0	0.5	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.8	0.0	4.5	6.3	2.2	0.0	0.0	5.6	1.1
LnGrp Delay(d),s/veh				31.5	0.0	31.4	40.1	5.1	0.0	0.0	16.7	13.3
LnGrp LOS				C		C	D	A			B	B
Approach Vol, veh/h					965			1035			2120	
Approach Delay, s/veh					31.4			13.9			16.6	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		59.5			18.5	41.0		21.7
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		55.0			22.7	27.8		26.0
Max Q Clear Time (g_c+I1), s		6.7			13.5	16.1		14.0
Green Ext Time (p_c), s		37.9			0.5	10.9		3.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	0	247	0	0	0	0	787	989	1249	1169	0
Future Volume (veh/h)	175	0	247	0	0	0	0	787	989	1249	1169	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	184	0	29				0	828	736	1315	1231	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	381	0	309				0	2470	1400	1486	4013	0
Arrive On Green	0.11	0.00	0.11				0.00	0.44	0.44	0.30	0.79	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	184	0	29				0	828	736	1315	1231	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	4.5	0.0	0.8				0.0	8.7	15.2	22.5	6.1	0.0
Cycle Q Clear(g_c), s	4.5	0.0	0.8				0.0	8.7	15.2	22.5	6.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	381	0	309				0	2470	1400	1486	4013	0
V/C Ratio(X)	0.48	0.00	0.09				0.00	0.34	0.53	0.89	0.31	0.00
Avail Cap(c_a), veh/h	387	0	313				0	2470	1400	1587	4013	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	0.0	35.9				0.0	16.4	18.2	30.1	2.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.1				0.0	0.4	1.4	6.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.3				0.0	4.5	6.9	11.2	2.8	0.0
LnGrp Delay(d),s/veh	38.5	0.0	36.0				0.0	16.8	19.6	36.2	2.8	0.0
LnGrp LOS	D		D					B	B	D	A	
Approach Vol, veh/h		213						1564			2546	
Approach Delay, s/veh		38.1						18.1			20.1	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	31.2	44.2		14.5		75.4		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	28.5	37.9		10.1		70.9		
Max Q Clear Time (g_c+I1), s	24.5	17.2		6.5		8.1		
Green Ext Time (p_c), s	2.2	17.0		0.2		38.1		

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	591	841	413	436
Future Volume (veh/h)	0	0	591	841	413	436
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			622	385	435	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1315	1118	0	0
Arrive On Green			0.71	0.71	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			622	385	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			2.3	1.4		
Cycle Q Clear(g_c), s			2.3	1.4		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1315	1118		
V/C Ratio(X)			0.47	0.34		
Avail Cap(c_a), veh/h			5658	4809		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.0	0.9		
Incr Delay (d2), s/veh			0.3	0.2		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			1.1	0.6		
LnGrp Delay(d),s/veh			1.3	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			1007			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								15.3
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								46.5
Max Q Clear Time (g_c+I1), s								4.3
Green Ext Time (p_c), s								6.7

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	906	0	1032	0	1682	515	0	1626	1086
Future Volume (veh/h)	0	0	0	906	0	1032	0	1682	515	0	1626	1086
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1305	0	694	0	1771	0	0	1712	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1802	0	804	0	2452	606	0	2452	606
Arrive On Green				0.51	0.00	0.51	0.00	0.38	0.00	0.00	0.38	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1305	0	694	0	1771	0	0	1712	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				23.6	0.0	31.6	0.0	19.4	0.0	0.0	18.5	0.0
Cycle Q Clear(g_c), s				23.6	0.0	31.6	0.0	19.4	0.0	0.0	18.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1802	0	804	0	2452	606	0	2452	606
V/C Ratio(X)				0.72	0.00	0.86	0.00	0.72	0.00	0.00	0.70	0.00
Avail Cap(c_a), veh/h				2134	0	952	0	2452	606	0	2452	606
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				15.8	0.0	17.7	0.0	21.7	0.0	0.0	21.4	0.0
Incr Delay (d2), s/veh				1.0	0.0	7.2	0.0	1.9	0.0	0.0	1.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.7	0.0	15.3	0.0	8.8	0.0	0.0	8.5	0.0
LnGrp Delay(d),s/veh				16.8	0.0	25.0	0.0	23.5	0.0	0.0	23.1	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1999			1771			1712	
Approach Delay, s/veh					19.6			23.5			23.1	
Approach LOS					B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		46.3
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		31.5				31.5		49.5
Max Q Clear Time (g_c+I1), s		21.4				20.5		33.6
Green Ext Time (p_c), s		9.8				10.6		8.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	205	742	0	1890	773	0	2604	1086	0	0
Future Volume (veh/h)	205	742	0	1890	773	0	2604	1086	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	216	754	0	1989	0	0	2741	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	496	886	0	3123	973	0	3936	973		
Arrive On Green	0.28	0.28	0.00	0.61	0.00	0.00	0.61	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	216	754	0	1989	0	0	2741	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	8.5	19.1	0.0	21.0	0.0	0.0	24.5	0.0		
Cycle Q Clear(g_c), s	8.5	19.1	0.0	21.0	0.0	0.0	24.5	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	496	886	0	3123	973	0	3936	973		
V/C Ratio(X)	0.44	0.85	0.00	0.64	0.00	0.00	0.70	0.00		
Avail Cap(c_a), veh/h	604	1079	0	3123	973	0	3936	973		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	25.1	28.9	0.0	10.4	0.0	0.0	11.0	0.0		
Incr Delay (d2), s/veh	0.6	5.7	0.0	1.0	0.0	0.0	1.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.2	9.0	0.0	10.1	0.0	0.0	10.9	0.0		
LnGrp Delay(d),s/veh	25.7	34.5	0.0	11.4	0.0	0.0	12.1	0.0		
LnGrp LOS	C	C		B			B			
Approach Vol, veh/h	970			1989			2741			
Approach Delay, s/veh	32.6			11.4			12.1			
Approach LOS	C			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		56.6		28.2		56.6		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		52.1		28.9		52.1		
Max Q Clear Time (g_c+I1), s		23.0		21.1		26.5		
Green Ext Time (p_c), s		28.8		2.6		25.4		

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	783	0	1212	144	1267	0	0	1983	319
Future Volume (veh/h)	0	0	0	783	0	1212	144	1267	0	0	1983	319
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				824	0	1234	152	1334	0	0	2087	80
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1556	0	1260	193	2277	0	0	2456	458
Arrive On Green				0.45	0.00	0.45	0.11	0.45	0.00	0.00	0.29	0.29
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				824	0	1234	152	1334	0	0	2087	80
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				15.5	0.0	39.2	7.5	17.7	0.0	0.0	20.8	3.4
Cycle Q Clear(g_c), s				15.5	0.0	39.2	7.5	17.7	0.0	0.0	20.8	3.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1556	0	1260	193	2277	0	0	2456	458
V/C Ratio(X)				0.53	0.00	0.98	0.79	0.59	0.00	0.00	0.85	0.17
Avail Cap(c_a), veh/h				1556	0	1260	207	2277	0	0	2456	458
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.8	0.0	24.2	39.1	18.6	0.0	0.0	30.1	23.9
Incr Delay (d2), s/veh				0.3	0.0	20.4	17.2	1.1	0.0	0.0	3.9	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.4	0.0	18.5	4.6	8.5	0.0	0.0	8.6	1.6
LnGrp Delay(d),s/veh				18.1	0.0	44.7	56.3	19.7	0.0	0.0	34.1	24.8
LnGrp LOS				B		D	E	B			C	C
Approach Vol, veh/h					2058			1486			2167	
Approach Delay, s/veh					34.0			23.5			33.7	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		44.8			14.3	30.5		45.2
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		40.3			10.5	25.3		40.7
Max Q Clear Time (g_c+I1), s		19.7			9.5	22.8		41.2
Green Ext Time (p_c), s		19.6			0.0	2.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	319	0	319	0	0	0	0	1092	391	1125	1557	0
Future Volume (veh/h)	319	0	319	0	0	0	0	1092	391	1125	1557	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	336	0	254				0	1149	215	1184	1639	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	458	0	371				0	3129	665	1439	3868	0
Arrive On Green	0.13	0.00	0.13				0.00	0.42	0.42	0.29	0.76	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	336	0	254				0	1149	215	1184	1639	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	8.0	0.0	7.4				0.0	9.0	7.7	18.7	9.7	0.0
Cycle Q Clear(g_c), s	8.0	0.0	7.4				0.0	9.0	7.7	18.7	9.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	458	0	371				0	3129	665	1439	3868	0
V/C Ratio(X)	0.73	0.00	0.68				0.00	0.37	0.32	0.82	0.42	0.00
Avail Cap(c_a), veh/h	670	0	542				0	3129	665	1800	3868	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	0.0	35.1				0.0	16.9	16.5	28.2	3.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	2.2				0.0	0.3	1.3	2.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	2.9				0.0	4.6	3.6	8.9	4.5	0.0
LnGrp Delay(d),s/veh	37.6	0.0	37.3				0.0	17.2	17.8	30.8	3.9	0.0
LnGrp LOS	D		D					B	B	C	A	
Approach Vol, veh/h		590						1364			2823	
Approach Delay, s/veh		37.5						17.3			15.2	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.9	40.1		15.8		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	30.5	29.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	20.7	11.0		10.0		11.7		
Green Ext Time (p_c), s	3.7	16.6		1.3		40.4		

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	199	260	250	50
Future Volume (veh/h)	0	0	199	260	250	50
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			209	46	263	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			965	820	0	0
Arrive On Green			0.52	0.52	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			209	46	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.6	0.1		
Cycle Q Clear(g_c), s			0.6	0.1		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			965	820		
V/C Ratio(X)			0.22	0.06		
Avail Cap(c_a), veh/h			7679	6527		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.2	1.1		
Incr Delay (d2), s/veh			0.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.3	0.1		
LnGrp Delay(d),s/veh			1.3	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			255			
Approach Delay, s/veh			1.3			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								9.3
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								38.5
Max Q Clear Time (g_c+I1), s								2.6
Green Ext Time (p_c), s								1.4

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	370	0	748	0	2040	1170	0	1096	1166
Future Volume (veh/h)	0	0	0	370	0	748	0	2040	1170	0	1096	1166
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				259	0	905	0	2147	0	0	1154	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				613	0	1094	0	3461	855	0	3461	855
Arrive On Green				0.35	0.00	0.35	0.00	0.54	0.00	0.00	0.54	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				259	0	905	0	2147	0	0	1154	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				8.8	0.0	20.6	0.0	18.2	0.0	0.0	8.0	0.0
Cycle Q Clear(g_c), s				8.8	0.0	20.6	0.0	18.2	0.0	0.0	8.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				613	0	1094	0	3461	855	0	3461	855
V/C Ratio(X)				0.42	0.00	0.83	0.00	0.62	0.00	0.00	0.33	0.00
Avail Cap(c_a), veh/h				868	0	1549	0	3461	855	0	3461	855
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				19.7	0.0	23.6	0.0	12.5	0.0	0.0	10.2	0.0
Incr Delay (d2), s/veh				0.5	0.0	2.6	0.0	0.8	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.4	0.0	9.3	0.0	8.1	0.0	0.0	3.5	0.0
LnGrp Delay(d),s/veh				20.2	0.0	26.2	0.0	13.4	0.0	0.0	10.4	0.0
LnGrp LOS				C		C		B			B	
Approach Vol, veh/h					1164			2147			1154	
Approach Delay, s/veh					24.9			13.4			10.4	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		47.0				47.0		31.7
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		42.5				42.5		38.5
Max Q Clear Time (g_c+I1), s		20.2				10.0		22.6
Green Ext Time (p_c), s		20.8				29.6		4.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	678	760	0	1282	270	0	1495	1166	0	0
Future Volume (veh/h)	678	760	0	1282	270	0	1495	1166	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	969	493	0	1349	0	0	1574	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	1187	530	0	2872	894	0	3618	894		
Arrive On Green	0.33	0.33	0.00	0.56	0.00	0.00	0.56	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	969	493	0	1349	0	0	1574	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	22.4	26.9	0.0	14.1	0.0	0.0	12.7	0.0		
Cycle Q Clear(g_c), s	22.4	26.9	0.0	14.1	0.0	0.0	12.7	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	1187	530	0	2872	894	0	3618	894		
V/C Ratio(X)	0.82	0.93	0.00	0.47	0.00	0.00	0.43	0.00		
Avail Cap(c_a), veh/h	1210	540	0	2872	894	0	3618	894		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	27.2	28.7	0.0	11.5	0.0	0.0	11.2	0.0		
Incr Delay (d2), s/veh	4.4	22.7	0.0	0.6	0.0	0.0	0.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	11.6	15.0	0.0	6.6	0.0	0.0	5.7	0.0		
LnGrp Delay(d),s/veh	31.6	51.5	0.0	12.1	0.0	0.0	11.6	0.0		
LnGrp LOS	C	D		B			B			
Approach Vol, veh/h	1462			1349			1574			
Approach Delay, s/veh	38.3			12.1			11.6			
Approach LOS	D			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		55.0		34.4		55.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		50.5		30.5		50.5		
Max Q Clear Time (g_c+I1), s		16.1		28.9		14.7		
Green Ext Time (p_c), s		28.8		1.0		29.7		

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	520	0	1232	270	1142	0	0	1865	300
Future Volume (veh/h)	0	0	0	520	0	1232	270	1142	0	0	1865	300
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				547	0	1253	284	1202	0	0	1963	67
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1480	0	1198	300	2390	0	0	2133	398
Arrive On Green				0.43	0.00	0.43	0.17	0.47	0.00	0.00	0.25	0.25
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				547	0	1253	284	1202	0	0	1963	67
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				9.7	0.0	38.7	14.3	14.8	0.0	0.0	20.3	3.0
Cycle Q Clear(g_c), s				9.7	0.0	38.7	14.3	14.8	0.0	0.0	20.3	3.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1480	0	1198	300	2390	0	0	2133	398
V/C Ratio(X)				0.37	0.00	1.05	0.95	0.50	0.00	0.00	0.92	0.17
Avail Cap(c_a), veh/h				1480	0	1198	300	2390	0	0	2133	398
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.4	0.0	25.7	37.0	16.6	0.0	0.0	32.8	26.4
Incr Delay (d2), s/veh				0.2	0.0	38.8	38.2	0.8	0.0	0.0	8.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	0.0	21.3	10.1	7.1	0.0	0.0	8.7	1.4
LnGrp Delay(d),s/veh				17.5	0.0	64.4	75.2	17.3	0.0	0.0	40.8	27.3
LnGrp LOS				B		F	E	B			D	C
Approach Vol, veh/h					1800			1486			2030	
Approach Delay, s/veh					50.2			28.4			40.3	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		46.8			19.7	27.1		43.2
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		42.3			15.2	22.6		38.7
Max Q Clear Time (g_c+I1), s		16.8			16.3	22.3		40.7
Green Ext Time (p_c), s		23.3			0.0	0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	370	0	0	0	0	1132	1180	1148	1208	0
Future Volume (veh/h)	310	0	370	0	0	0	0	1132	1180	1148	1208	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	326	0	188				0	1192	935	1208	1272	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	407	0	329				0	2563	1453	1358	3970	0
Arrive On Green	0.12	0.00	0.12				0.00	0.46	0.46	0.27	0.78	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	326	0	188				0	1192	935	1208	1272	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	8.2	0.0	5.7				0.0	13.1	20.2	20.6	6.5	0.0
Cycle Q Clear(g_c), s	8.2	0.0	5.7				0.0	13.1	20.2	20.6	6.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	407	0	329				0	2563	1453	1358	3970	0
V/C Ratio(X)	0.80	0.00	0.57				0.00	0.46	0.64	0.89	0.32	0.00
Avail Cap(c_a), veh/h	445	0	360				0	2563	1453	1433	3970	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.2	0.0	37.1				0.0	16.6	18.5	31.1	2.9	0.0
Incr Delay (d2), s/veh	9.4	0.0	1.8				0.0	0.6	2.2	7.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	2.3				0.0	6.8	9.1	10.4	3.0	0.0
LnGrp Delay(d),s/veh	47.7	0.0	38.9				0.0	17.2	20.7	38.2	3.1	0.0
LnGrp LOS	D		D					B	C	D	A	
Approach Vol, veh/h		514						2127			2480	
Approach Delay, s/veh		44.5						18.7			20.2	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.7	45.3		15.0		74.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	25.5	39.5		11.5		69.5		
Max Q Clear Time (g_c+I1), s	22.6	22.2		10.2		8.5		
Green Ext Time (p_c), s	1.5	15.9		0.3		47.3		

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	912	500	340	730
Future Volume (veh/h)	0	0	912	500	340	730
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			960	297	358	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1505	1279	0	0
Arrive On Green			0.81	0.81	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			960	297	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			4.8	1.0		
Cycle Q Clear(g_c), s			4.8	1.0		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1505	1279		
V/C Ratio(X)			0.64	0.23		
Avail Cap(c_a), veh/h			4412	3750		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			0.9	0.5		
Incr Delay (d2), s/veh			0.5	0.1		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			2.3	0.4		
LnGrp Delay(d),s/veh			1.3	0.6		
LnGrp LOS			A	A		
Approach Vol, veh/h			1257			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								23.4
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								55.5
Max Q Clear Time (g_c+I1), s								6.8
Green Ext Time (p_c), s								12.2

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	940	0	967	0	1622	1270	0	1732	1086
Future Volume (veh/h)	0	0	0	940	0	967	0	1622	1270	0	1732	1086
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1302	0	665	0	1707	0	0	1823	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1747	0	780	0	2548	630	0	2548	630
Arrive On Green				0.49	0.00	0.49	0.00	0.40	0.00	0.00	0.40	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1302	0	665	0	1707	0	0	1823	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				24.1	0.0	30.1	0.0	17.9	0.0	0.0	19.6	0.0
Cycle Q Clear(g_c), s				24.1	0.0	30.1	0.0	17.9	0.0	0.0	19.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1747	0	780	0	2548	630	0	2548	630
V/C Ratio(X)				0.75	0.00	0.85	0.00	0.67	0.00	0.00	0.72	0.00
Avail Cap(c_a), veh/h				2105	0	939	0	2548	630	0	2548	630
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				16.6	0.0	18.2	0.0	20.2	0.0	0.0	20.7	0.0
Incr Delay (d2), s/veh				1.2	0.0	6.6	0.0	1.4	0.0	0.0	1.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.9	0.0	14.4	0.0	8.1	0.0	0.0	8.9	0.0
LnGrp Delay(d),s/veh				17.8	0.0	24.8	0.0	21.6	0.0	0.0	22.5	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1967			1707			1823	
Approach Delay, s/veh					20.2			21.6			22.5	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.0				37.0		44.7
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		32.5				32.5		48.5
Max Q Clear Time (g_c+I1), s		19.9				21.6		32.1
Green Ext Time (p_c), s		12.2				10.6		8.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	192	930	0	1720	490	0	2663	1086	0	0
Future Volume (veh/h)	192	930	0	1720	490	0	2663	1086	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	202	954	0	1811	0	0	2803	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	607	1084	0	2812	876	0	3544	876		
Arrive On Green	0.34	0.34	0.00	0.55	0.00	0.00	0.55	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	202	954	0	1811	0	0	2803	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	7.3	24.4	0.0	21.2	0.0	0.0	29.8	0.0		
Cycle Q Clear(g_c), s	7.3	24.4	0.0	21.2	0.0	0.0	29.8	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	607	1084	0	2812	876	0	3544	876		
V/C Ratio(X)	0.33	0.88	0.00	0.64	0.00	0.00	0.79	0.00		
Avail Cap(c_a), veh/h	692	1235	0	2812	876	0	3544	876		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	21.0	26.6	0.0	13.3	0.0	0.0	15.2	0.0		
Incr Delay (d2), s/veh	0.3	7.0	0.0	1.1	0.0	0.0	1.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.6	11.6	0.0	10.2	0.0	0.0	13.5	0.0		
LnGrp Delay(d),s/veh	21.3	33.6	0.0	14.5	0.0	0.0	17.1	0.0		
LnGrp LOS	C	C		B			B			
Approach Vol, veh/h	1156			1811			2803			
Approach Delay, s/veh	31.4			14.5			17.1			
Approach LOS	C			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		52.0		33.9		52.0		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		47.5		33.5		47.5		
Max Q Clear Time (g_c+I1), s		23.2		26.4		31.8		
Green Ext Time (p_c), s		24.0		3.0		15.6		

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	900	0	977	320	1577	0	0	2468	260
Future Volume (veh/h)	0	0	0	900	0	977	320	1577	0	0	2468	260
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				947	0	991	337	1660	0	0	2598	79
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1174	0	951	345	2842	0	0	2671	498
Arrive On Green				0.34	0.00	0.34	0.19	0.56	0.00	0.00	0.31	0.31
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				947	0	991	337	1660	0	0	2598	79
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				22.5	0.0	30.7	17.0	19.2	0.0	0.0	27.2	3.2
Cycle Q Clear(g_c), s				22.5	0.0	30.7	17.0	19.2	0.0	0.0	27.2	3.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1174	0	951	345	2842	0	0	2671	498
V/C Ratio(X)				0.81	0.00	1.04	0.98	0.58	0.00	0.00	0.97	0.16
Avail Cap(c_a), veh/h				1174	0	951	345	2842	0	0	2671	498
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				27.0	0.0	29.7	36.0	13.0	0.0	0.0	30.5	22.3
Incr Delay (d2), s/veh				4.3	0.0	40.9	42.1	0.9	0.0	0.0	12.1	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.3	0.0	17.1	12.4	9.1	0.0	0.0	12.1	1.5
LnGrp Delay(d),s/veh				31.2	0.0	70.5	78.2	13.9	0.0	0.0	42.6	22.9
LnGrp LOS				C		F	E	B			D	C
Approach Vol, veh/h					1938			1997			2677	
Approach Delay, s/veh					51.3			24.7			42.0	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		54.8			22.0	32.8		35.2
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		50.3			17.5	28.3		30.7
Max Q Clear Time (g_c+I1), s		21.2			19.0	29.2		32.7
Green Ext Time (p_c), s		28.5			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	510	0	440	0	0	0	0	1397	510	1474	1884	0
Future Volume (veh/h)	510	0	440	0	0	0	0	1397	510	1474	1884	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	537	0	416				0	1471	274	1552	1983	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	616	0	499				0	2500	531	1674	3664	0
Arrive On Green	0.18	0.00	0.18				0.00	0.34	0.34	0.33	0.72	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	537	0	416				0	1471	274	1552	1983	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	13.6	0.0	12.9				0.0	14.6	12.4	26.8	16.0	0.0
Cycle Q Clear(g_c), s	13.6	0.0	12.9				0.0	14.6	12.4	26.8	16.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	616	0	499				0	2500	531	1674	3664	0
V/C Ratio(X)	0.87	0.00	0.83				0.00	0.59	0.52	0.93	0.54	0.00
Avail Cap(c_a), veh/h	634	0	514				0	2500	531	1704	3664	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	35.5				0.0	24.6	23.9	28.7	5.7	0.0
Incr Delay (d2), s/veh	12.4	0.0	11.1				0.0	1.0	3.6	9.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	5.7				0.0	7.6	5.9	13.6	7.5	0.0
LnGrp Delay(d),s/veh	48.2	0.0	46.6				0.0	25.6	27.4	37.9	6.3	0.0
LnGrp LOS	D		D					C	C	D	A	
Approach Vol, veh/h		953						1745			3535	
Approach Delay, s/veh		47.5						25.9			20.2	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.5	34.5		20.5		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	30.5	29.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	28.8	16.6		15.6		18.0		
Green Ext Time (p_c), s	1.2	12.5		0.4		42.4		

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	220	260	250	50
Future Volume (veh/h)	0	0	220	260	250	50
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			232	48	263	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1012	860	0	0
Arrive On Green			0.54	0.54	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			232	48	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			0.6	0.1		
Cycle Q Clear(g_c), s			0.6	0.1		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1012	860		
V/C Ratio(X)			0.23	0.06		
Avail Cap(c_a), veh/h			7279	6187		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			1.2	1.1		
Incr Delay (d2), s/veh			0.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.3	0.1		
LnGrp Delay(d),s/veh			1.3	1.1		
LnGrp LOS			A	A		
Approach Vol, veh/h			280			
Approach Delay, s/veh			1.3			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								9.9
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								38.5
Max Q Clear Time (g_c+I1), s								2.6
Green Ext Time (p_c), s								1.6

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	370	0	820	0	2300	1170	0	1110	1190
Future Volume (veh/h)	0	0	0	370	0	820	0	2300	1170	0	1110	1190
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				259	0	979	0	2421	0	0	1168	0
Adj No. of Lanes				1	0	2	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				643	0	1148	0	3384	836	0	3384	836
Arrive On Green				0.36	0.00	0.36	0.00	0.53	0.00	0.00	0.53	0.00
Sat Flow, veh/h				1774	0	3167	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				259	0	979	0	2421	0	0	1168	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				9.0	0.0	23.5	0.0	23.6	0.0	0.0	8.7	0.0
Cycle Q Clear(g_c), s				9.0	0.0	23.5	0.0	23.6	0.0	0.0	8.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				643	0	1148	0	3384	836	0	3384	836
V/C Ratio(X)				0.40	0.00	0.85	0.00	0.72	0.00	0.00	0.35	0.00
Avail Cap(c_a), veh/h				808	0	1442	0	3384	836	0	3384	836
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				19.6	0.0	24.2	0.0	14.7	0.0	0.0	11.2	0.0
Incr Delay (d2), s/veh				0.4	0.0	4.2	0.0	1.3	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.5	0.0	10.9	0.0	10.6	0.0	0.0	3.9	0.0
LnGrp Delay(d),s/veh				20.0	0.0	28.5	0.0	16.1	0.0	0.0	11.5	0.0
LnGrp LOS				B		C		B			B	
Approach Vol, veh/h					1238			2421			1168	
Approach Delay, s/veh					26.7			16.1			11.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		48.0				48.0		34.4
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		43.5				43.5		37.5
Max Q Clear Time (g_c+I1), s		25.6				10.7		25.5
Green Ext Time (p_c), s		17.3				30.9		4.4

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	830	760	0	1390	270	0	1510	1190	0	0
Future Volume (veh/h)	830	760	0	1390	270	0	1510	1190	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	1084	550	0	1463	0	0	1589	0		
Adj No. of Lanes	2	1	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	1294	577	0	2722	847	0	3430	847		
Arrive On Green	0.36	0.36	0.00	0.54	0.00	0.00	0.54	0.00		
Sat Flow, veh/h	3548	1583	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	1084	550	0	1463	0	0	1589	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	25.1	30.4	0.0	16.9	0.0	0.0	13.8	0.0		
Cycle Q Clear(g_c), s	25.1	30.4	0.0	16.9	0.0	0.0	13.8	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	1294	577	0	2722	847	0	3430	847		
V/C Ratio(X)	0.84	0.95	0.00	0.54	0.00	0.00	0.46	0.00		
Avail Cap(c_a), veh/h	1299	580	0	2722	847	0	3430	847		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	26.1	27.8	0.0	13.6	0.0	0.0	12.9	0.0		
Incr Delay (d2), s/veh	5.0	26.0	0.0	0.8	0.0	0.0	0.5	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	13.1	17.3	0.0	8.0	0.0	0.0	6.2	0.0		
LnGrp Delay(d),s/veh	31.1	53.8	0.0	14.4	0.0	0.0	13.4	0.0		
LnGrp LOS	C	D		B			B			
Approach Vol, veh/h	1634			1463			1589			
Approach Delay, s/veh	38.7			14.4			13.4			
Approach LOS	D			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		52.6		37.3		52.6		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		48.1		32.9		48.1		
Max Q Clear Time (g_c+I1), s		18.9		32.4		15.8		
Green Ext Time (p_c), s		25.6		0.4		28.0		

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	520	0	1250	270	1160	0	0	1870	300
Future Volume (veh/h)	0	0	0	520	0	1250	270	1160	0	0	1870	300
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				547	0	1273	284	1221	0	0	1968	64
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1510	0	1223	298	2345	0	0	2067	385
Arrive On Green				0.44	0.00	0.44	0.17	0.46	0.00	0.00	0.24	0.24
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				547	0	1273	284	1221	0	0	1968	64
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				9.5	0.0	39.5	14.3	15.3	0.0	0.0	20.5	2.9
Cycle Q Clear(g_c), s				9.5	0.0	39.5	14.3	15.3	0.0	0.0	20.5	2.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1510	0	1223	298	2345	0	0	2067	385
V/C Ratio(X)				0.36	0.00	1.04	0.95	0.52	0.00	0.00	0.95	0.17
Avail Cap(c_a), veh/h				1510	0	1223	298	2345	0	0	2067	385
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.8	0.0	25.2	37.1	17.2	0.0	0.0	33.5	26.8
Incr Delay (d2), s/veh				0.1	0.0	37.0	39.8	0.8	0.0	0.0	11.3	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.5	0.0	21.4	10.2	7.3	0.0	0.0	9.1	1.3
LnGrp Delay(d),s/veh				17.0	0.0	62.3	77.0	18.0	0.0	0.0	44.9	27.8
LnGrp LOS				B		F	E	B			D	C
Approach Vol, veh/h					1820			1505			2032	
Approach Delay, s/veh					48.7			29.1			44.3	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		46.0			19.6	26.4		44.0
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		41.5			15.1	21.9		39.5
Max Q Clear Time (g_c+I1), s		17.3			16.3	22.5		41.5
Green Ext Time (p_c), s		22.2			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	370	0	0	0	0	1150	1180	1150	1210	0
Future Volume (veh/h)	310	0	370	0	0	0	0	1150	1180	1150	1210	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	326	0	189				0	1211	937	1211	1274	0
Adj No. of Lanes	2	0	2				0	3	2	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	407	0	329				0	2561	1451	1360	3970	0
Arrive On Green	0.12	0.00	0.12				0.00	0.46	0.46	0.27	0.78	0.00
Sat Flow, veh/h	3442	0	2787				0	5588	3167	5003	5253	0
Grp Volume(v), veh/h	326	0	189				0	1211	937	1211	1274	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	8.2	0.0	5.7				0.0	13.3	20.3	20.7	6.5	0.0
Cycle Q Clear(g_c), s	8.2	0.0	5.7				0.0	13.3	20.3	20.7	6.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	407	0	329				0	2561	1451	1360	3970	0
V/C Ratio(X)	0.80	0.00	0.57				0.00	0.47	0.65	0.89	0.32	0.00
Avail Cap(c_a), veh/h	445	0	360				0	2561	1451	1433	3970	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.2	0.0	37.1				0.0	16.7	18.5	31.1	2.9	0.0
Incr Delay (d2), s/veh	9.4	0.0	1.9				0.0	0.6	2.2	7.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	2.3				0.0	7.0	9.3	10.4	3.0	0.0
LnGrp Delay(d),s/veh	47.7	0.0	39.0				0.0	17.3	20.8	38.2	3.1	0.0
LnGrp LOS	D		D					B	C	D	A	
Approach Vol, veh/h		515						2148			2485	
Approach Delay, s/veh		44.5						18.8			20.2	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	28.7	45.3		15.0		74.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	25.5	39.5		11.5		69.5		
Max Q Clear Time (g_c+I1), s	22.7	22.3		10.2		8.5		
Green Ext Time (p_c), s	1.5	15.9		0.3		47.6		

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	1050	500	340	730
Future Volume (veh/h)	0	0	1050	500	340	730
Number			8	18	1	16
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863
Adj Flow Rate, veh/h			1105	326	358	0
Adj No. of Lanes			1	1	1	1
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			1579	1342	0	0
Arrive On Green			0.85	0.85	0.00	0.00
Sat Flow, veh/h			1863	1583	0	
Grp Volume(v), veh/h			1105	326	0.0	
Grp Sat Flow(s),veh/h/ln			1863	1583		
Q Serve(g_s), s			6.6	1.2		
Cycle Q Clear(g_c), s			6.6	1.2		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1579	1342		
V/C Ratio(X)			0.70	0.24		
Avail Cap(c_a), veh/h			3687	3134		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	1.00		
Uniform Delay (d), s/veh			0.8	0.4		
Incr Delay (d2), s/veh			0.6	0.1		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			3.0	0.5		
LnGrp Delay(d),s/veh			1.4	0.5		
LnGrp LOS			A	A		
Approach Vol, veh/h			1431			
Approach Delay, s/veh			1.2			
Approach LOS			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								29.6
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								58.5
Max Q Clear Time (g_c+I1), s								8.6
Green Ext Time (p_c), s								16.5

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	940	0	980	0	1670	1270	0	1830	1240
Future Volume (veh/h)	0	0	0	940	0	980	0	1670	1270	0	1830	1240
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h				1309	0	672	0	1758	0	0	1926	0
Adj No. of Lanes				2	0	1	0	4	1	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				1757	0	784	0	2533	626	0	2533	626
Arrive On Green				0.50	0.00	0.50	0.00	0.40	0.00	0.00	0.40	0.00
Sat Flow, veh/h				3548	0	1583	0	6669	1583	0	6669	1583
Grp Volume(v), veh/h				1309	0	672	0	1758	0	0	1926	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	0	1602	1583	0	1602	1583
Q Serve(g_s), s				24.3	0.0	30.6	0.0	18.8	0.0	0.0	21.4	0.0
Cycle Q Clear(g_c), s				24.3	0.0	30.6	0.0	18.8	0.0	0.0	21.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1757	0	784	0	2533	626	0	2533	626
V/C Ratio(X)				0.75	0.00	0.86	0.00	0.69	0.00	0.00	0.76	0.00
Avail Cap(c_a), veh/h				2093	0	934	0	2533	626	0	2533	626
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				16.6	0.0	18.2	0.0	20.7	0.0	0.0	21.5	0.0
Incr Delay (d2), s/veh				1.2	0.0	7.0	0.0	1.6	0.0	0.0	2.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.1	0.0	14.8	0.0	8.6	0.0	0.0	9.8	0.0
LnGrp Delay(d),s/veh				17.8	0.0	25.2	0.0	22.3	0.0	0.0	23.7	0.0
LnGrp LOS				B		C		C			C	
Approach Vol, veh/h					1981			1758			1926	
Approach Delay, s/veh					20.3			22.3			23.7	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.0				37.0		45.2
Change Period (Y+Rc), s		4.5				4.5		4.5
Max Green Setting (Gmax), s		32.5				32.5		48.5
Max Q Clear Time (g_c+I1), s		20.8				23.4		32.6
Green Ext Time (p_c), s		11.4				9.0		8.1

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Volume (veh/h)	220	930	0	1740	490	0	2760	1240	0	0
Future Volume (veh/h)	220	930	0	1740	490	0	2760	1240	0	0
Number	7	14	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	232	954	0	1832	0	0	2905	0		
Adj No. of Lanes	1	2	0	3	1	0	4	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0	2	2		
Cap, veh/h	580	1035	0	2909	906	0	3666	906		
Arrive On Green	0.33	0.33	0.00	0.57	0.00	0.00	0.57	0.00		
Sat Flow, veh/h	1774	3167	0	5253	1583	0	6669	1583		
Grp Volume(v), veh/h	232	954	0	1832	0	0	2905	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1695	1583	0	1602	1583		
Q Serve(g_s), s	9.0	25.8	0.0	21.4	0.0	0.0	31.6	0.0		
Cycle Q Clear(g_c), s	9.0	25.8	0.0	21.4	0.0	0.0	31.6	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	0.00		1.00		
Lane Grp Cap(c), veh/h	580	1035	0	2909	906	0	3666	906		
V/C Ratio(X)	0.40	0.92	0.00	0.63	0.00	0.00	0.79	0.00		
Avail Cap(c_a), veh/h	600	1071	0	2909	906	0	3666	906		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	23.2	28.9	0.0	12.7	0.0	0.0	14.9	0.0		
Incr Delay (d2), s/veh	0.4	12.5	0.0	1.0	0.0	0.0	1.8	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.5	13.1	0.0	10.1	0.0	0.0	14.2	0.0		
LnGrp Delay(d),s/veh	23.6	41.4	0.0	13.8	0.0	0.0	16.7	0.0		
LnGrp LOS	C	D		B			B			
Approach Vol, veh/h	1186			1832			2905			
Approach Delay, s/veh	37.9			13.8			16.7			
Approach LOS	D			B			B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		55.4		33.6		55.4		
Change Period (Y+Rc), s		4.5		4.5		4.5		
Max Green Setting (Gmax), s		50.9		30.1		50.9		
Max Q Clear Time (g_c+I1), s		23.4		27.8		33.6		
Green Ext Time (p_c), s		27.2		1.2		17.2		

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	900	0	980	320	1580	0	0	2500	260
Future Volume (veh/h)	0	0	0	900	0	980	320	1580	0	0	2500	260
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				947	0	981	337	1663	0	0	2632	76
Adj No. of Lanes				2	0	2	1	3	0	0	6	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				1178	0	954	345	2836	0	0	2661	496
Arrive On Green				0.34	0.00	0.34	0.19	0.56	0.00	0.00	0.31	0.31
Sat Flow, veh/h				3442	0	2787	1774	5253	0	0	8941	1583
Grp Volume(v), veh/h				947	0	981	337	1663	0	0	2632	76
Grp Sat Flow(s),veh/h/ln				1721	0	1393	1774	1695	0	0	1416	1583
Q Serve(g_s), s				22.5	0.0	30.8	17.0	19.3	0.0	0.0	27.7	3.1
Cycle Q Clear(g_c), s				22.5	0.0	30.8	17.0	19.3	0.0	0.0	27.7	3.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1178	0	954	345	2836	0	0	2661	496
V/C Ratio(X)				0.80	0.00	1.03	0.98	0.59	0.00	0.00	0.99	0.15
Avail Cap(c_a), veh/h				1178	0	954	345	2836	0	0	2661	496
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.9	0.0	29.6	36.0	13.1	0.0	0.0	30.7	22.3
Incr Delay (d2), s/veh				4.1	0.0	36.7	42.1	0.9	0.0	0.0	15.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.3	0.0	16.6	12.4	9.2	0.0	0.0	12.7	1.4
LnGrp Delay(d),s/veh				31.0	0.0	66.3	78.2	14.0	0.0	0.0	45.8	22.9
LnGrp LOS				C		F	E	B			D	C
Approach Vol, veh/h					1928			2000			2708	
Approach Delay, s/veh					49.0			24.8			45.1	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		54.7			22.0	32.7		35.3
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		50.2			17.5	28.2		30.8
Max Q Clear Time (g_c+I1), s		21.3			19.0	29.7		32.8
Green Ext Time (p_c), s		28.4			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	510	0	440	0	0	0	0	1400	510	1490	1900	0
Future Volume (veh/h)	510	0	440	0	0	0	0	1400	510	1490	1900	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	537	0	400				0	1474	258	1568	2000	0
Adj No. of Lanes	2	0	2				0	4	1	3	3	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	616	0	498				0	2445	520	1712	3664	0
Arrive On Green	0.18	0.00	0.18				0.00	0.33	0.33	0.34	0.72	0.00
Sat Flow, veh/h	3442	0	2787				0	7451	1583	5003	5253	0
Grp Volume(v), veh/h	537	0	400				0	1474	258	1568	2000	0
Grp Sat Flow(s),veh/h/ln	1721	0	1393				0	1863	1583	1668	1695	0
Q Serve(g_s), s	13.6	0.0	12.3				0.0	14.8	11.7	26.9	16.2	0.0
Cycle Q Clear(g_c), s	13.6	0.0	12.3				0.0	14.8	11.7	26.9	16.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	616	0	498				0	2445	520	1712	3664	0
V/C Ratio(X)	0.87	0.00	0.80				0.00	0.60	0.50	0.92	0.55	0.00
Avail Cap(c_a), veh/h	634	0	514				0	2445	520	1761	3664	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	35.2				0.0	25.2	24.1	28.2	5.8	0.0
Incr Delay (d2), s/veh	12.5	0.0	8.7				0.0	1.1	3.4	7.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	5.3				0.0	7.8	5.6	13.6	7.6	0.0
LnGrp Delay(d),s/veh	48.2	0.0	44.0				0.0	26.3	27.5	36.1	6.3	0.0
LnGrp LOS	D		D					C	C	D	A	
Approach Vol, veh/h		937						1732			3568	
Approach Delay, s/veh		46.4						26.5			19.4	
Approach LOS		D						C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	35.1	33.9		20.5		69.0		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	31.5	28.5		16.5		64.5		
Max Q Clear Time (g_c+I1), s	28.9	16.8		15.6		18.2		
Green Ext Time (p_c), s	1.7	11.4		0.4		42.3		

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Notes

APPENDIX D

SEWER CAPACITY STUDY AND
SEWER SERVICES WILL SERVE LETTER

Sewer Capacity Study

For

The Press

3370 Harbor Boulevard, 1375 Sunflower Avenue
& 1376 W. South Coast Drive
Costa Mesa, CA

August 1st, 2016

REGISTERED PROFESSIONAL ENGINEER
NICK V. NGUYEN
No. 59138
CIVIL
STATE OF CALIFORNIA

Nick Nguyen, P.E.
Registered Civil Engineer No. 59138
Exp.: 6/30/17

Prepared for:

TREH/Kearny Costa Mesa, LLC
1900 Avenue of the Stars, Suite 320
Los Angeles, CA. 90067
(310) 203-1847

Prepared by:

TAIT
RISING TO THE CHALLENGE

Tait & Associates, Inc.
701 N. Parkcenter Drive
Santa Ana, CA 92705
(714) 560-8200

TAIT JOB # **SP7998B**

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4.2 Building (Parcel 2) 3
4.3 Building (Parcel 7) 3
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Appendix B – Vesting Tentative Parcel Map No. 2016-134 ..... B
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Appendix D – Sewer Improvement References ..... D
Appendix E – CMSD Unit Flow Coefficients ..... E
Appendix F – Existing Flow Calculations Based on CMSD Unit Flow Coefficients ..... F
Appendix G – Proposed Flow Calculations Based on CMSD Unit Flow Coefficients ..... G
Appendix H – Pipe Hydraulics Calculations ..... H

Section 1 Study Purpose

The Costa Mesa Sanitary District has requested Kearny Real Estate Company to provide a site specific sewer capacity study to show the amount of proposed wastewater generated by the development of The Press and the project's possible impacts to the surrounding Costa Mesa Sanitary District (CMSD) sewer system. This sewer study is to prove that the proposed increase in sewer usage by the proposed buildings in the proposed Parcels 2, 3, and 7 will have no adverse effect on the existing sewer lines downstream. Refer to Appendix B for the Vesting Tentative Parcel Map No. 2016-134.

Section 2 Project Location

The proposed project site is a 23.41-acres parcel located in the city of Costa Mesa, CA. The site is enclosed by South Coast Drive along the south end, Sunflower Drive along the north end, and Harbor Boulevard on the west side. The Press, in Parcel 3, building address is 1376 South Coast Drive. The future potential residential building, in Parcel 2, address is 1375 Sunflower Avenue. The future potential office building, in Parcel 7, address is 3370 Harbor Boulevard. Refer to Appendix B for the Vesting Tentative Parcel Map No. 2016-134.

Section 3 Site Description

The existing condition of the site is occupied by a one-story industrial building and the Costa Mesa Baseball field with associated parking.

The Press, which is an existing building, will have a third of the building demolished from the north end adjacent to Sunflower Avenue, and remodeled as part of the development of Parcel 3. In addition to The Press, which will occupy 8.08-acres with 295,000 sf. of office space in Parcel 3 of the 23.41-acre property, an additional two buildings, approximately 3.65-acres (Parcel 2) and 1.50-acres (Parcel 7), are entitled for the remaining acreages. Parcel 2 will have 215,000 sf. of medium density residential space, and Parcel 7 will have 145,000 sf. of office space. Refer to Appendix B for the Vesting Tentative Parcel Map No. 2016-134.

Section 4 Existing Sewer System Layout

This section summarizes the proposed sewer layout for each building of the project site.

4.1 The Press (Parcel 3)

The sewer from the Press will connect to a stub out south of the property to a 10" V.C.P. Greenville-Banning Trunk sewer line along South Coast Drive owned by the Costa Mesa Sanitary District. The 10" V.C.P. sewer line leads to the College Avenue Sub-trunk 12" V.C.P. sewer line. Refer to Sheet 4 in Appendix D for Referenced Existing Sewer Improvement Plans.

4.2 Building (Parcel 2)

The sewer from the potential proposed residential parcel will connect to a stub out east of the property to a 12" V.C.P. sewer line along Segerstrom Brothers' Railroad owned by the Costa Mesa Sanitary District. The 12" V.C.P. sewer line leads to the College Avenue Sub-trunk 12" V.C.P. sewer line. Refer to Sheet 2 in Appendix D for Referenced Existing Sewer Improvement Plans.

4.3 Building (Parcel 7)

The sewer from the potential proposed office building will connect west of the property to 8" V.C.P. sewer line along Harbor Boulevard owned by the Costa Mesa Sanitary District. The 8" V.C.P. sewer line will connect to 10" Greenville-Banning Trunk Sewer before connecting to the College Avenue Sub-trunk 12" V.C.P. sewer line. Refer to Sheet 3 in Appendix D for Referenced Existing Sewer Improvement Plans.

Section 5 Design Criteria

The project area is currently zoned for industrial use surrounded by industrial and commercial zoning. Refer to Appendix C for current zoning map.

5.1 Unit Flow Coefficients

Refer to Appendix E for Various Land Uses.

5.2 Existing Sewer Flows

The calculated existing sewer peak flow for the 12" sewer conveying area "A" is 0.070 cfs. The calculated existing sewer peak flow for the 8" sewer conveying areas B, C, D and E is 0.144 cfs. The existing sewer peak flow for the 10" sewer conveying areas B, C, D, E, G, H, I, J, K and L is 0.562 cfs. The total combined existing sewer peak flow is 0.6320 cfs at Greenville-Banning Trunk Sewer. Refer to Appendix F for Calculations.

5.3 Sewer Capacity

The calculated sewer capacity for the 12" sewer conveying Area "A" is 0.17 cfs. The calculated sewer capacity for the 8" sewer discharge to Harbor Boulevard conveying Areas B, C, D and E is 0.249 cfs. The calculated sewer capacity for the 10" sewer discharge to the Greenville-Banning Trunk conveying Areas B, C, D, E, F, G, H, I, J, K, L and M is 0.829 cfs. After the confluence, Area F confluences with the College Avenue Sub-trunk with 0.136 cfs. After the confluence on College Avenue Sub-trunk, the total combined sewer capacity is 1.135 cfs. Refer to Appendix G for Calculations.

Section 6 Results and Conclusion

In consideration of the hydraulic conditions below:

$$Sewer\ System\ Sizing\ is\ Limited\ to\ the\ following\ hydraulic\ condition:$$

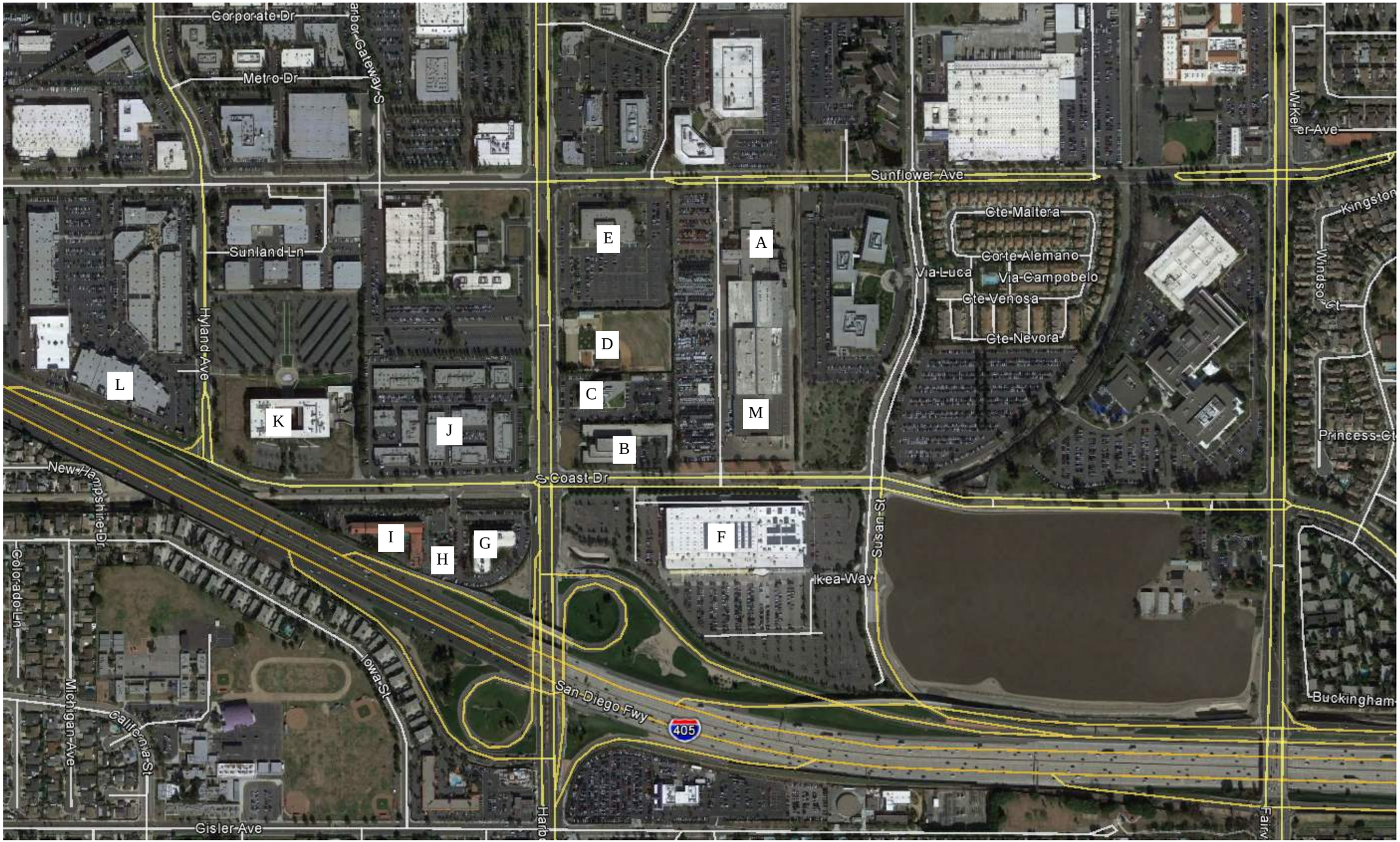
$$\frac{Depth}{diameter} = \frac{D}{d} = \frac{1}{2} for\ pipes < 18"\ diameter$$

For the Greenville-Banning 10" Sewer Trunk line, the projected flow rate is over the required fifty percent flow rate of 0.62 cfs at 0.829 cfs. The depth of flow is 0.50 foot; therefore, the D/d is equal to 0.60. As for the College Avenue 12" Sub-trunk line, the projected flow rate is also over the required fifty percent flow rate of 0.80 cfs at 1.135 cfs. The depth of flow is 0.63 foot; therefore, the D/d is equal to 0.63. Please see Appendix H for more details of pipe hydraulics calculations.

Although the projected peak wet weather flow is above half full, it is within the range of acceptable gravity flow operation and there will be no surcharging.

APPENDIX

Appendix A – Vicinity Map



VICINITY MAP

STREET ADDRESS - Costa Mesa, CA 92626	EXISTING AREA (sf)	PROPOSED AREA (sf)
A - 1375 West Sunflower Avenue	132,992	215,000
B - 3330 Harbor Boulevard	56,251	-
C - 3350 Harbor Boulevard	45,602	-
D - 3370 Harbor Boulevard	225	145,000
E - 3390 Harbor Boulevard	77,216	-
F - 1475 South Coast Drive	307,820	-
G - 1503 South Coast Drive	65,881	-

STREET ADDRESS - Costa Mesa, CA 92626	EXISTING AREA (sf)	PROPOSED AREA (sf)
H - 1507 South Coast Drive	12,683	-
I - 1515 South Coast Drive	60,481	-
J - 3303 Harbor Boulevard (Commerce Park)	173,600	-
K - 3321 Hyland Avenue	176,455	-
L - 3303-3323 Hyland Avenue	60,129	-
M - 1376 South Coast Drive	115,696	295,000

Appendix B – Vesting Tentative Parcel Map No. 2016-134

VESTING TENTATIVE PARCEL MAP NO. 2016-134

IN THE CITY OF COSTA MESA,
COUNTY OF ORANGE, STATE OF CALIFORNIA

PROPOSED CONDITIONS

TITLE REPORT:

TITLE COMPANY: CHICAGO TITLE INSURANCE COMPANY
POLICY NO. : 12020589-X59
DATED: NOVEMBER 12, 2015

LEGAL DESCRIPTION:

PARCEL A:

THAT PORTION OF THE LAND ALLOTED TO JAMES MCFADDEN IN DECREE OF PARTITION OF THE RANCHO SANTIAGO DE SANTA ANA, RENDERED IN CASE NO. 1192 AND ENTERED SEPTEMBER 12, 1868 IN BOOK "B", PAGE 410 OF JUDGMENTS OF THE 17TH JUDICIAL DISTRICT COURT OF CALIFORNIA, IN THE CITY OF SANTA ANA, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE CENTERLINE OF HUNTZINGER AVENUE, EAST 1237.68 FEET FROM THE CENTERLINE OF HARBOR BOULEVARD, SAID POINT BEING THE INTERSECTION OF THE CENTERLINE OF SAID HUNTZINGER AVENUE WITH THE CENTERLINE OF RAILS OF THE RAILROAD AS THEY EXISTED SEPTEMBER 9, 1965; THENCE SOUTH 00°02'30" WEST 766.00 FEET ALONG SAID CENTERLINE OF EXISTING RAILS; THENCE WESTERLY 615.00 FEET PARALLEL WITH SAID CENTERLINE OF HUNTZINGER AVENUE TO A LINE PARALLEL WITH AND WESTERLY 615.00 FEET FROM SAID CENTERLINE OF EXISTING RAILS; THENCE NORTH 00°02'30" EAST 766.00 FEET ALONG SAID PARALLEL LINE TO SAID CENTERLINE OF HUNTZINGER AVENUE; THENCE EASTERLY 615.00 FEET ALONG LAST SAID CENTERLINE TO THE POINT OF BEGINNING.

EXCEPT ALL OIL, GAS, HYDROCARBON SUBSTANCES AND MINERALS BY WHATEVER NAME KNOWN IN, ON OR UNDER THE ABOVE DESCRIBED LAND BELOW A DEPTH OF 500 FEET MEASURED VERTICALLY FROM THE SURFACE OF THE GROUND, BUT WITHOUT THE RIGHT OF ENTRY UPON ANY PORTION OF THE SURFACE OF THE GROUND ABOVE A DEPTH OF 500 FEET FOR THE PURPOSE OF EXPLORING FOR, BORING, MINING, DRILLING, REMOVING, EXTRACTING OR MARKETING SAID SUBSTANCES, TOGETHER WITH THE EXCLUSIVE RIGHT TO EXECUTE ANY AND ALL LEASES FOR THE PURPOSE OF EXTRACTING OR RECOVERING SAID SUBSTANCES, AS RESERVED IN DEED RECORDED JANUARY 16, 1966.

PARCEL B:

PARCEL 1, IN THE CITY OF COSTA MESA, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP FILED IN BOOK 127, PAGES 13 AND 14 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTING ALL MINERAL RIGHTS, BUT WITHOUT RIGHT OF ENTRY ON THE SURFACE OR WITHIN 500 FEET THEREOF, AS RESERVED BY C.J. SEGERSTROM & SONS, A GENERAL PARTNERSHIP, IN THE DEED RECORDED JANUARY 24, 1979 IN BOOK 13010, PAGE 1405 OF OFFICIAL RECORDS.

EXISTING EASEMENTS:

- ( ) INDICATES SHOWN HEREON. NUMBERED ACCORDING TO THE ABOVE REFERENCED PRELIMINARY TITLE REPORT.
- (7) AN EASEMENT FOR ROAD PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED IN BOOK 7797 PAGE 276, O.R.
- (8) AN EASEMENT FOR PUBLIC UTILITIES PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED APRIL 17, 1967 IN BOOK 8226 PAGE 944, O.R.
- (9) AN EASEMENT FOR COMMON CARRIER RAILROAD AND TRANSPORTATION PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED IN BOOK 8414 PAGE 129, O.R.
- (11) AN EASEMENT FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JANUARY 31, 1989 AS INSTRUMENT NO. 89-054233, O.R.
- (12) AN EASEMENT FOR STREET AND HIGHWAY PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JANUARY 29, 1998 AS INSTRUMENT NO. 1998-0050778, O.R.
- (13) AN EASEMENT FOR PUBLIC SEWERS, PUMPING WELLS, PUMPING STATIONS, SERVICE ROADS AND MANHOLES PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED NOVEMBER 12, 1965 IN BOOK 7738, PAGE 834, O.R.
- (14) AN EASEMENT FOR STORM DRAIN AND APPURTENANT STRUCTURES PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JANUARY 4, 1967 IN BOOK 8145 PAGE 14, O.R.
- (15) AN EASEMENT FOR RAILROAD, TRANSPORTATION AND COMMUNICATION PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED OCTOBER 11, 1973 IN BOOK 10949 PAGE 559, O.R.
- (18) AN EASEMENT FOR STREET AND HIGHWAY PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JULY 9, 1979 IN BOOK 13220 PAGE 1984, O.R.

TITLE REPORT:

TITLE COMPANY: CHICAGO TITLE INSURANCE COMPANY
POLICY NO. : 00046313-994-X59
DATED: NOVEMBER 12, 2015

LEGAL DESCRIPTION:

PARCEL 2, AS SHOWN ON PARCEL MAP NO. 98-227 IN THE CITY OF COSTA MESA, COUNTY OF ORANGE, STATE OF CALIFORNIA, FILED IN BOOK 305, PAGES 6 AND 7 OF PARCEL MAPS, AND AS PER CERTIFICATE OF CORRECTION RECORDED ON AUGUST 26, 1999 AS INSTRUMENT NO. 1999-621102, OFFICIAL RECORDS, BOTH IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTING ALL MINERALS RIGHTS, BUT WITHOUT RIGHT OF ENTRY ON THE SURFACE OR WITHIN 500 FEET THEREOF, AS RESERVED BY C.J. SEGERSTROM & SONS, A CALIFORNIA GENERAL PARTNERSHIP, IN THE DEED RECORDED JANUARY 22, 1999 IN THE OFFICIAL RECORDS OF THE COUNTY OF ORANGE.

EXISTING EASEMENTS:

- ( ) INDICATES SHOWN HEREON. NUMBERED ACCORDING TO THE ABOVE REFERENCED PRELIMINARY TITLE REPORT.
- (2) AN EASEMENT FOR TRAFFIC SIGNAL PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JULY 19, 1966 IN BOOK 7993, PAGE 895, O.R.
- (3) AN EASEMENT FOR SEWER PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JANUARY 16, 1979 IN BOOK 13002, PAGE 1496, O.R.
- (4) AN EASEMENT FOR INGRESS AND EGRESS PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED IN PARCEL MAP NO. 98-227, P.M.B. 305 / 6 - 7.
- (7') AN EASEMENT FOR STREET AND HIGHWAY PURPOSES AND RIGHTS INCIDENTAL THERETO RECORDED JUNE 27, 2012 AS INSTRUMENT NO. 2012-363512, O.R.

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARINGS BETWEEN O.C.S. HORIZONTAL CONTROL STATION GPS NO. 6106 AND STATION GPS NO. 6117 BEING NORTH 00°20'50" EAST PER RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

BENCHMARK:

BM NO.: 1F-175-04

DESCRIPTION: FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "1F-175-04", SET IN THE TOP OF CURB AT THE NORTHEAST CORNER OF A 3.0 FT X 3.0 FT DROP INLET BASIN. MONUMENT IS LOCATED IN THE SOUTHEAST PORTION OF THE INTERSECTION OF HARBOR BLVD. AND SOUTH COAST DR. 72 FT EAST OF THE CENTERLINE OF HARBOR BLVD. 100 FT SOUTH OF THE CENTERLINE OF SOUTH COAST DR. MONUMENT IS SET LEVEL WITH THE SIDEWALK.

ELEVATION: 29.20 FEET (NAVD 1988)

YEAR LEVELED: 2010

AREA SUMMARY TABLE:

EXISTING AREA: ± 1,094,291 S.F. / ± 25.12 ACRES (GROSS)
± 1,019,702 S.F. / ± 23.41 ACRES (NET)

PROPOSED AREAS:

PARCEL 1:	± 95,368 S.F. / ±	2.19 ACRES
PARCEL 2:	± 158,926 S.F. / ±	3.65 ACRES
PARCEL 3:	± 351,851 S.F. / ±	8.08 ACRES
PARCEL 4:	± 45,920 S.F. / ±	1.05 ACRES
PARCEL 5:	± 165,307 S.F. / ±	3.79 ACRES
PARCEL 6:	± 108,780 S.F. / ±	2.50 ACRES
PARCEL 7:	± 65,485 S.F. / ±	1.50 ACRES
PARCEL A:	± 28,064 S.F. / ±	0.64 ACRES
TOTAL:	± 1,019,702 S.F. / ±	23.41ACRES

UTILITY INFORMATION:

WATER:

MESA CONSOLIDATED WATER
1965 PLACENTIA AVENUE
COSTA MESA, CA 92627
(949) 631-1200

SANITARY SEWER:

COSTA MESA SANITARY DISTRICT
628 WEST 19TH STREET
COSTA MESA, CA 92627
(949) 645-9400

ELECTRIC:

SOUTHERN CALIFORNIA EDISON
(800) 684-8123

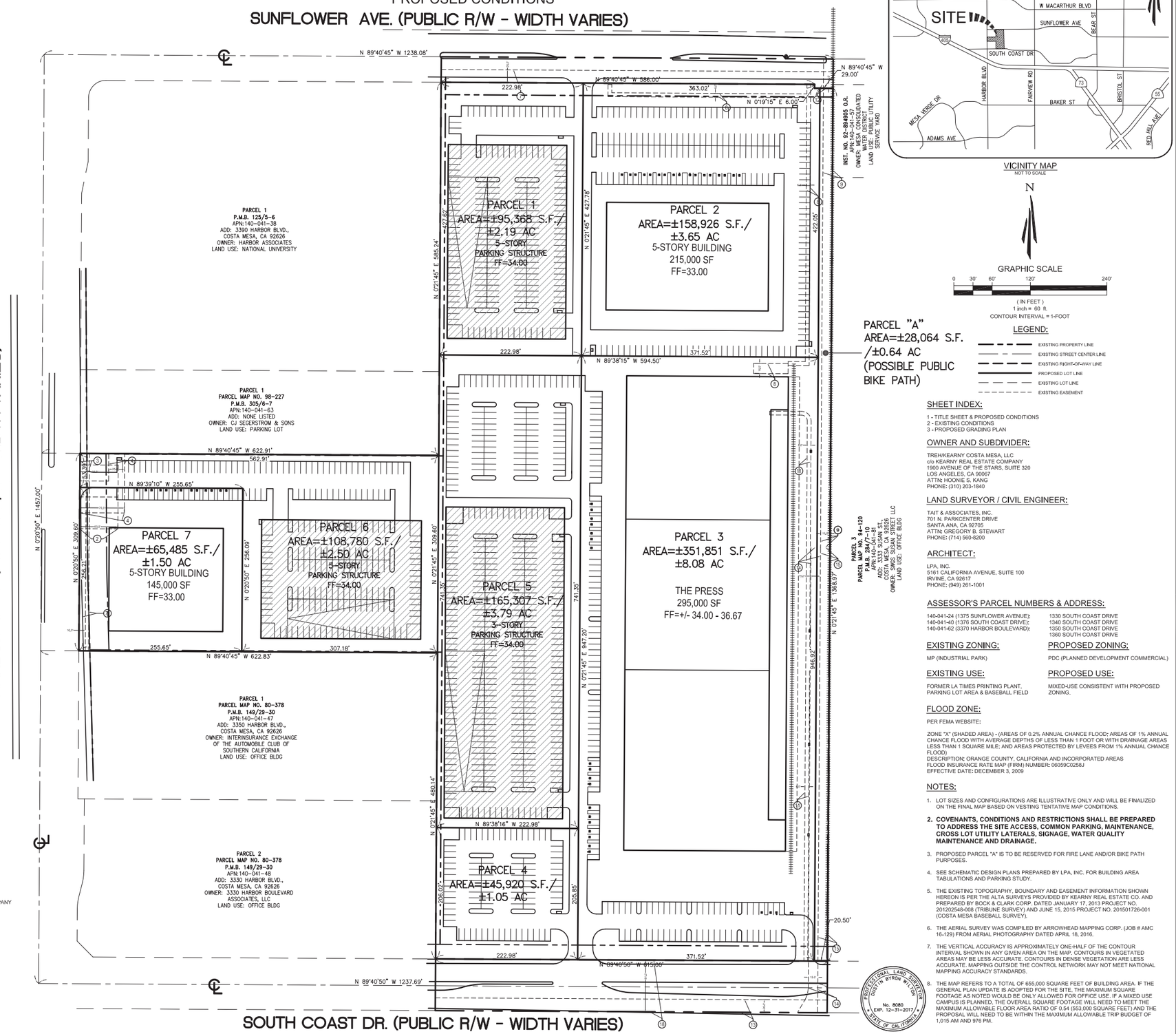
GAS:

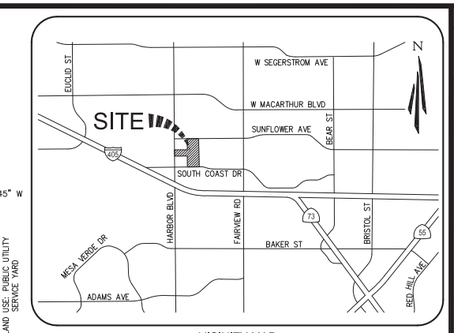
SOUTHERN CALIFORNIA GAS COMPANY
(800) 427-2000

TELECOMMUNICATIONS / CABLE:

PACIFIC BELL
2280 FAIRVIEW ROAD
COSTA MESA, CA 92627
(800) 310-2155

TIME WARNER CABLE
200 PAULARINO AVENUE
COSTA MESA, CA 92626
(866) 744-1678





VICINITY MAP
NOT TO SCALE

N

GRAPHIC SCALE
0 30' 60' 120' 240'
(IN FEET)
1 inch = 60 ft.
CONTOUR INTERVAL = 1-FOOT

LEGEND:

- EXISTING PROPERTY LINE
- EXISTING STREET CENTER LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED LOT LINE
- EXISTING LOT LINE
- EXISTING EASEMENT

SHEET INDEX:

1 - TITLE SHEET & PROPOSED CONDITIONS
2 - EXISTING CONDITIONS
3 - PROPOSED GRADING PLAN

OWNER AND SUBDIVIDER:

TREH/KEARNY COSTA MESA, LLC
c/o KEARNY REAL ESTATE COMPANY
1900 AVENUE OF THE STARS, SUITE 320
LOS ANGELES, CA 90067
ATTN: HOONIE S. KANG
PHONE: (310) 203-1840

LAND SURVEYOR / CIVIL ENGINEER:

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
ATTN: GREGORY B. STEWART
PHONE: (714) 560-8200

ARCHITECT:

LPA, INC.
5161 CALIFORNIA AVENUE, SUITE 100
IRVINE, CA 92617
PHONE: (949) 261-1001

ASSESSOR'S PARCEL NUMBERS & ADDRESS:

140-041-24 (1375 SUNFLOWER AVENUE); 1330 SOUTH COAST DRIVE
140-041-40 (1376 SOUTH COAST DRIVE); 1340 SOUTH COAST DRIVE
140-041-62 (3370 HARBOR BOULEVARD); 1350 SOUTH COAST DRIVE
1360 SOUTH COAST DRIVE

EXISTING ZONING:

MP (INDUSTRIAL PARK)

PROPOSED ZONING:

PDC (PLANNED DEVELOPMENT COMMERCIAL)

EXISTING USE:

FORMER LA TIMES PRINTING PLANT, PARKING LOT AREA & BASEBALL FIELD

PROPOSED USE:

MIXED-USE CONSISTENT WITH PROPOSED ZONING.

FLOOD ZONE:

PER FEMA WEBSITE:

ZONE "X" (SHADED AREA) - (AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD)
DESCRIPTION: ORANGE COUNTY, CALIFORNIA AND INCORPORATED AREAS
FLOOD INSURANCE RATE MAP (FIRM) NUMBER: 06059C0258J
EFFECTIVE DATE: DECEMBER 3, 2009

NOTES:

1. LOT SIZES AND CONFIGURATIONS ARE ILLUSTRATIVE ONLY AND WILL BE FINALIZED ON THE FINAL MAP BASED ON VESTING TENTATIVE MAP CONDITIONS.
2. **COVENANTS, CONDITIONS AND RESTRICTIONS SHALL BE PREPARED TO ADDRESS THE SITE ACCESS, COMMON PARKING, MAINTENANCE, CROSS LOT UTILITY LATERALS, SIGNAGE, WATER QUALITY MAINTENANCE AND DRAINAGE.**
3. PROPOSED PARCEL "A" IS TO BE RESERVED FOR FIRE LANE AND/OR BIKE PATH PURPOSES.
4. SEE SCHEMATIC DESIGN PLANS PREPARED BY LPA, INC. FOR BUILDING AREA TABULATIONS AND PARKING STUDY.
5. THE EXISTING TOPOGRAPHY, BOUNDARY AND EASEMENT INFORMATION SHOWN HEREON IS PER THE ALTA SURVEYS PROVIDED BY KEARNY REAL ESTATE CO. AND PREPARED BY BOCK & CLARK CORP. DATED JANUARY 17, 2013 PROJECT NO. 201202548-008 (TRIBUNE SURVEY) AND JUNE 15, 2015 PROJECT NO. 201501726-001 (COSTA MESA BASEBALL SURVEY).
6. THE AERIAL SURVEY WAS COMPILED BY ARROWHEAD MAPPING CORP. (JOB # AMC 16-129) FROM AERIAL PHOTOGRAPHY DATED APRIL 18, 2016.
7. THE VERTICAL ACCURACY IS APPROXIMATELY ONE-HALF OF THE CONTOUR INTERVAL SHOWN IN ANY GIVEN AREA ON THE MAP. CONTOURS IN VEGETATED AREAS MAY BE LESS ACCURATE. CONTOURS IN DENSE VEGETATION ARE LESS ACCURATE. MAPPING OUTSIDE THE CONTROL NETWORK MAY NOT MEET NATIONAL MAPPING ACCURACY STANDARDS.
8. THE MAP REFERS TO A TOTAL OF 655,000 SQUARE FEET OF BUILDING AREA. IF THE GENERAL PLAN UPDATE IS ADOPTED FOR THE SITE, THE MAXIMUM SQUARE FOOTAGE AS NOTED WOULD BE ONLY ALLOWED FOR OFFICE USE. IF A MIXED USE CAMPUS IS PLANNED, THE OVERALL SQUARE FOOTAGE WILL NEED TO MEET THE MAXIMUM ALLOWABLE FLOOR AREA RATIO OF 0.54 (553,000 SQUARE FEET) AND THE PROPOSAL WILL NEED TO BE WITHIN THE MAXIMUM ALLOWABLE TRIP BUDGET OF 1,015 AM AND 976 PM.

NO.	DESCRIPTION	BY	DATE	CHK
1	REVISED PER CITY OF COSTA MESA 1ST PLAN CHECK COMMENTS	GG	6-06-16	GBS

REVISIONS

TAIT
Since 1944
701 N. Parkcenter Drive
Santa Ana, CA 92705
p: 714/560-8200
www.tait.com
t: 714/560/8211
Los Angeles Sacramento San Francisco Dallas Phoenix
Orlando San Diego Boise Denver Portland

VESTING TENTATIVE PARCEL MAP NO. 2016-134

THE PRESS
1375 SUNFLOWER AVE., 1375 & COAST DR., 3370 HARBOR BLVD.,
COSTA MESA, CA 92626

KEARNY REAL ESTATE COMPANY
1900 AVENUE OF THE STARS, SUITE 320
LOS ANGELES, CA 90067

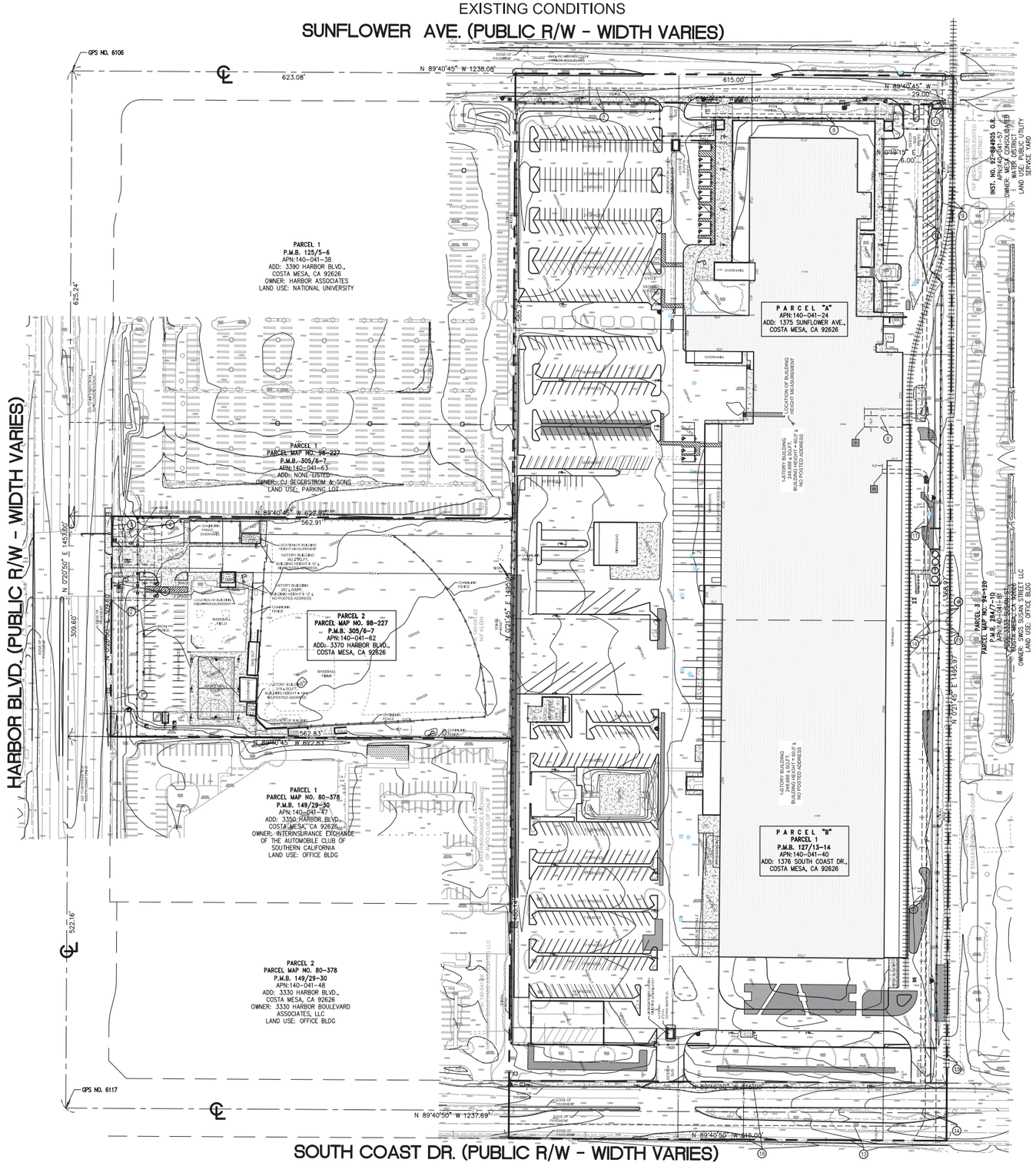
DRAWN: GG
DATE: 04/13/16
CHECKED: GBS
DATE: 04/28/16
REVISION #: 1 06/06/16
REVISION #: 2 07/11/16
JOB NO: SP7998

K:\Drawing\SP\SP7998 - Costa Mesa\Survey\Office\Tentative Map\SP7998-TM-SH1.dwg
PLOTTED: 7/11/2016 4:17:03 PM BY Geoffrey Gulpeo PAGESETUP: ---- PLOTSTYLE: Default R14 pen assignments.ctb

VESTING TENTATIVE PARCEL MAP NO. 2016-134

IN THE CITY OF COSTA MESA,
COUNTY OF ORANGE, STATE OF CALIFORNIA

EXISTING CONDITIONS



N

GRAPHIC SCALE

0 30' 60' 120' 240'

(IN FEET)
1 inch = 60 ft.

LEGEND:

- EXISTING PROPERTY LINE
- EXISTING STREET CENTER LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED LOT LINE
- EXISTING LOT LINE
- EXISTING EASEMENT
- PROPOSED PARKING STRUCTURE

AREA SUMMARY TABLE:

EXISTING AREA: ± 1,094,291 S.F. / ± 25.12 ACRES (GROSS)

± 1,019,702 S.F. / ± 23.41 ACRES (NET)

NOTES:

1. LOT SIZES AND CONFIGURATIONS ARE ILLUSTRATIVE ONLY AND WILL BE FINALIZED ON THE FINAL MAP BASED ON VESTING TENTATIVE MAP CONDITIONS.
2. **COVENANTS, CONDITIONS AND RESTRICTIONS SHALL BE PREPARED TO ADDRESS THE SITE ACCESS, COMMON PARKING, MAINTENANCE, CROSS LOT UTILITY LATERALS, SIGNAGE, WATER QUALITY MAINTENANCE AND DRAINAGE.**
3. PROPOSED PARCEL "A" IS TO BE RESERVED FOR FIRE LANE AND/OR BIKE PATH PURPOSES.
4. SEE SCHEMATIC DESIGN PLANS PREPARED BY LPA, INC. FOR BUILDING AREA TABULATIONS AND PARKING STUDY.
5. THE EXISTING TOPOGRAPHY, BOUNDARY AND EASEMENT INFORMATION SHOWN HEREON IS PER THE ALTA SURVEYS PROVIDED BY KEARNY REAL ESTATE CO. AND PREPARED BY BOCK & CLARK CORP. DATED JANUARY 17, 2013 PROJECT NO. 2012025A8-008 (TRIBUNE SURVEY) AND JUNE 15, 2015 PROJECT NO. 201501726-001 (COSTA MESA BASEBALL SURVEY).
6. THE AERIAL SURVEY WAS COMPILED BY ARROWHEAD MAPPING CORP. (JOB # AMC 16-129) FROM AERIAL PHOTOGRAPHY DATED APRIL 18, 2016.
7. THE VERTICAL ACCURACY IS APPROXIMATELY ONE-HALF OF THE CONTOUR INTERVAL SHOWN IN ANY GIVEN AREA ON THE MAP. CONTOURS IN VEGETATED AREAS MAY BE LESS ACCURATE. CONTOURS IN DENSE VEGETATION ARE LESS ACCURATE. MAPPING OUTSIDE THE CONTROL NETWORK MAY NOT MEET NATIONAL MAPPING ACCURACY STANDARDS.
8. THE MAP REFERS TO A TOTAL OF 655,000 SQUARE FEET OF BUILDING AREA. IF THE GENERAL PLAN UPDATE IS ADOPTED FOR THE SITE, THE MAXIMUM SQUARE FOOTAGE AS NOTED WOULD BE ONLY ALLOWED FOR OFFICE USE. IF A MIXED USE CAMPUS IS PLANNED, THE OVERALL SQUARE FOOTAGE WILL NEED TO MEET THE MAXIMUM ALLOWABLE FLOOR AREA RATIO OF 0.54 (553,000 SQUARE FEET) AND THE PROPOSAL WILL NEED TO BE WITHIN THE MAXIMUM ALLOWABLE TRIP BUDGET OF 1,015 AM AND 976 PM.

NO.	DESCRIPTION	BY	DATE	CHK
1	REVISED PER CITY OF COSTA MESA 1ST PLAN CHECK COMMENTS	GG	5-06-16	GBS

REVISIONS

NO.	DESCRIPTION	BY	DATE	CHK

REVISIONS

TAIT
Since 1964
701 N. Parkcenter Drive
Santa Ana, CA 92705
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www.tait.com
Los Angeles Sacramento San Francisco Dallas Phoenix
Orlando San Diego Boise Denver Portland

VESTING TENTATIVE PARCEL MAP NO. 2016-134

THE PRESS
1375 SUNFLOWER AVE., 1376 S. COAST DR., 3370 HARBOR BLVD.,
COSTA MESA, CA 92626

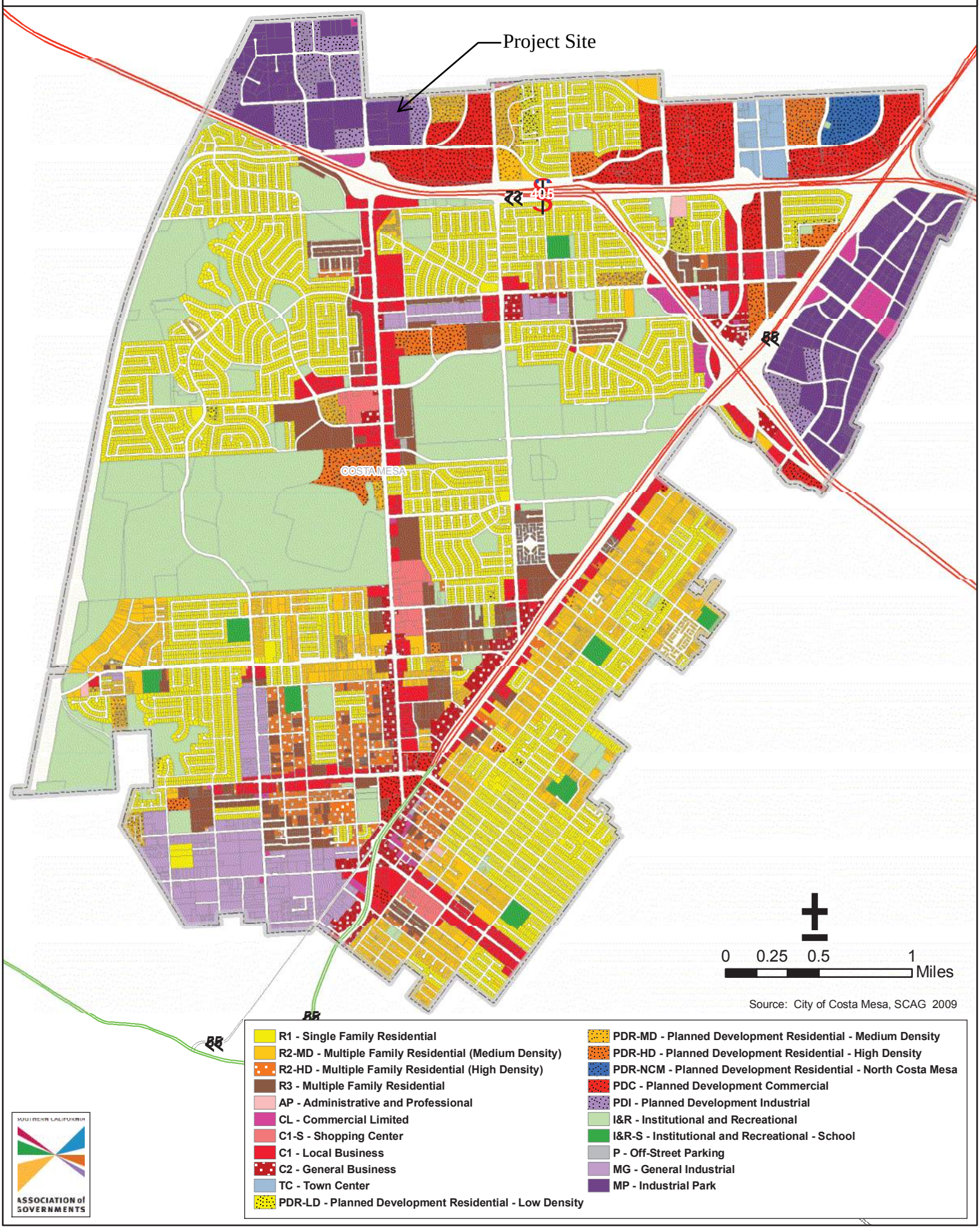
KEARNY REAL ESTATE COMPANY
1900 AVENUE OF THE STARS, SUITE 320
LOS ANGELES, CA 90067

DRAWN: GG
DATE: 04/13/16
CHECKED: GBS
DATE: 04/28/16
REVISION #: 1
DATE: 05/06/16
JOB NO: SP7998

K:\Drawings\SP\SP7998 - Costa Mesa\Survey\Office\Tentative Map\SP7998-TM-SHT2.dwg
PLOTTED: 7/11/2016 4:17:54 PM BY Geoffrey Galpao PAGESETUP: ---- PLOTSTYLE: Default.R14.pen assignments.ctb

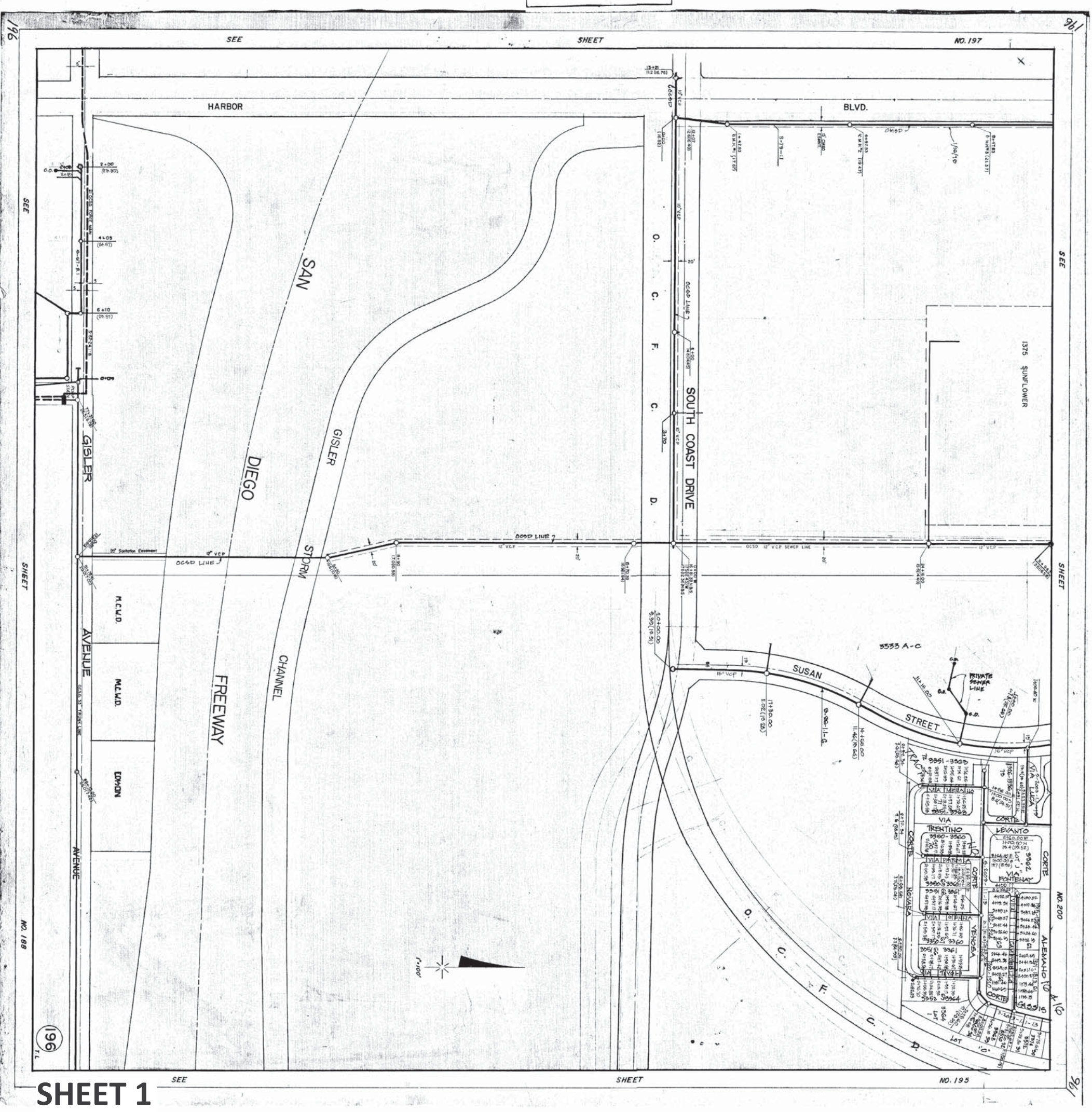
Appendix C – Zoning Map

Zoning Map for City of Costa Mesa



Appendix D – Sewer Improvement References

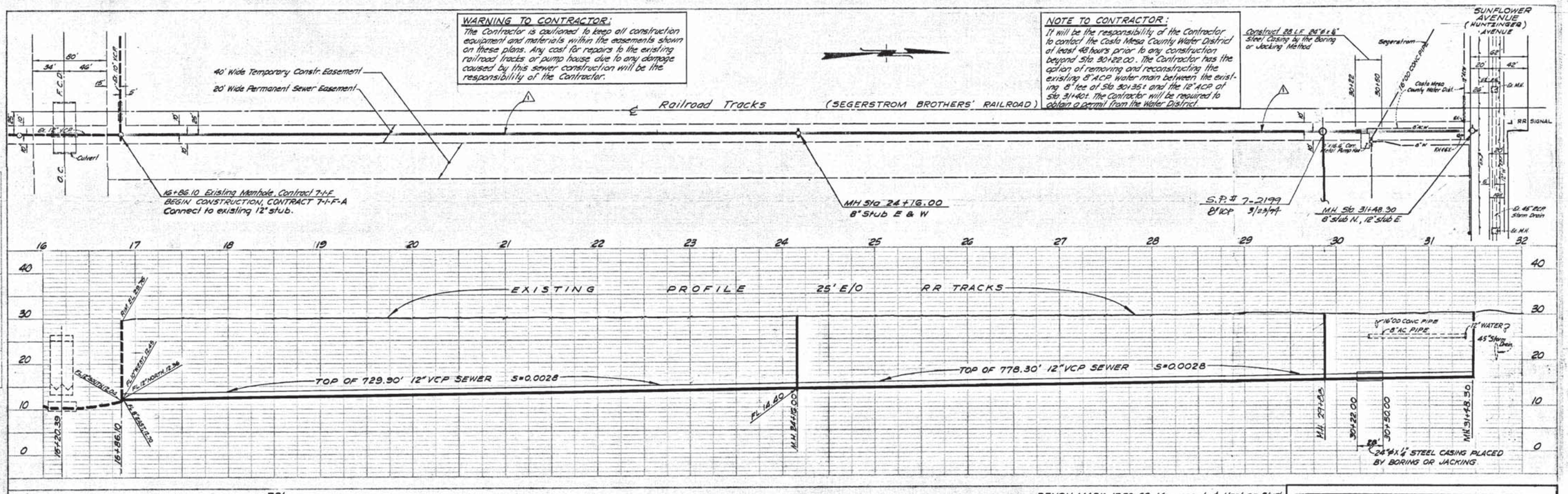
S-196

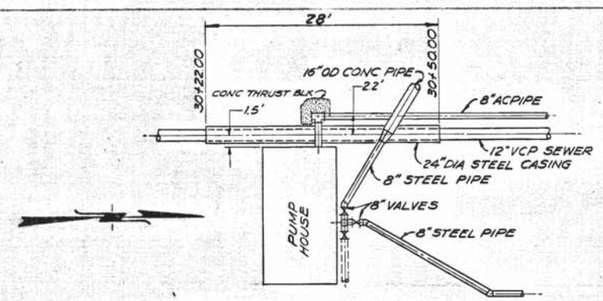

SEE SHEET NO. 197
HARBOR BLVD.
SOUTH COAST DRIVE
O. C. F. C. D.
1375 SUNFLOWER
SAN DIEGO FREEWAY
GISLER AVENUE
GISLER STORM CHANNEL
OCSD LINE
OCSD 12" VCP SEWER LINE
M.C.W.D.
LOMA
SUSAN STREET
3533 A-C
PRIVATE SEWER LINE
VIA TRENTINO
VIA PARMA
VIA VENOSA
VIA FONTENAY
VIA LUCA
CORTE LEVANTO
CORTE NOVARA
ALEMANO
SEE SHEET NO. 188
SEE SHEET NO. 200
SEE SHEET NO. 195
196

SHEET 1

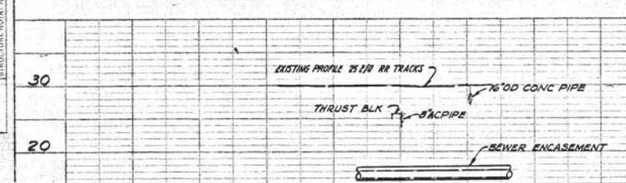
WARNING TO CONTRACTOR:
The Contractor is cautioned to keep all construction equipment and materials within the easements shown on these plans. Any cost for repairs to the existing railroad tracks or pump house due to any damage caused by this sewer construction will be the responsibility of the Contractor.

NOTE TO CONTRACTOR:
It will be the responsibility of the Contractor to contact the Costa Mesa County Water District at least 48 hours prior to any construction beyond Sta. 30+22.00. The Contractor has the option of removing and reconstructing the existing 8" ACP water main between the existing 8" tee at Sta. 30+35± and the 12" ACP at Sta. 31+40±. The Contractor will be required to obtain a permit from the Water District.





DETAIL - SEWER ENCASEMENT
Scale: 1" = 8'-0"



BENCH MARK: IF 92-60. Monument ℄ Harbor Blvd and Huntzinger Ave. 1961 el 29.228

FIELD BOOK No. 10. O C S D No. 7

"AS-BUILT"

GRAPHIC SCALE: 1" = 50'

LEGEND:

THE FOLLOWING SYMBOLS AND ABBREVIATIONS HAVE BEEN USED UNLESS OTHERWISE NOTED

- INSTALL SEWER PIPE — SIZE & TYPE INDICATED
- INSTALL STANDARD MANHOLE
- INSTALL SPECIAL MANHOLE OR STRUCTURE
- —6" W— EXISTING WATER LINE — SIZE AS INDICATED
- —5" WW— EXISTING WASTE WATER LINE — SIZE AS INDICATED
- —4" G— EXISTING GAS LINE — SIZE AS INDICATED
- —6" OIL— EXISTING OIL LINE — SIZE AS INDICATED
- —12" IRR.— EXISTING IRRIGATION LINE — SIZE AS INDICATED
- —o— EXISTING POWER AND/OR TELEPHONE POLE, GUY POLE
- ANCHOR OR GUY WIRE
- —x— EXISTING FENCE
- EXISTING CURB
- RIGHT OF WAY LINE
- RAILROAD

R.C.P.	REINFORCED CONCRETE PIPE		
V.C.P.	VITRIFIED CLAY PIPE		
C.M.P.	CORRUGATED METAL PIPE		
R.C.B.	REINFORCED CONCRETE BOX	INV.	INVERT
HDWL	HEADWALL	W.M.	WATER METER
C.B.	CATCH BASIN	G.M.	GAS METER
C.O.	CLEAN OUT	M.H.	MANHOLE
P.M.S.	PLANT MIX SURFACING	S.P.	STANDPIPE
E.P.	EDGE OF EXISTING PAVEMENT	F.L.	FLOW LINE
S	SLOPE IN FEET PER FOOT	STD.	STANDARD
P.I.	POINT OF INTERSECTION	I.P.	IRON PIPE
ELEV.	ELEVATION	EUC.	EUCALYPTUS
B.M.	BENCH MARK	CONC.	CONCRETE
EQ.	EQUATION	F.M.	FORCE MAIN
F.H.	FIRE HYDRANT	—o—	IRR. VALVE
—⋈—	VALVE		

BENCH MARK USC&GS-Y-167-1933, N.W. CURB, U.S. ALT. 101 & SANTA ANA RIVER BRIDGE-ELEVATION 16.014 FEET

△	10/09	TRANSFER CONT # 7-1-F-A TO COSTA MESA SANITARY DISTRICT

COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CALIF.
DISTRICT NO. 7

CONTRACT 7-1-F-A

COLLEGE AVENUE SUB-TRUNK SEWER
EXTENSION TO SUNFLOWER AVENUE

BOYLE AND LOWRY
CONSULTING ENGINEERS A JOINT VENTURE OF
BOYLE ENGINEERING AND LOWRY AND ASSOCIATES
CIVIL ENGINEERS

RA-24

DESIGNED BY:	DRAWN BY:	APPROVED BY:	SHEET
HCB	SWP/EDR	Sidney L. Lowry	2
CHKD BY: HCB/SLL	DATE: August, 1966	SIDNEY L. LOWRY R.C.E. 6210	OF 4 SHEETS

RA-24

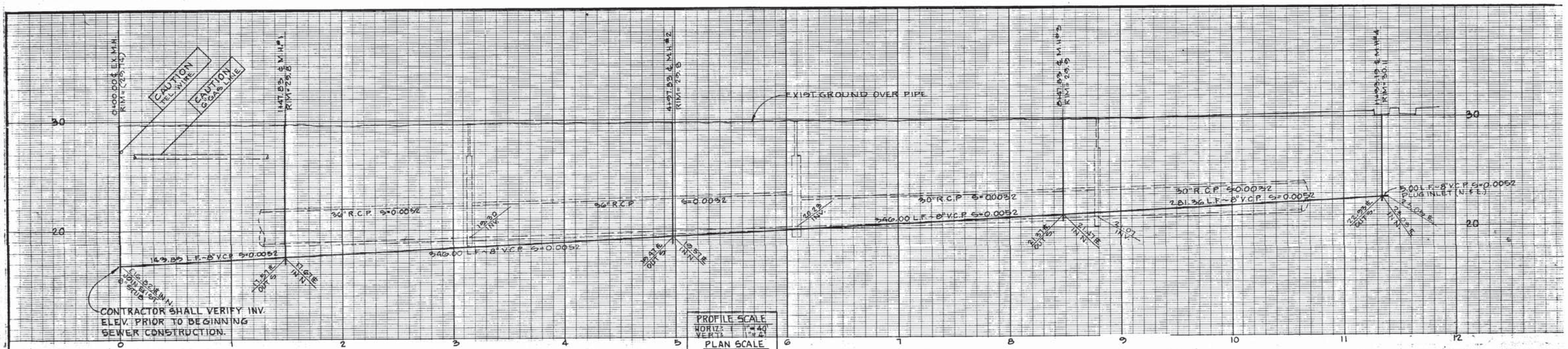
SHEET 2

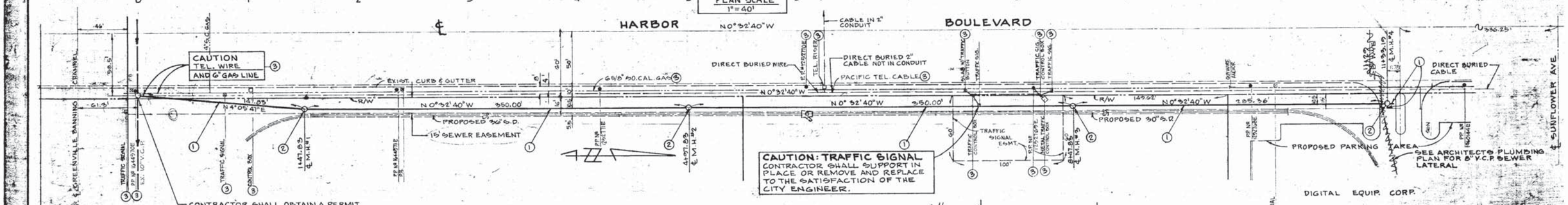
PLAN — SURVEYED, PLOTTED, NOTE BOOK, ALIGNMENT CHECKED, NO., BL. OF MAP CHECKED, DATE

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, GRADES CHECKED, B.R. NOTED, NO., REVISED, DATE (INSPECTOR)

EAST FILE CORP. IRVINE CA. S-66-6.2

PLATE 2 - PLAN - PROFILE C.F.E. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK



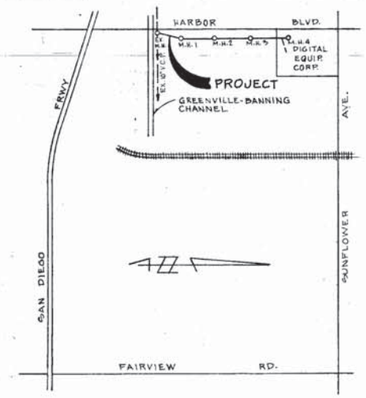


GENERAL NOTES

1. ALL SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE COSTA MESA SANITARY DISTRICT.
2. MANHOLE SHALL BE BRICK OR PRECAST CONCRETE AS MANUFACTURED BY ASSOCIATED CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.
3. SEWER MANHOLE FRAME AND COVER SHALL BE ALHAMBRA FOUNDRY A-1270 OR APPROVED EQUAL.
4. CLAY PIPE JOINTS SHALL BE MECHANICAL COMPRESSION JOINTS. MECHANICAL COMPRESSION JOINTS SHALL BE WEDGE-LOCK, SPEED SEAL, MAINLINE, OR APPROVED EQUAL. IN NO CASE WILL JOINTING MATERIAL USING NEAT PORTLAND CEMENT MORTAR OR GROUT BE PERMITTED.
5. CONTRACTOR SHALL REQUEST INSPECTION FROM THE OFFICE OF THE SANITARY DISTRICT ENGINEER 24 HOURS PRIOR TO COMMENCEMENT OF WORK. TELEPHONE: (714) 556-5400.
6. CONNECTION PERMIT REQ'D FROM STREET DEPT., TEL 556-5307, 77 FAIR DR. COSTA MESA.
7. WORK NOT DONE IN THE PRESENCE OF THE SANITARY DISTRICT INSPECTOR IS SUBJECT TO REJECTION.
8. A 15' EASEMENT WILL BE GRANTED TO C.M.S.D. FOR ALL NON-DEDICATED STREETS FOR MAINTENANCE PURPOSES OF SEWER MAINS AND MANHOLES.
9. 8" V.C.P. HOUSE CONNECTIONS SHALL BE CONSTRUCTED FOR EACH CONNECTION SHOWN ON THE PLAN.
10. THE DEVELOPER SHALL FURNISH THE SEWER CONTRACTOR WITH A PLAN INDICATING THE RECOMMENDED LOCATION OF EACH HOUSE CONNECTION PRIOR TO SEWER MAIN CONSTRUCTION.
11. ALL SEWER HOUSE CONNECTIONS SHALL BE PLACED PRIOR TO SURFACING OF STREETS OR PARKING AREAS.
12. ALL SEWER MANHOLE FRAMES AND COVERS IN PAVEMENT AREAS SHALL BE LEFT 6" BELOW FINISH GRADE.
13. THE SEWER CONTRACTOR SHALL RAISE THE MANHOLE FRAME AND COVER TO FINISH GRADE AFTER STREET OR PARKING LOT SURFACING IS COMPLETED.
14. STAMP "S" ON CURB AT ALL SEWER LATERAL LOCATIONS.
15. PRIOR TO EXCAVATION IN THIS AREA PLEASE CALL UNDERGROUND SERVICE ALERT AT (1-800) 422-4133.
16. CONTRACTOR SHALL OBTAIN A PERMIT FROM CITY OF COSTA MESA ENGINEERING DEPARTMENT AND REQUEST INSPECTION 48 HOURS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC RIGHT OF WAY. (TEL. 556-5323, 77 FAIR DRIVE, COSTA MESA)
17. MAINTAIN ALL TRAFFIC LANES ON HARBOR BOULEVARD.

CONSTRUCTION NOTES & ESTIMATED QUANTITIES

CONST. NOTE No.	ITEMS TO BE CONSTRUCTED OR INSTALLED	QUANTITY	UNIT
1	INSTALL 8" V.C.P. SEWER MAIN	1122	L.F.
2	CONST. 48" I.D. SEWER MANHOLE	4	EA.
3	PROTECT IN PLACE		



VICINITY MAP
N.T.S.

AS BUILTS
5/18/79 F.M.

COSTA MESA SANITARY DISTRICT

APPROVED BY: Donald E. Stevens DATE: 10-18-78
DONALD E. STEVENS, DISTRICT ENGINEER

Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this Project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

UNDERGROUND STRUCTURES

ALL UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR OTHERS AND THOSE SHOWN ON THE RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. THE OWNER BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO AGREES TO ASSUME LIABILITY AND TO HOLD UNDERSIGNED HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED; NOT INDICATED ON THE PUBLIC RECORDS EXAMINED; LOCATED AT VARIANCE WITH THAT REPORTED OR SHOWN ON RECORDS EXAMINED. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.

Robert Bein, William Frost & Associates
PROFESSIONAL ENVIRONMENTAL ENGINEERS & PLANNERS
P.O. BOX 2590 • 1401 QUAIL STREET, NEWPORT BEACH, CALIFORNIA 92663
(714) 833-0070
Robert W. Bein DATE: 8-30-78
ROBERT W. BEIN R.C.E. 12758

REVISIONS

NO.	DATE	DESCRIPTION	APP.

CONTRACTOR
WORK STARTED:
WORK ACCEPTED:
INSPECTED BY:
DATE

REFERENCES

FIELD BOOK	PAGE		
		BENCH MARK NO. 145	REFERENCE PLANS
		ELEVATION 30.59	NOTE TO CONTRACTOR, SEE SHT.
		DESCRIPTION CITY OF COSTA	STANDARD DRAWING NO.
		MESA B.M. BEING A	
		CHISLED "X" IN THE CENTER	
		OF CURB RET. AT N.E. COR.	
		OF HARBOR BLVD. & SUN-	
		FLOWER AVE.	

PLAN AND PROFILE FOR THE IMPROVEMENT OF

SEWER ADJACENT TO HARBOR BLVD.

FROM GREENVILLE-BANNING CHANNEL TO 1133' NORTH OF GREENVILLE-BANNING CHANNEL

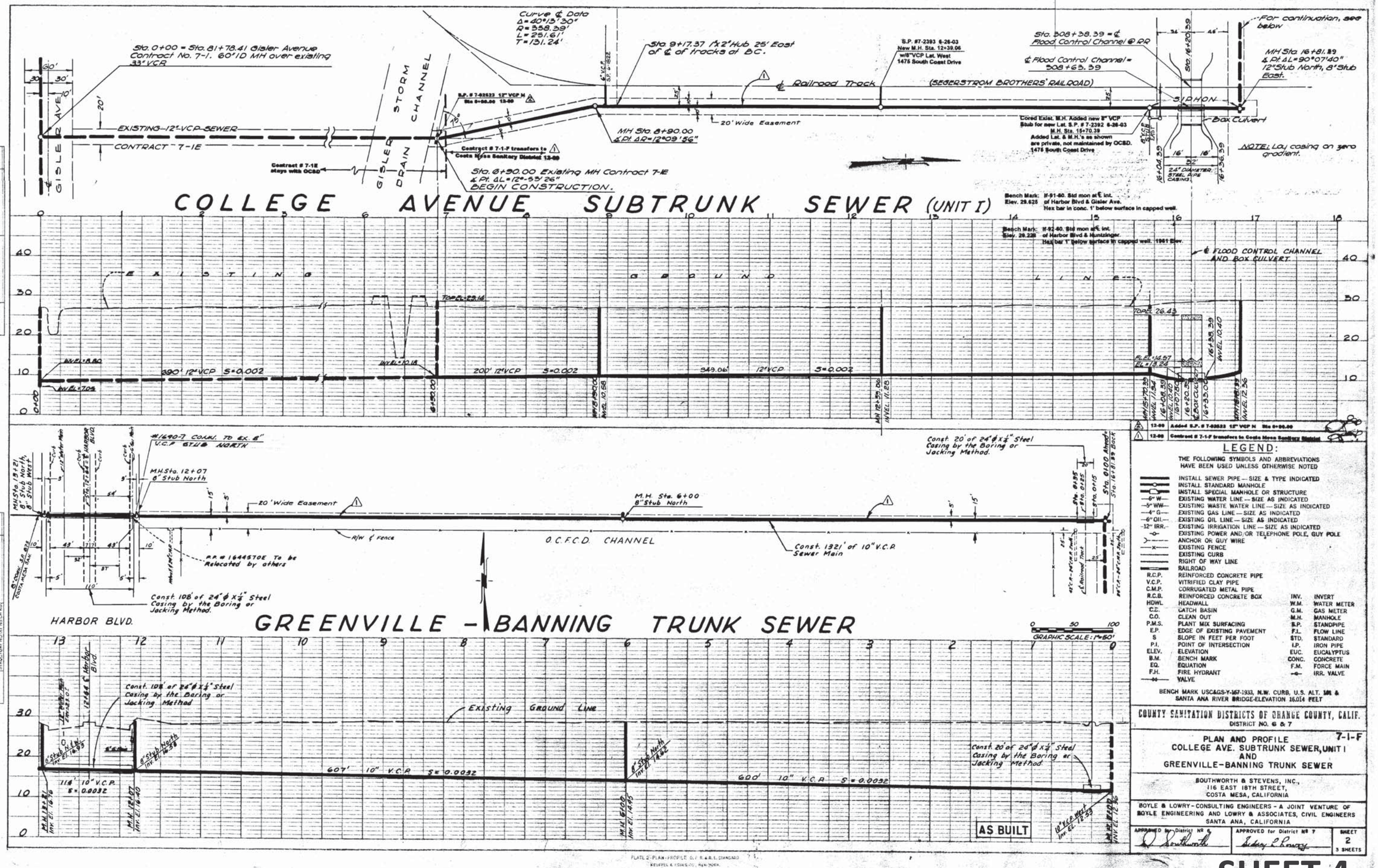
CITY OF COSTA MESA

SHEET 1 OF 1

PLAN NUMBER

SHEET 3

S-79-11


COLLEGE AVENUE SUBTRUNK SEWER (UNIT I)
Sta. 0+00 = Sta. 81+78.41 Gisler Avenue Contract No. 7-1. 60" ID MH over existing 33" VCP
GISLER AVE.
EXISTING 12" VCP SEWER
CONTRACT 7-1E
GISLER DRAIN STORM CHANNEL
Contract # 7-1E stays with OCSD
Contract # 7-1-F transfers to Costa Mesa Sanitary District 12-69
S.P. # 7-02523 12" VCP N Sta 8+90.00 12-69
Curve ℄ Data
Δ=40°13'30"
R=558.39'
L=251.61'
T=131.24'
Sta. 9+17.37 1"x2" Hub 25' East of ℄ of tracks at BC.
℄ Railroad Track
(SEGERSTROM BROTHERS' RAILROAD)
20' Wide Easement
MH Sta. 8+90.00
℄ Pt. ΔR=12°09'56"
Sta. 8+90.00 Existing MH Contract 7-1E
℄ Pt. ΔL=12°-53'26"
BEGIN CONSTRUCTION.
S.P. #7-2393 6-26-03
New M.H. Sta. 12+39.06
w/8" VCP Lat. West
1475 South Coast Drive
Sta. 308+38.39 = ℄ Flood Control Channel @ PR
℄ Flood Control Channel = 308+63.39
Cored Exist. M.H. Added new 8" VCP Stub for new Lat. S.P. # 7-2392 6-26-03
M.H. Sta. 15+70.39
Added Lat. & M.H.'s as shown are private, not maintained by OCSD.
1475 South Coast Drive
SIPHON
Box Culvert
24" DIAMETER STEEL PIPE CASING
For continuation, see below
MH Sta. 16+81.89
℄ Pt. ΔL=90°07'40"
12" Stub North, 8" Stub East.
NOTE: Lay casing on zero gradient.
Bench Mark: H-91-60. Std mon at ℄ int. of Harbor Blvd & Gisler Ave. Hex bar in conc. 1' below surface in capped well.
Elev. 29.625
Bench Mark: H-92-60. Std mon at ℄ int. of Harbor Blvd & Huntzinger. Hex bar 1' below surface in capped well. 1961 Elev.
Elev. 28.228
EXISTING GROUND LINE
℄ FLOOD CONTROL CHANNEL AND BOX CULVERT
TOP EL. 26.43
390' 12" VCP S=0.002
200' 12" VCP S=0.002
349.06' 12" VCP S=0.002
GREENVILLE - BANNING TRUNK SEWER
HARBOR BLVD.
#1690-7 CONN. TO EX. 8" V.C.P. STUB NORTH
M.H. Sta. 12+07 8" Stub North
20' Wide Easement
M.H. Sta. 6+00 8" Stub North
R/W & Fence
O.C.F.C.D. CHANNEL
Const. 1321' of 10" V.C.P. Sewer Main
P.P. # 1644STOE To be Relocated by others
Const. 108' of 24" ø x ¼" Steel Casing by the Boring or Jacking Method.
Const. 20' of 24" ø x ¼" Steel Casing by the Boring or Jacking Method.
Existing Ground Line
607' 10" V.C.P. S=0.0032
600' 10" V.C.P. S=0.0032
114' 10" V.C.P. S=0.0032
GRAPHIC SCALE: 1"=50'
AS BUILT
LEGEND:
THE FOLLOWING SYMBOLS AND ABBREVIATIONS HAVE BEEN USED UNLESS OTHERWISE NOTED
INSTALL SEWER PIPE — SIZE & TYPE INDICATED
INSTALL STANDARD MANHOLE
INSTALL SPECIAL MANHOLE OR STRUCTURE
EXISTING WATER LINE — SIZE AS INDICATED
EXISTING WASTE WATER LINE — SIZE AS INDICATED
EXISTING GAS LINE — SIZE AS INDICATED
EXISTING OIL LINE — SIZE AS INDICATED
EXISTING IRRIGATION LINE — SIZE AS INDICATED
EXISTING POWER AND/OR TELEPHONE POLE, GUY POLE
ANCHOR OR GUY WIRE
EXISTING FENCE
EXISTING CURB
RIGHT OF WAY LINE
RAILROAD
R.C.P. REINFORCED CONCRETE PIPE
V.C.P. VITRIFIED CLAY PIPE
C.M.P. CORRUGATED METAL PIPE
R.C.B. REINFORCED CONCRETE BOX
HDWL. HEADWALL
C.B. CATCH BASIN
C.O. CLEAN OUT
P.M.S. PLANT MIX SURFACING
E.P. EDGE OF EXISTING PAVEMENT
S SLOPE IN FEET PER FOOT
P.I. POINT OF INTERSECTION
ELEV. ELEVATION
B.M. BENCH MARK
EQ. EQUATION
F.H. FIRE HYDRANT
VALVE
INV. INVERT
W.M. WATER METER
G.M. GAS METER
M.H. MANHOLE
S.P. STANDPIPE
F.L. FLOW LINE
STD. STANDARD
I.P. IRON PIPE
EUC. EUCALYPTUS
CONC. CONCRETE
F.M. FORCE MAIN
IRR. VALVE
BENCH MARK USC&GS-Y-157-1933, N.W. CURB, U.S. ALT. 101 & SANTA ANA RIVER BRIDGE-ELEVATION 16.014 FEET
12-69 Added S.P. # 7-02523 12" VCP N Sta 8+90.00
12-69 Contract # 7-1-F transfers to Costa Mesa Sanitary District
COUNTY SANITATION DISTRICTS OF ORANGE COUNTY, CALIF.
DISTRICT NO. 6 & 7
7-1-F
PLAN AND PROFILE
COLLEGE AVE. SUBTRUNK SEWER, UNIT I
AND
GREENVILLE-BANNING TRUNK SEWER
SOUTHWORTH & STEVENS, INC.,
116 EAST 18TH STREET,
COSTA MESA, CALIFORNIA
BOYLE & LOWRY - CONSULTING ENGINEERS - A JOINT VENTURE OF BOYLE ENGINEERING AND LOWRY & ASSOCIATES, CIVIL ENGINEERS
SANTA ANA, CALIFORNIA
APPROVED for District No. 6
APPROVED for District No. 7
SHEET 2
3 SHEETS
S-67-252
SHEET 4

Appendix E – CMSD Unit Flow Coefficients

PROVIDED BY COSTA MESA SANITARY DISTRICT

Table 1: UNIT FLOW COEFFICIENTS

Use		**Unit**
Office	200 gal / 1000 SF per day	0.2 GPD/SF
Retail	100 gal / 1000 SF per day	0.1 GPD/SF
Person	85 gal per person per day	85 GPD/Person
Restaurant	50 gal. per seat per day	50 GPD/seat
Hotel	150 gal. per room per day	150 GPD/room
Low Density Residential	1545 gal per day per acre	0.0355 GPD/SF
Medium Density Residential	2525 gal per day per acre	0.0580 GPD/SF
High Density Residential	4625gal per day per acre	0.1062 GPD/SF
Commercial	5000 gal per day per acre	0.1148 GPD/SF
Industrial	3500 gal. per day per acre	0.0804 GPD/SF
Storm Inflow	800 gal per day per acre	0.0184 GPD/SF

Appendix F – Existing Flow Calculations Based on CMSD Unit Flow Coefficients

EXISTING SEWER FLOWS

Existing Project Site Discharge to College Avenue Sub-Trunk 12" Sewer (Reference Plan S-66-6.2, Sheet 2 in Appendix C)							
	Address	Use	Sq. Ft.	Use Flow (mgd)	Storm Flow (mgd)	Total Flow (mgd)	
A	1375 West Sunflower Avenue	Commercial	132992	0.01530	0.00240	0.01770	
$Average\ Flow = Q_a$				Actual Average Flow to Times Storm Drain	=	0.01770	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.0450	mgd
				Actual Peak Flow	**=**	**0.070**	cfs

Existing Project Site Discharge to Harbor Boulevard 8" Sewer (Reference Plan S-79-1.1, Sheet 1 in Appendix C)							
	Address	Use	Sq. Ft.	Use Flow (mgd)	Storm Flow (mgd)	Total Flow (mgd)	
B	3330 Harbor Boulevard	Office	56251	0.01130	0.00100	0.01230	
C	3350 Harbor Boulevard	Office	45702	0.00910	0.00080	0.00990	
D	3370 Harbor Boulevard	Commercial	225	0.00000	0.00000	0.00000	
E	3390 Harbor Boulevard	Office	77216	0.01540	0.00140	0.01680	
$Average\ Flow = Q_a$				Actual Average Flow to Harbor Boulevard	=	0.03900	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.0930	mgd
				Actual Peak Flow	**=**	**0.144**	cfs

Neighborhood Discharge to Greenville-Banning 10" Sewer (Reference Plan S-67-25, Sheet 2 in Appendix C)							
	Address	**Use**	**Sq. Ft.**	**Use Flow (mgd)**	**Storm Flow (mgd)**	**Total Flow (mgd)**	
G	1503 South Coast Drive	Office	65881	0.00760	0.00120	0.00880	
H	1507 South Coast Drive	Restaurant (*)	208	0.01040	0.00000	0.01040	
I	1515 South Coast Drive	Hotel (**)	160	0.02400	0.00000	0.02400	
J	3303 Harbor Boulevard (Commerce Park)	Office	173600	0.03470	0.00320	0.03790	
K	3300 Hyland Avenue	Office	176455	0.01760	0.00320	0.02080	
L	3303 Hyland Avenue	Retail	60129	0.00600	0.00110	0.00710	
M	1376 South Coast Drive	Commercial	115696	0.01330	0.00210	0.01540	
$Average\ Flow = Q_a$				Actual Average Flow to Greenville-Banning Sewer	=	0.12440	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.2700	mgd
				Actual Peak Flow	**=**	**0.418**	cfs

Total Discharge to Confluence at College Avenue Sub-Trunk 12" Sewer (Reference Sheet 4 in Appendix C)			
Total Actual Peak Flow	**=**	**0.6320**	cfs

(*) Units here are in seats
(**) Units here are in rooms

Appendix G – Proposed Flow Calculations Based on CMSD Unit Flow Coefficients

SEWER CAPACITY

Proposed Project Site Discharge to College Avenue Sub-Trunk 12" Sewer (Reference Sheet 2 in Appendix C)

	Address	Use	Sq. Ft.	Use Flow (mgd)	Storm Flow (mgd)	Total Flow (mgd)	
A	1375 West Sunflower Avenue	Office	215000	0.04300	0.00390	0.04690	
$Average\ Flow = Q_a$				Actual Average Flow to Times Storm Drain	=	0.04690	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.1100	mgd
				Actual Peak Flow	=	**0.17**	cfs
Sewer System Sizing is Limited to Hydraulic Conditions: Depth/Diameter=D/d=1/2							
$Area\ of\ Pipe = A = \pi r^2$				A	=	0.79	sf
$Perimeter\ of\ Pipe = P = 2\pi r$				P	=	3.14	sf
$Hydraulic\ Radius = R_h = A/P$				R_h	=	0.25	sf
$Manning\ Formula = v = \frac{k}{n} {R_h}^{2/3} S^{1/2}$, k=1.49 , n=0.013, s=0.0028				Max Allowable Velocity	=	2.41	f/s
$Max.Allowable\ Flow = Q = vA * 50\%$				Max. Allowable Flow	=	**0.95**	cfs

Actual Peak Flow<Max. Allowable Flow; therefore COMPLIES with hydraulic conditions.

Proposed Project Site Discharge to Harbor Boulevard 8" Sewer (Reference Sheet 3 in Appendix C)

	Address	Use	Sq. Ft.	Use Flow (mgd)	Storm Flow (mgd)	Total Flow (mgd)	
B	3330 Harbor Boulevard	Office	56251	0.01130	0.00100	0.01230	
C	3350 Harbor Boulevard	Office	45702	0.00910	0.00080	0.00990	
D	3370 Harbor Boulevard	Office	145000	0.02900	0.00270	0.03170	
E	3390 Harbor Boulevard	Office	77216	0.01540	0.00140	0.01680	
$Average\ Flow = Q_a$				Actual Average Flow to Harbor Boulevard	=	0.07070	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.1610	mgd
				Actual Peak Flow	=	**0.249**	cfs
Sewer System Sizing is Limited to Hydraulic Conditions: Depth/Diameter=D/d=1/2							
$Area\ of\ Pipe = A = \pi r^2$				A	=	0.35	sf
$Perimeter\ of\ Pipe = P = 2\pi r$				P	=	2.09	sf
$Hydraulic\ Radius = R_h = A/P$				R_h	=	0.17	sf
$Manning\ Formula = v = \frac{k}{n} {R_h}^{2/3} S^{1/2}$, k=1.49 , n=0.013, s=0.0052				Max Allowable Velocity	=	2.50	f/s
$Max.Allowable\ Flow = Q = vA * 50\%$				Max. Allowable Flow	=	**0.44**	cfs

Actual Peak Flow<Max. Allowable Flow; therefore COMPLIES with hydraulic conditions.

Neighborhood Discharge to Greenville-Banning 10" Sewer (Reference Sheet 4 in Appendix C)

	Address	**Use**	**Sq. Ft.**	**Use Flow (mgd)**	**Storm Flow (mgd)**	**Total Flow (mgd)**	
B	3330 Harbor Boulevard	Office	56251	0.01130	0.00100	0.01230	
C	3350 Harbor Boulevard	Office	45702	0.00910	0.00080	0.00990	
D	3370 Harbor Boulevard	Office	145000	0.02900	0.00270	0.03170	
E	3390 Harbor Boulevard	Office	77216	0.01540	0.00140	0.01680	
G	1503 South Coast Drive	Office	65881	0.00760	0.00120	0.00880	
H	1507 South Coast Drive	Restaurant (*)	208	0.01040	N/A	0.01040	
I	1515 South Coast Drive	Hotel (**)	160	0.02400	N/A	0.02400	
J	3303 Harbor Boulevard (Commerce Park)	Office	173600	0.03470	0.00320	0.03790	
K	3300 Hyland Avenue	Office	176455	0.03530	0.00320	0.03850	
L	3303 Hyland Avenue	Retail	60129	0.00600	0.00110	0.00710	
M	1376 South Coast Drive	Office	295000	0.05900	0.00540	0.06440	
$Average\ Flow = Q_a$				Actual Average Flow to Greenville-Banning Sewer	=	0.26180	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.5360	mgd
				Actual Peak Flow	=	**0.829**	cfs
Sewer System Sizing is Limited to Hydraulic Conditions: Depth/Diameter=D/d=1/2							
$Area\ of\ Pipe = A = \pi r^2$				A	=	0.55	sf
$Perimeter\ of\ Pipe = P = 2\pi r$				P	=	2.62	sf
$Hydraulic\ Radius = R_h = A/P$				R_h	=	0.21	sf
$Manning\ Formula = v = \frac{k}{n} {R_h}^{2/3} S^{1/2}$, k=1.49 , n=0.013, s=0.0032				Max Allowable Velocity	=	2.28	f/s
$Max.Allowable\ Flow = Q = vA$ * 50%				Max. Allowable Flow	=	**0.62**	cfs

Actual Peak Flow>Max. Allowable Flow; depth of flow = 0.50'; therefore it is within the range of acceptable gravity flow operation.

Total Discharge After Confluence at College Avenue Sub-Trunk 12" Sewer (Reference Sheet 4 in Appendix C)

F	1475 South Coast Drive	Retail	307820	0.03080	0.00570	0.03650	
$\boldsymbol{Average\ Flow = Q_a}$				Actual Average Flow After College Avenue Subtrunk Sewer	=	0.03650	mgd
$Peak\ Flow = Q_p = 1.84(Q_a)^{0.92}$				Actual Peak Flow	=	0.0880	mgd
				Actual Peak Flow	=	**0.136**	cfs
				Total Actual Peak Flow	=	**1.1350**	cfs
Sewer System Sizing is Limited to Hydraulic Conditions: Depth/Diameter=D/d=1/2							
$\boldsymbol{Area\ of\ Pipe = A = \pi r^2}$				A	=	0.79	sf
$Perimeter\ of\ Pipe = P = 2\pi r$				P	=	3.14	sf
$Hydraulic\ Radius = R_h = A/P$				R_h	=	0.25	sf
$Manning\ Formula = v = \frac{k}{n} {R_h}^{2/3} S^{1/2}$, k=1.49 , n=0.013, s=0.002				Max Allowable Velocity	=	2.03	f/s
$Max.Allowable\ Flow = Q = vA * 50\%$				Max. Allowable Flow	=	**0.80**	cfs

Actual Peak Flow>Max. Allowable Flow; depth of flow = 0.63'; therefore it is within the range of acceptable gravity flow operation.

(*) Units here are in seats
(**) Units here are in rooms

Appendix H – Pipe Hydraulics Calculations

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, Jul 28 2016

<Name>

Circular

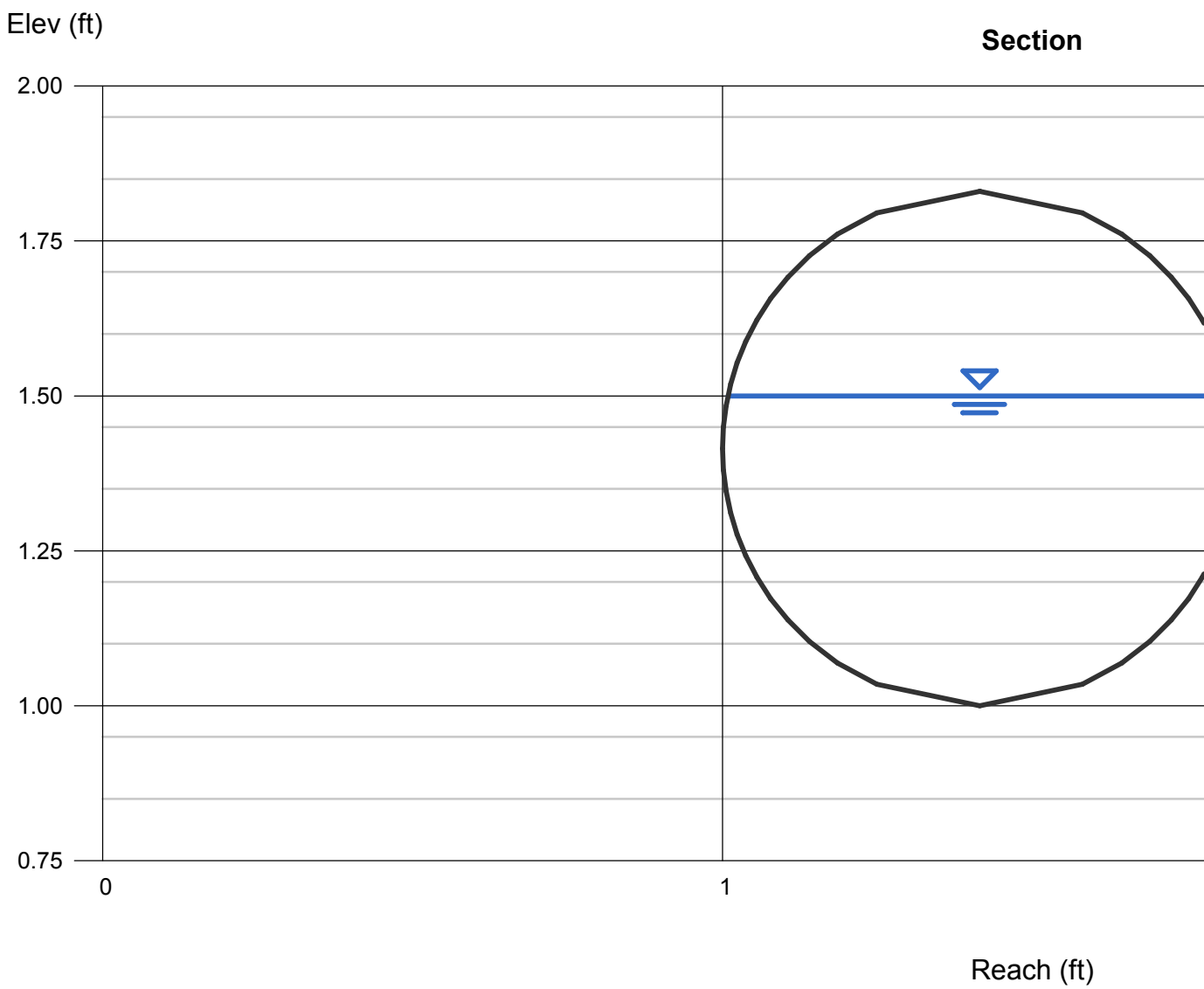
Diameter (ft)	= 0.83
Invert Elev (ft)	= 1.00
Slope (%)	= 0.32
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 0.83

Highlighted

Depth (ft)	= 0.50
Q (cfs)	= 0.830
Area (sqft)	= 0.34
Velocity (ft/s)	= 2.43
Wetted Perim (ft)	= 1.48
Crit Depth, Yc (ft)	= 0.41
Top Width (ft)	= 0.81
EGL (ft)	= 0.59



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, Jul 28 2016

<Name>

Circular

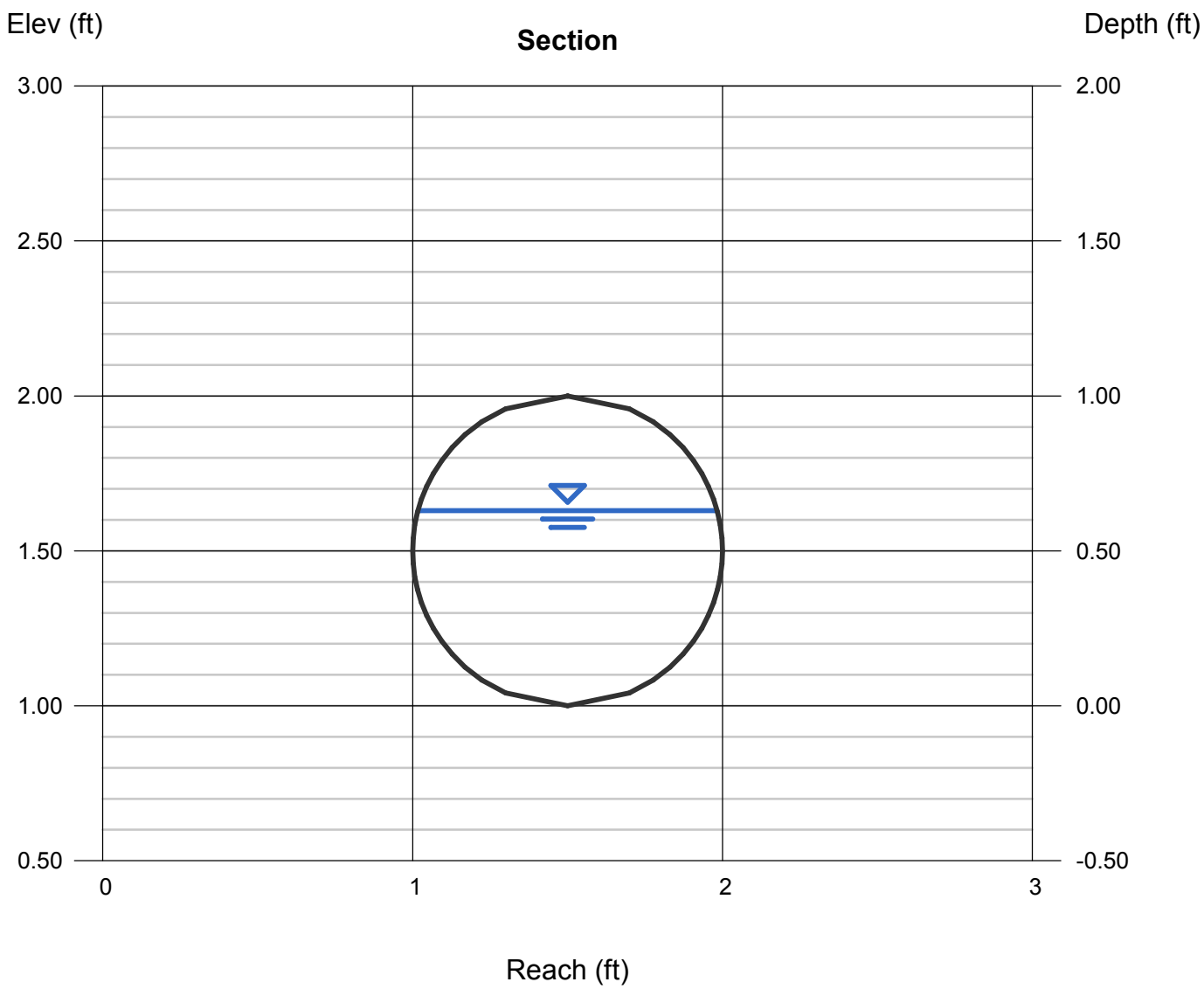
Diameter (ft)	= 1.00
Invert Elev (ft)	= 1.00
Slope (%)	= 0.20
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.14

Highlighted

Depth (ft)	= 0.63
Q (cfs)	= 1.135
Area (sqft)	= 0.52
Velocity (ft/s)	= 2.18
Wetted Perim (ft)	= 1.83
Crit Depth, Yc (ft)	= 0.45
Top Width (ft)	= 0.97
EGL (ft)	= 0.70



Costa Mesa Sanitary District

...an Independent Special District

Board of Directors
Michael Scheafer
Arthur Perry
Robert Ooten
Arlene Schafer
James Ferryman

Staff
Scott C. Carroll
General Manager

Robin B. Hamers
District Engineer

Alan R. Burns
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Marcus D. Davis
Treasurer

Noelani Middenway
District Clerk

Wendy H. Davis
Finance Manager

www.cmsdca.gov

District of Distinction
2009-2014

August 1, 2016

TREH/Kearny Costa Mesa, LLC
1900 Avenue of the Stars Suite 320
Los Angeles, CA 90067

Nick Nguyen, PE
Tait & Associates, Inc.
701 Parkcenter Drive
Santa Ana, CA 92705

RE: SEWER WILL SERVE LETTER
LA Times Redevelopment
3370 Harbor Blvd, 1375 Sunflower Avenue, and
1376 W. South Coast Drive, Costa Mesa

Gentlemen:

The Costa Mesa Sanitary District is the local sewer agency that provides sanitary sewer service to the subject property and due to potential sewer flows beyond master plan levels along with certain sewer mains being transferred from the Orange County Sanitation District to the Costa Mesa Sanitary District, a sewer capacity study was required from the developer's engineer.

The Sewer Capacity Study prepared by Tait & Associates dated August 1, 2016 identifies the existing and proposed flows for the tributary area that includes the 23.41-acre LA Times redevelopment and concludes that upon maximum build-out, the sewer mains will be flowing slightly above half full at peak wet weather flow, which is acceptable for gravity sewer operation.

Therefore, the District considers this letter a will serve letter and the commitment to serve the project will last for three (3) years from the date of this letter after which a new request shall be made. The sewer capacity study will remain on file at the Costa Mesa Sanitary District.

Thank you for your consideration in this matter. Please contact me at (714) 293-2727 (cell) or rhamers@robhamers.com if you have any questions.

Sincerely,

Robin B. Hamers
District Engineer

Cc: Staff

628 W. 19th Street / Costa Mesa, CA 92627-2716 • (949) 645-8400 / fax: (949) 650-2253

APPENDIX E

WATER SUPPLY ASSESSMENT

L.A. TIMES BUILDING REUSE PROJECT

WATER SUPPLY ASSESSMENT

May 2017

Prepared for:

MESA WATER DISTRICT

Prepared by:

PSOMAS
3 Hutton Centre Drive
Suite 200
Santa Ana, CA 92707
Project No. 3COS010200

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APPENDICES

APPENDIX A – CITY OF COSTA MESA WATER EFFICIENT LANDSCAPE ORDINANCE NO. 16-03

ABBREVIATIONS/ACRONYMS

AB	Assembly Bill
AF	Acre-feet
AFY	Acre-feet per year
APN	Assessor Parcel Number
BDCP	Bay Delta Conservation Plan
BEA	Basin Equity Assessment
BMP	Best Management Practice
BPP	Basin Production Percentage
CAWCD	Central Arizona Water Conservation District
CEQA	California Environmental Quality Act
CFS	Cubic feet per second
CPP	Canyon Power Plant
CRA	Colorado River Aqueduct
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
CVWD	Coachella Valley Water District
District, Mesa Water	Mesa Water District
DWA, Desert	Desert Water Agency
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ETAF	Evapotranspiration Adjustment Factor
FEIR	Final Environmental Impact Report
FY	Fiscal Year
GAP	Green Acres Project
GMP	Groundwater Management Plan
Gpd	Gallons per day
GWRS	Groundwater Replenishment System
IID	Imperial Irrigation District
IRP	Integrated Resources Planning
IRWM	Integrated Regional Water Management
LACDPW	Los Angeles County Department of Public Works
LTFP	Long Term Facilities Plan
MAF	Million acre-feet
Metropolitan, MWD	Metropolitan Water District of Southern California
MG	Million gallons
MGD	Million gallons per day
MOU	Memorandum of Understanding
MPR	Master Plan Report
MWDOC	Municipal Water District of Orange County

MWELO	Model Water Efficient Landscape Ordinance
MWRF	Mesa Water Reliability Facility
OC	Orange County
OCSD	Orange County Sanitation District
OCWD	Orange County Water District
PVID	Palo Verde Irrigation District
QSA	Quantification Settlement Agreement
RA	Replenishment Assessment
RUWMP	Regional Urban Water Management Plan
SAR	Santa Ana River
SB	Senate Bill
SDCWA	San Diego County Water Authority
sf	Square feet
SNWA	Southern Nevada Water Authority
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	Thousand Acre Feet
UWMP	Urban Water Management Plan
WCR	Walnut Canyon Reservoir
WEAP	Water Evaluation and Planning
WQCP	Water Quality Control Plan
WRD	Water Replenishment District
WSA	Water Supply Assessment
WSAP	Water Supply Allocation Plan
WSDM	Water Surplus and Drought Management
WUE	Water Use Efficiency
YCWA	Yuba County Water Agency

Executive Summary

This Water Supply Assessment (WSA) has been prepared for the Los Angeles (L.A.) Times Building Reuse Project (Proposed Project) in accordance with applicable sections of the Public Resources Code and California Water Code as referenced in Senate Bill (SB) 610, which requires the demonstration of water supply sufficiency for development projects of this size.

The Proposed Project will be implemented on the 25.1-acre site of the former L.A. Times Building at 1375 West Sunflower Avenue and 3370 Harbor Boulevard in the City of Costa Mesa (City). In July 2016, the GP FEIR was certified and the 2015-2035 General Plan was approved. These documents addressed the development of the L.A. Times site with up to 655,000 square feet (sf) of office development or 553,000 sf of commercial/retail development

The Proposed Project entails the renovation of the existing 339,063 sf L.A. Times building and associated surface parking, and the construction of approximately 315,000 sf of commercial development in two additional separate buildings. Although the current proposal involves development of up to 3 office buildings, the WSA analyzes development of the site with a mixture of hotel, restaurant, office and retail uses. This development scenario includes uses that would be permitted on the project site pursuant to existing zoning and land use designation; therefore, this option was analyzed as it generates the highest water demand and is therefore the most conservative in terms of analyzing the Project's impact on water supply.

The Proposed Project is located within the water service area of Mesa Water District (Mesa Water or District). This WSA will demonstrate that the District has sufficient water supply projected through the year 2040 to meet all District water demands including water demands for the Proposed Project, which were included in the water demands forecasted in the District's 2015 Urban Water Management Plan (UWMP).

E.1 Water Demands

District Water Demands

The District's total water demand in FY 2015 was 18,002 acre-feet (AF) including 1,158 AF of recycled water use, which was significantly less than the total water demand of 19,700 AF projected for the District in the District's 2010 UWMP (8.6 percent less). This is believed to be primarily attributable to District water conservation efforts associated with the Water Conservation Act of 2009 (SBx7-7) that mandated water demand reductions of 10 percent by 2015, which the District has met, and a reduction of 20 percent by 2020, which the District is on track to meet.

In April 2015 Governor Brown issued Executive Order B-29-15 as a result of one of the most severe droughts in California's history, requiring a collective reduction in statewide urban water use of 25 percent by February 2016 (relative to demands in 2013), with each agency in the state given a specific reduction target by DWR. The District was able to meet

their reduction target (initially set at 20 percent and subsequently lowered to 13 percent) through May 2016. These EO B-29-15 reduction targets have since been eliminated.

Water demand projections developed in the District's 2014 Water Master Plan (Master Plan) based on land use, population and economic growth were the basis for demand projections presented in the District's 2015 UWMP. The Master Plan identified over 82 acres of parcels for future development within the District's service area for a corresponding demand projection of 350 AFY that included the additional demands from the L.A. Times Building Reuse Project.

Project Water Demands

Metered Fiscal Year (FY) 2015 water demand for the existing land uses at the Project site was 14.5 AF, including site landscaping that was irrigated with potable water. There is no recycled water use on-site. Based on the estimate of approximately 80 percent of the Project being completed by 2020 with the remaining 20 percent completed by 2025, the additional project demand above the FY 2015 demand for the existing site land uses of 15 AFY are shown in Table E.1, not including water loss. The estimated buildout water demands for the Proposed Project are projected to be 112 AF greater than the FY 2015 water demands for the existing land uses at the Project site.

Table E.1
Estimated Project Water Demand[(a)] Phasing (AF)

	FY 2020	FY 2025	FY 2030	FY 2035	FY 2040
2015 Demand	15	15	15	15	15
Project	101	126	126	126	126
Additional Demand	87	112	112	112	112

(a) Not including water loss
Table may not total exactly due to spreadsheet rounding

Projected normal year District water demands through FY 2040 are shown in Table E.2. All demands include an estimated 4.3 percent in water loss consistent with the 2015 UWMP, thus representing required District supply. District water demands as estimated in the 2015 UWMP included the increased demands due to the Proposed Project. The demand increase from the Proposed Project in FY 2040 is projected to be 0.6 percent of the total demand estimated for the District.

E.2 Water Supply

Approximately 94 percent of the District's water supply and 100 percent of its potable water supply comes from groundwater produced from the Orange County Groundwater Basin (OC Basin). Mesa Water utilizes recycled water purchased from the Orange County Water District (OCWD) via the Green Acres Project (GAP) for approximately 6 percent of its water supply. The District has imported water connections for back-up water supply.

Table E.2
Projected Normal District Water Demands (AF)

Projected Normal Demands[a]	FY 2020	FY 2025	FY 2030	FY 2035	FY 2040
Total District Demand without Project[b]	20,520	20,559	20,625	20,692	20,757
Additional Project Demand[b]	90	117	117	117	117
Total Demand[c]	20,610	20,676	20,742	20,809	20,874

(a) All demands include estimated 4.3% water loss consistent with the 2015 UWMP
(b) Additional Project demand above FY 2015 demand of existing land uses on the Project site
(c) From Table 2-6, Mesa Water District Final 2015 UWMP

Groundwater Supply

The OC Basin is managed by the Orange County Water District (OCWD). The District pumps groundwater from the OC Basin via six wells that provide clear groundwater from the main production aquifer, and two wells that provide organic amber-tinted groundwater from below the main aquifer. The amber-tinted groundwater is then treated at the Mesa Water Reliability Facility (MWRF) before being pumped into the distribution system. The clear groundwater only requires disinfection by chloramination prior to entering the distribution system.

OCWD manages the OC Basin largely through financial incentives to encourage groundwater producers to pump a sustainable amount of water. The framework for the financial incentives is the Basin Production Percentage (BPP), which is the percentage a Basin producer can pump from the Basin in a given water year relative to its total water supply not including recycled water. Groundwater production at or below the BPP is assessed a Replenishment Assessment (RA). For Basin groundwater production above the BPP, a Basin Equity Assessment (BEA) is assessed in addition to the RA.

The BPP for the past twenty years has averaged approximately 73 percent. Resolution No. 13-1-6 adopted on January 16, 2013 by the OCWD Board of Directors stated the District's goal to develop the necessary supplies and facilities to achieve and maintain a 75 percent BPP, long-term. OCWD's transition to the higher 75 percent BPP was due to construction of the Ground Water Recovery System (GWRS) Initial Expansion Project, which was completed in 2015, which provided an additional 33,600 AFY of water for recharging the groundwater basin.

A BEA Exemption is used to encourage pumping of groundwater that does not meet drinking water standards in order to clean up and contain the spread of poor quality water. OCWD uses a partial or total exemption of the BEA to compensate a qualified participating agency or Producer for the costs of treating poor-quality groundwater. Amber-tinted groundwater produced from the Mesa Water Reliability Facility (MWRF) is BEA Exempt, which allows the District to utilize groundwater to meet 100 percent of demands. Without the MWRF, District groundwater production would be restricted by the BPP pumping percentage and more expensive imported water would need to be purchased to satisfy District water demands.

Imported Water Supply

Mesa Water has connections to receive imported water purchased from the Municipal Water District of Orange County (MWDOC), a member agency of the Metropolitan Water District of Southern California (Metropolitan). Metropolitan imports water to Southern California from the Colorado River and from northern California via the State Water Project (SWP). Because of the MWRF, the District is able to utilize imported water as a reliable back-up source to meet demands rather than a normal source of supply.

Through the 1996 Integrated Resources Plan and subsequent updates, Metropolitan has worked toward identifying and developing water supplies to provide 100 percent reliability. Due to competing needs and uses for all of the water sources and regional water operation issues, Metropolitan undertook a number of planning processes: the Integrated Resources Planning (IRP) Process, the Water Surplus and Drought Management (WSDM) Plan, the Urban Water Management Plan (UWMP) and the Water Supply Allocation Plan (WSAP).

E.3 Reliability of Water Supplies

The reliability of the District's water supply is primarily dependent on clear and color-treated groundwater produced from the OC Basin, which is managed by OCWD. However, having imported water delivered by Metropolitan as a reliable backup is also a key to providing Mesa Water with a reliable water supply.

According to the OCWD's 2014/15 Engineer's Report, 114,061 acre-feet of water was supplied to the OC Basin through (1) direct percolation or injection of purchased imported water from the Colorado River and State Water Project, (2) use of recycled water to supplement purchased imported water in the Alamitos seawater intrusion barrier, and (3) use of GWRS recycled water. For the five year period from July 1, 2010 to June 30, 2015, an annual average of approximately 120,000 acre-feet of supplemental water and recycled water was percolated or injected into the underground Basin for replenishment or used directly in place of pumping groundwater (i.e. In-Lieu Program). The average annual overdraft during the same five-year period was 132,000 AF.

Metropolitan has taken a number of actions to secure a reliable water source for its member agencies. Metropolitan developed a WSAP and has utilized it initially in 2009 and 2010, and again in 2015 for dealing with potential shortages that took into consideration the impact on retail customers and the economy, changes and losses in local supplies, the investment in and development of local resources, and conservation achievements. Additional actions taken by Metropolitan over the past several years have increased spending on conservation, local projects and water supply/reliability enhancements significantly.

In their 2015 UWMP, Metropolitan estimated supply capability and projected demands for an average (normal) year based on an average of hydrologies for the years 1922-2012; for a single dry-year based on a repeat of the hydrology in the year 1977; and for multiple dry years based on a repeat of the hydrology of 1990-1992. In all scenarios, there is a projected

surplus, even without Metropolitan's Supplies under Development and Potential Supplies that could further increase the projected surplus if/when implemented.

Normal-year, dry-year, and multiple dry-year demands projected for the District through FY 2040 as estimated in the District's 2015 UWMP, which included the Proposed Project demands, were compared with projected available groundwater and recycled water supplies. Demands for dry-year scenarios were increased 6.0 percent consistent with the District's 2015 UWMP.

The District is projected to have sufficient groundwater supply and supplementary recycled water supply to meet all normal, single-dry year, and multiple-dry year demands, including the Proposed Project demands, through the year 2040, with imported water as a back-up water supply source.

E.4 Conclusion

The estimated buildout water demand for the Proposed Project is projected to be 112 AF greater than the FY 2015 water demand for the existing land uses at the Project site, which is only 0.6 percent of the total demand estimated for Mesa Water in FY 2040 including water loss.

The information included in this WSA identifies a sufficient and reliable water supply for the Mesa Water, now and into the future, including a sufficient water supply for the re-developed land uses proposed for the Proposed Project. These supplies are also sufficient to provide for overall District-wide growth at the rate projected in the District's 2015 UWMP.

1 INTRODUCTION

This Water Supply Assessment (WSA) has been prepared for the Los Angeles (L.A.) Times Building Reuse Project (Proposed Project) in accordance with applicable sections of the Public Resources Code and California Water Code as referenced in Senate Bill (SB), which requires the demonstration of water supply sufficiency for development projects of this size.

The Proposed Project will be implemented on the 25.1-acre site of the former L.A. Times Building at 1375 West Sunflower Avenue and 3370 Harbor Boulevard in the City of Costa Mesa (City). In July 2016, the GP FEIR was certified and the 2015- 2035 General Plan was approved. These documents addressed the development of the L.A. Times site with up to 655,000 square feet (sf) of office development or 553,000 sf of commercial/retail development.

The Proposed Project entails the renovation of the existing 339,063 sf L.A. Times building and associated surface parking, and the construction of approximately 315,000 sf of commercial development in two additional separate buildings. Although the current proposal involves development of up to 3 office buildings, the WSA analyzes development of the site with a mixture of hotel, restaurant, office and retail uses. This development scenario includes uses that would be permitted on the project site pursuant to existing zoning and land use designation; therefore, this option was analyzed as it generates the highest water demand and is therefore the most conservative in terms of analyzing the Project's impact on water supply.

The Proposed Project will be implemented in two phases with approximately 80 percent estimated to be completed by 2020 and the remaining 20% completed by 2025.

The Proposed Project is located within the water service area of Mesa Water District (Mesa Water or District). This WSA will demonstrate that the District has sufficient water supply projected through the year 2040 to meet all District water demands including water demands from the Proposed Project, which were included in the water demands forecasted in the District's 2015 Urban Water Management Plan (UWMP).

2 LEGISLATION

According to the Guidebook for Implementation of Senate Bill (SB) 610 and SB 221 Water Code Section 10912, a "Project" requiring a WSA is defined by any of the following criteria:

1. A proposed residential development of more than 500 dwelling units (DU)
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sf) of floor space
3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space
4. A proposed hotel or motel, or both, having more than 500 rooms
5. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor space
6. A mixed-use project that includes one or more of the projects specified in this subdivision
7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project

The Proposed Project is a mixed-use project that will have 300,000 sf of office buildings, along with a 400-room hotel, and 100,000 sf of retail and restaurant floor space, and as such, necessitates the preparation of a WSA following the requirements of SB 610.

2.1 SB 610 – Costa – Water Supply Planning

SB 610 was chaptered into law on October 9, 2001. It mandates that a city or county approving certain projects subject to CEQA (i) identify any public water system that may supply water for the project, and (ii) request those public water systems to prepare a specified water supply assessment. The assessment is to include the following:

1. A discussion of whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing.
2. The identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.
3. A description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights, or water service contracts.

4. A demonstration of water supply entitlements, water rights, or water service contracts by the following means:
   a. Written contracts or other proof of entitlement to an identified water supply.
   b. Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
   c. Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.
   d. Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.
5. The identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.
6. If groundwater is included for the supply for a proposed project, the following additional information is required:
   a. Review of any information contained in the Urban Water Management Plan (UWMP) relevant to the identified water supply for the proposed project.
   b. Description of any groundwater basin(s) from which the proposed project will be supplied. Adjudicated basins must have a copy of the court order or decree adopted and a description of the amount of groundwater the public water system has the legal right to pump. For non-adjudicated basins, information on whether the DWR has identified the basin as over-drafted or has projected that the basin will become over-drafted if present management conditions continue, in the most current bulletin of DWR that characterizes the condition of the basin, and a detailed description of the efforts being undertaken in the basin to eliminate the long-term overdraft condition.
   c. Description and analysis of the amount and location of groundwater pumped by the public water system for the past five years from any groundwater basin which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
   d. Description and analysis of the amount and location of groundwater projected to be pumped by the public water system from any groundwater basin by which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
   e. Analysis of the sufficiency of the groundwater from the basin(s) from which the proposed project will be supplied.

The Water Supply Assessment shall be included in any environmental document prepared for the project. The assessment may include an evaluation of any information included in that environmental document. A determination shall be made whether the projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Additionally, SB 610 requires new information to be included as part of an UWMP if groundwater is identified as a source of water available to the supplier. Information must include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 prohibits eligibility for funds from specified bond acts until the plan is submitted to the State.

2.2 SB 1262 – Sustainable Groundwater Management Act

State Senate Bill 1262 adopted in September 2016 amends Section 66473.7 of the Government Code to require WSAs to address certain elements regarding groundwater sustainability if the project relies in whole or in part on groundwater as a source of supply.

3 L.A. TIMES BUILDING REUSE PROJECT

The Proposed Project would be implemented on the site of the former L.A. Times Building in the City of Costa Mesa. In July 2016, the GP FEIR was certified and the 2015- 2035 General Plan was approved. These documents addressed the development of the L.A. Times site with up to 655,000 square feet (sf) of office development or 553,000 sf of commercial/retail development.

3.1 Proposed Project Location

The Proposed Project location is at 1375 West Sunflower Avenue and 3370 Harbor Boulevard in the City of Costa Mesa as shown on Figure 3.1. The L.A. Times Building and associated surface parking areas encompass approximately 21 acres on two adjacent parcels currently owned by Tribune Publishing (Assessor Parcel Numbers [APNs] 140-041-24 and 140-041-40). The adjacent baseball field is approximately 4 acres on an additional parcel owned by the same owner, Tribune Publishing (APN 140-041-62).

The 25.1-acre Project site is bound to the west by the National University campus, office buildings, and Harbor Boulevard; to the north by Sunflower Avenue and commercial and industrial development; to the east by commercial development, an open space area and Susan Street; to the south by the IKEA retail center; and to the southeast by an active agricultural area. An aerial photograph of the Proposed Project is shown on Figure 3.2.

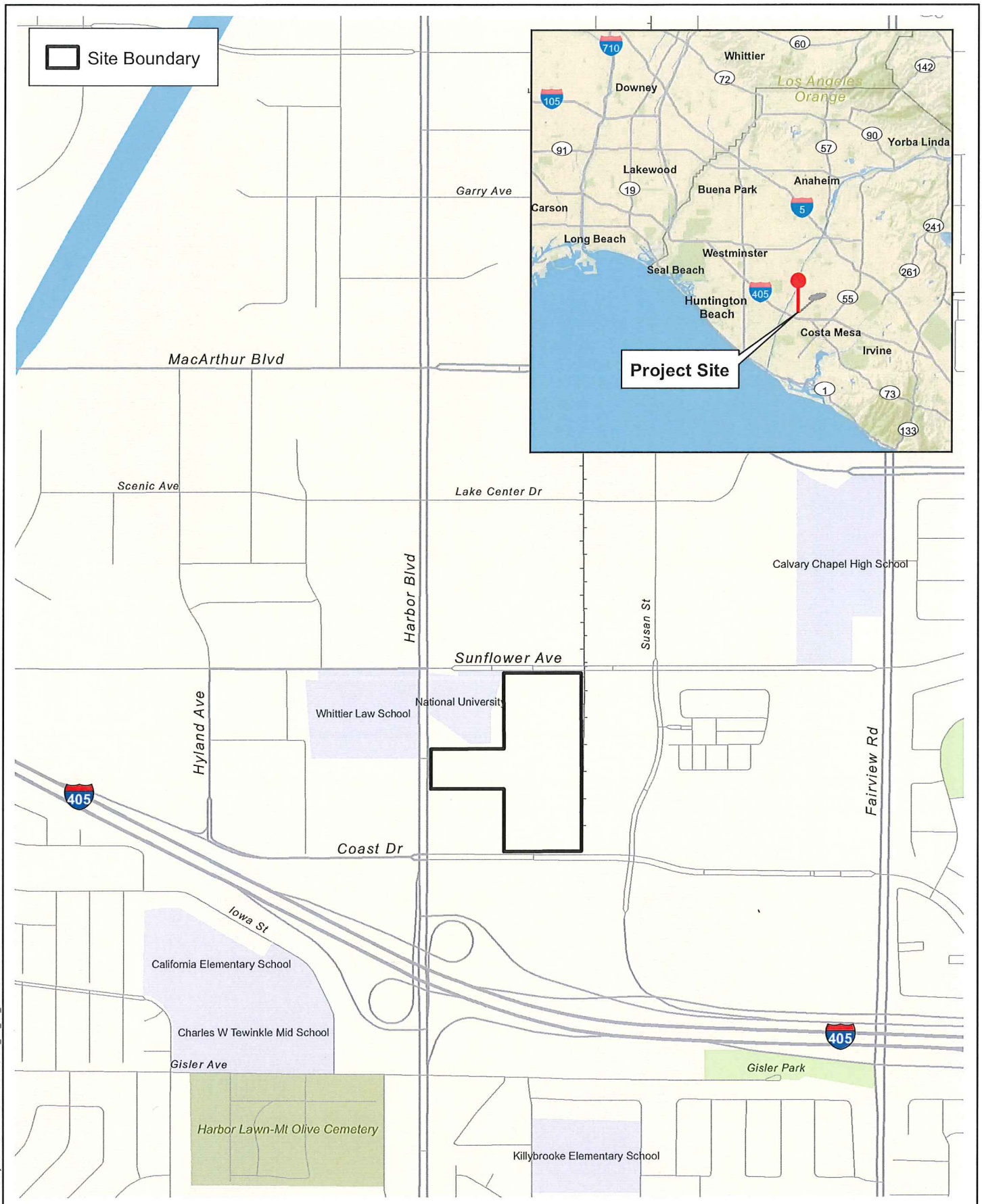
3.2 Proposed Project Characteristics

3.2.1 Existing Conditions

The 25.1-acre project site, consisting of three parcels owned by Tribune Publishing, is currently occupied by the 339,063 sf former L.A. Times Building and ancillary structures, surface parking areas, and an active baseball field. The site is relatively flat with no notable elevation changes. Landscaping on the site consists of planters along the L.A. Times Building and throughout the associated parking lot, trees lining the perimeter of the baseball field, turf associated with the baseball fields, and an approximately 0.6-acre strip of trees and vegetation along the southern edge of the L.A. Times site.

3.2.2 Proposed Project Description

The Proposed Project entails the renovation of the existing 339,063 sf L.A. Times building and associated surface parking, and the construction of approximately 315,000 sf of commercial development in two additional separate buildings. Although the current proposal involves development of up to 3 office buildings, the WSA analyzes development of the site with a mixture of hotel, restaurant, office and retail uses, all of which are permitted uses pursuant to existing zoning and land use designation, in order to characterize the highest potential water demand for the site. Specifically, it is assumed that the project site would be developed with a 400-room hotel, 40,000 SF of restaurant uses, 300,000 SF of office space, and 60,000 SF of retail uses. Therefore, the WSA evaluates the most conservative scenario in terms of analyzing the Project's impact on water supply.



Regional Location/Local Vicinity Map

Figure 3.1

LA Times Building Reuse Project

N W E S

1,000 500 0 1,000 Feet

BonTerra PSOMAS

(Rev: 08/08/2016 JAZ) R:\Projects\GIB\3GIB010100\Graphics\CEQA\ex1_RL_LV_20160808.pdf

Aerial Source: Aerials Express 2009

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Aerial Photograph

Figure 3.2

LA Times Building Reuse Project

N W E S

200 100 0 200 Feet

BonTerra PSOMAS

(Rev: 08/08/2016 JAZ) R:\Projects\GIB\3GIB010100\Graphics\CEQA\ex2_Aerial_20160808.pdf

3.2.3 Proposed Project Phasing

The Proposed Project will be implemented in three phases with approximately 80 percent estimated to be completed by 2020 and the remaining 20% completed by 2025.

3.3 Project Water Demands

3.3.1 FY 2015 BBSP Land Use Water Demands

FY 2015 water demand metered for the existing land uses at the Project site by address is shown in Table 3.5. The total demand was 14.5 AF. The site landscaping as described above in Section 3.2.1 is irrigated with potable water. There is no recycled water use.

Table 3.5
FY 2015 Metered Water Demands[(a)] at Project Site

Address	Irrigation (gpd)	Buildings (gpd)	Total (gpd)	Total (AFY)
1375 Sunflower	1,986	5,308	7,294	8.2
3370 Harbor	5,652	27	5,679	6.4
Totals	7,638	5,335	12,973	14.5

(a) All water use was potable water, i.e. no recycled water
Table may not total exactly due to spreadsheet rounding

3.3.2 Estimated Project Water Demand

Uses, units, unit demand factors and water demands estimated for the proposed Project land uses are shown in Table 3.6. Building areas are calculated using a floor area ratio (FAR) of 0.64 FAR for office buildings and a FAR of 0.54 FAR for commercial buildings.

It is estimated that approximately 25 percent of the Project site will be irrigated (2.5 acres) and that all site irrigation would be done with potable water, i.e. there will be no Project recycled water use. The irrigation rate of 1,500 gpd/acre is estimated based on the Model Water Efficient Landscape Ordinance (MWELO), which limits the Evapotranspiration Adjustment Factor (ETAF) for non-residential land use irrigation to 0.45. In calculating the maximum irrigation rate, an evapotranspiration (ETo) rate of 45.6 inches was used, which is the historical annual average for Costa Mesa.

Based on the estimate of approximately 80 percent of the Project being completed by 2020 with the remaining 20 percent completed by 2025, the additional project demand over and above the FY 2015 demand for the existing site land uses of 15 AFY are shown in Table 3.7, not including water loss.

Table 3.6
Estimated Buildout Water Demands[a]

Use	Hotel Rooms	Building square feet[a] (sf)	Acres	Unit Demand Factor	Water Demand (gpd)	Water Demand AFY
Hotel	400	-	-	125	50,000	56.0
Restaurant[b]	-	40,000	-	800	32,000	35.8
Office[b]	-	300,000	-	65	19,500	21.8
Retail[b]	-	60,000	-	125	7,500	8.4
Irrigation[c][d]	-	-	2.5	1,500	3,750	4.2
Totals		-	-	-	112,750	126.3

(a) All water use from potable water, i.e. no recycled water
(b) Building areas calculated with 0.64 FAR for office and 0.54 FAR for other commercial uses
(c) Assume 10% of the 25-acre site irrigated with potable water
(d) Irrigation rate based on Model Water Efficient Landscape Ordinance (MWELO):
ETAF (Evapotranspiration Adjustment Factor) = 0.45 for non-residential potable irrigation
MAWA (Maximum Applied Water Allowance) in gal/yr = ETo x 0.62 x ETAF x Area
ETo (evapotranspiration) for Costa Mesa = 45.6 inches (historical annual average)
Table may not total exactly due to spreadsheet rounding

Table 3.7
Estimated Project Water Demand Phasing (AF)

	2020	2025	2030	2035	2040
2015 Demand	15	15	15	15	15
Project	101	126	126	126	126
Additional Demand	87	112	112	112	112

Not including water loss
Table may not total exactly due to spreadsheet rounding

4 MESA WATER SYSTEM

4.1 District Water System Characteristics

The Mesa Water service area encompasses 18 square miles in Orange County and includes most of the City of Costa Mesa, portions of the City of Newport Beach, and a small portion of unincorporated Orange County. The Mesa Water service area is shown on Figure 4-1. The service area has ground elevations ranging from 30 to 110 feet above sea level, and overlies the Orange County Groundwater Basin (OC Basin or Basin), which provides approximately 94 percent of the District's water supply and 100 percent of its potable water supply. The OC Basin is managed by the Orange County Water District (OCWD). Mesa Water utilizes recycled water for approximately 6 percent of its water supply. The District also has imported water connections for back-up water supply; and emergency connections with adjacent water agencies.

The District pumps groundwater from the OC Basin via six wells that provide clear groundwater from the main production aquifer, and two wells that provide organic amber-tinted groundwater from below the main aquifer. The amber-tinted groundwater is then treated at the MWRF before being pumped into the distribution system. The MWRF, which is owned and operated by the District, has an 8.6 MGD capacity. The plant removes organic color from the water using a nanofiltration membrane treatment process. The clear groundwater only requires disinfection by chloramination prior to entering the distribution system.

In addition to the wells and the MWRF, the District's water system includes two reservoirs with a combined storage capacity of 28 million gallons; pump stations at each reservoir; and approximately 317 miles of transmission and distribution pipelines. The District has two metered connections with the City of Huntington Beach and with Irvine Ranch Water District (IRWD). Additionally, the District has four emergency connections with the City of Santa Ana, seven emergency connections with the City of Newport Beach, and five emergency connections with Irvine Ranch Water District (IRWD).

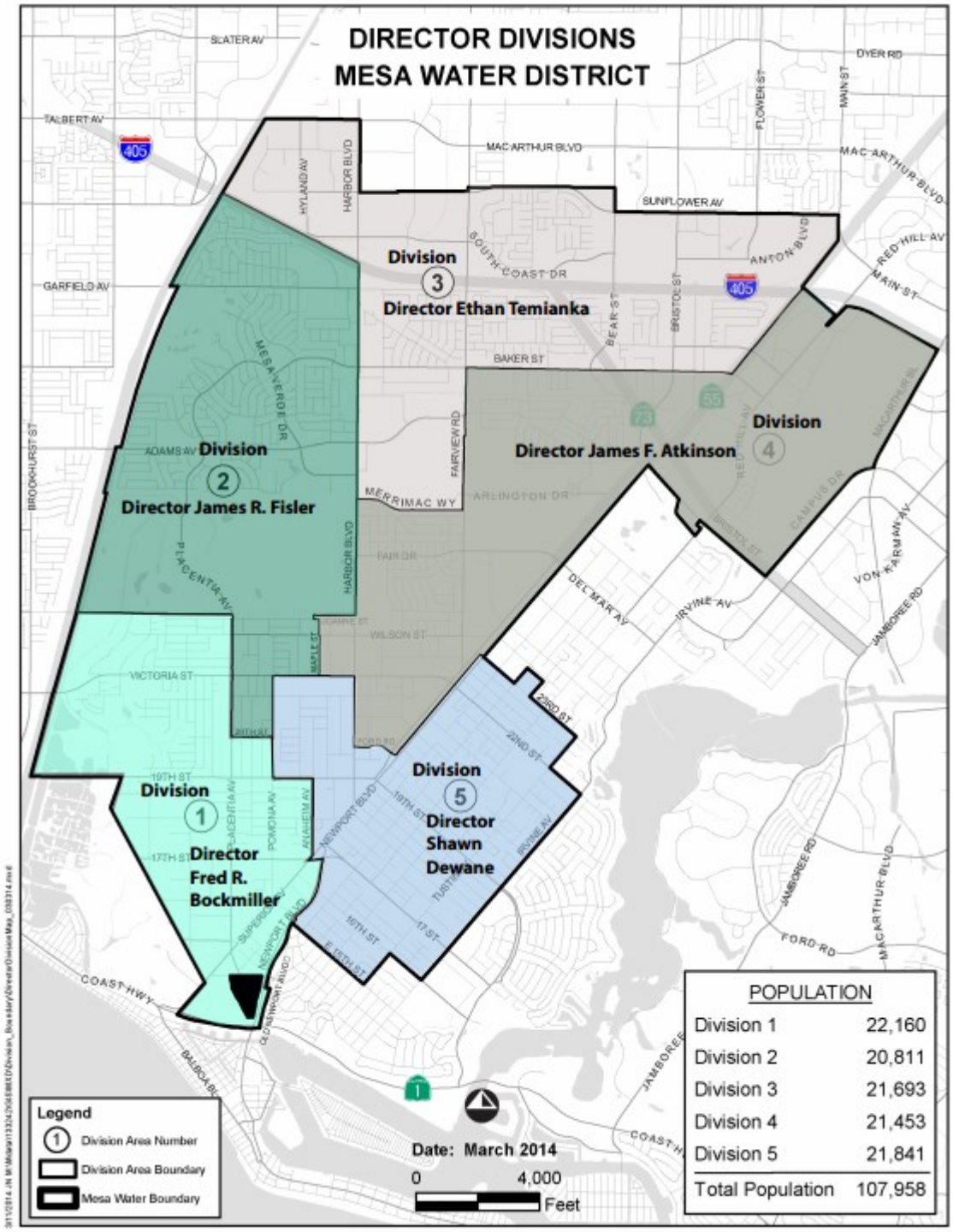
The District also has connections to receive imported water from the Metropolitan Water District of Southern California (Metropolitan) through the Municipal Water District of Orange County (MWDOC). The District currently uses imported water supply as a backup to supplement their groundwater supply.

The District receives recycled water from OCWD via the Green Acres Project (GAP).

District's water service area population, which was estimated at 107,588 in 2015, is estimated to increase to 110,675 by 2040, which is an increase of approximately 2.9 percent. The service area also attracts a significant number of visitors during the summer months, which contributes to increased water demands.

There were a total of 23,760 customer service connections in 2015. All active service connections are metered. Residential land use accounts for approximately 61 percent of the potable water, and this percentage is anticipated to remain largely the same through 2040.

Figure 4.1 Mesa Water Service Area



4.2 District Water Demands

Since the previous 2010 UWMP update, southern California's urban water demand has been largely shaped by the efforts to comply with the Water Conservation Act of 2009 (SBx7-7). This law requires all California retail urban water suppliers serving more than 3,000 acre-feet per year (AFY) or 3,000 service connections to achieve a 20 percent water demand reduction (from a historical baseline) by 2020 and an interim 10 percent reduction by 2015. Mesa Water's actual water use in FY 2015 of 108 (gallons per capita per day (gpcd) was significantly less than their 2015 target of 162 gpcd and is less than their 2020 target of 144 gpcd. Meeting the 2020 target is critical to ensure the District's eligibility to receive future state water grants and loans.

In April 2015, Governor Jerry Brown issued Executive Order B-29-15 requiring the State Water Resources Control Board to implement measures to cut the State's overall water usage by 25% due to the continuing drought. Water agencies were assigned various reduction goals, and the District's reduction goal was initially set at 20 percent below demands of 2013. The State Water Board subsequently lowered the District's target water conservation goal to 13 percent below demands of 2013. This reduction was in recognition of the significant new water supply provided by the Groundwater Replenishment System (GWRS) project, available to all OCWD members. In response, District water use decreased a cumulative 22.3 percent for the eleven recording months (June 2015 through May 2016) relative to year 2013 water usage (9.3 percent greater than the District's goal).

In May 2016, the Governor issued Executive Order B-37-16, which continued the requirement for monthly reporting of water conservation levels versus 2013 use but allowed each urban water supplier to set its own target customized to fir its unique conditions. Following this EO, the State Water Board adopted a revised emergency regulation which extends restrictions on urban water use through January 2017. Under the new regulation, last year's state-mandated conservation targets are being replaced with locally determined measures established under a self-certification approach ("Stress Test"). The Stress test requires each water supply agency to demonstrate whether or not they require a water use reduction requirement under specific, extreme conditions of high demand and low precipitation over the next three years, assuming the drought continues.

District water conservation programs range from being a signatory member of the California Urban Water Conservation Council's (CUWCC) Best Management Practices (BMP) Memorandum of Understanding (MOU) since 1994, to the implementation of water audit and leak detection programs. Mesa Water has also partnered with MWDOC on educational programs, retrofits, and trainings.

The District's total water demand in FY 2015 was 18,002 AF including 1,158 AF of recycled water use, which was significantly less than the total water demand of 19,700 AF projected for the District in the District's 2010 UWMP (8.6 percent) and is primarily attributable to District water conservation efforts associated with SBx7-7 and Executive Order B-29-15.

It is anticipated that once the drought ends, water use will increase some relative to 2015 water use. However, it is also anticipated that a great deal of water conservation will remain due to permanent measures that have already been implemented for existing District residences and other development.

California's newly adopted green building code will have a direct impact on new home building and water conservation in the State. The new code aims to cut indoor water consumption by at least 20 percent, primarily through more efficient indoor water fixtures. The California Green Building program also includes outdoor water conservation by reducing the area devoted to high-irrigation use lawns and plants, emphasizing natural drought-tolerant plantings and the installation of irrigation controls that respond to local weather conditions. This is consistent with the new MWELO, which was adopted by the State on July 15, 2015. The City of Costa Mesa adopted Ordinance 16-03 on February 16, 2016, which is their water efficient landscape ordinance in compliance with MWELO and a copy is included in Appendix A.

Water demand projections developed in the District's 2014 Water Master Plan based on land use, population and economic growth were the basis for demand projections presented in the District's 2015 UWMP.

Future land uses and development projects were identified by parcel in the 2014 Water Master Plan through two approaches. The first approach centered on reviewing all development plans received by the City of Costa Mesa Planning Department in 2012 and 2013. Eight developments of at least 14 units were deemed to be of a sufficient size to impact future water use within the service area and were included in the future demand forecast. The second approach used aerial imagery of the service area to identify vacant lots and potential infill sites for future developments. Identified parcels included residential and commercial areas and were assumed to follow the zoning designation from the City of Costa Mesa 2004 General Plan Land Use Map.

Together, the two approaches identified over 82 acres of parcels for future development within the District's service area for a corresponding demand projection of 350 AFY that included the additional demands from the L.A. Times Building Reuse Project. Linear interpolation was used to project demands out to 2040. The Banning Ranch Development water demand of 614 AFY was evaluated but not included in demand projections as the timing of this development is unknown.

Projected normal year (non-dry year) water demands for the District are shown in Table 4.1. Total District demands come from Table 2-6 of the District's 2015 UWMP, which are based on demands projected in the District's 2014 Water Master Plan. The additional Project demands (above the FY2015 demand of existing land uses on the project site) were included in the 2015 UWMP demand projections. All demands shown in Table 4.1 include an estimated 4.3% of water loss consistent with the 2015 UWMP. At buildout, the additional Project demands (117 AF) are estimated to be 0.6 percent of the District's total projected 2040 water demand of 20,874 AF.

Table 4.1
Projected Normal District Water Demands (AF)

Projected Normal Demands[a]	FY 2020	FY 2025	FY 2030	FY 2035	FY 2040
Total District Demand without Project[b]	20,520	20,559	20,625	20,692	20,757
Additional Project Demand[b]	90	117	117	117	117
Total Demand[c]	20,610	20,676	20,742	20,809	20,874

(a) All demands include estimated 4.3% water loss consistent with the 2015 UWMP
(b) Additional Project demand above FY 2015 demand of existing land uses on the Project site
(c) From Table 2-6, Mesa Water District Final 2015 UWMP

4.3 District Water Supply

4.3.1 Groundwater Supply

The information in this section is intended to furnish the information required by Water Code section 10910(f).

The primary source of water supply for the District is the OC Basin. Groundwater produced by District wells from FY 2011 through FY 2015 is shown in Table 4.2.

Table 4.2
Historical District Groundwater Production (AF)

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
12,193	10,852	15,558	18,457	17,652

The OC Basin underlies the north half of Orange County beneath broad lowlands. A description of the Coastal Plain of the Basin or DWR's Groundwater Basin Number 8-1, dated September 2001, states that the Basin underlies a coastal alluvial plain in the northwestern portion of Orange County. The Basin covers an area of approximately 350 square miles, bordered by the Coyote and Chino Hills to the north, the Santa Ana Mountains to the northeast, the Pacific Ocean to the southwest, and terminates at the Orange County line to the northwest, where its aquifer systems continue into the Central Basin of Los Angeles County.[1]

The Basin is dominated by a deep structural depression containing a thick accumulation of fresh water-bearing imbedded marine and continental sand, silt and clay deposits. The sediments containing easily recoverable fresh water extend to approximately 2,000 feet in depth. Although water bearing aquifers exist below that level, reduced water quality and pumping make these materials economically unviable at present. Upper, middle and lower

[1] DWR's Bulletin 118-1 Basin Description for Coastal Plain of Orange County Groundwater Basin Number 8-1. September 5, 2001.

aquifer systems are recognized in the Basin with well production yields ranging from 500 to 4,500 gallons per minute, but are generally 2,000 to 3,000 gallons per minute.[2]

The aquifers comprising the Basin form a complex series of interconnected sand and gravel deposits. The Basin holds millions of acre feet of water, of which about 1.25 to 1.5 million AF is available for use.[3]

The OC Basin is unadjudicated, but is managed by the OCWD. To ensure the Basin is not overdrawn, OCWD recharges the Basin with local and imported water. Groundwater conditions in the Basin are influenced by the natural hydrologic conditions. The Basin is recharged primarily by four sources: (1) local rainfall, which varies due to the extent of the annual seasonal precipitation; (2) storm and base flows from the Santa Ana River, which includes recycled wastewater from treatment plants in Riverside and San Bernardino Counties; (3) imported water; and (4) highly treated recycled wastewater. The Basin generally operates as a reservoir in which the net amount of water stored is increased in wet years to allow for manageable overdrafts in dry years. Groundwater production within the OC Basin for 2014/15 was 305,259 AF (including any available In-Lieu Program water), which was an 8.0 percent decrease from the prior water year.[4]

OCWD's Groundwater Replenishment System (GWRS) is the world's largest advanced water purification system for potable reuse. OCSD treats wastewater and produces water clean enough to undergo purification at the GWRS, instead of discharging it into the Pacific Ocean. This water is then purified at the GWRS using a three-step advanced process. Consisting of microfiltration, reverse osmosis and ultraviolet light with hydrogen peroxide, this purification process produces high quality water that meets and exceeds state and federal drinking water standards. This purified water is injected into a seawater barrier and pumped to recharge basins where it naturally percolates into the OC Basin and supplements Orange County's drinking water supplies.

Operational since January 2008, the GWRS originally produced 70 million gallons a day (MGD) (78,400 AFY) of highly purified water. In 2015, the project was expanded to produce 100 MGD (112,000 AFY). Ultimate capacity for the GWRS is projected at 130 MGD (145,600 AFY) after infrastructure is built to increase wastewater flows from OCSD to the GWRS.

Basin recharge occurs largely in the following recharge basins: (i) Warner Basin, a 50-foot deep recharge basin located next to the Santa Ana River (SAR) at the intersection of the 55 and 91 Freeways; (ii) Burris Pit, located between Lincoln Avenue and Ball Road; (iii) Kraemer Basin, located adjacent to Burris Pit, and (iv) Santiago Creek. A large portion of the recharge of the Basin comes from water flowing in the Santa Ana River (SAR) south of the Prado Dam, which is located in San Bernardino County, just east of the Orange County jurisdictional boundary. With the exception of contractual rights conveyed to Bryant Ranch landowners in east Yorba Linda which have contractual rights to

[2] DWR's Bulletin 118-1 Basin Description for Coastal Plain of Orange County Groundwater Basin Number 8-1. September 5, 2001.
[3] Orange County Water District 2020 Master Plan Report. Chapter 3, Orange County Groundwater Basin Hydrology. 2000.
[4] OCWD. Engineer's Report, 2014/15. February 2016.

approximately 2,800 AFY of SAR water, OCWD has the legal rights to all of the SAR flow south of the Prado Dam. (See OCWD v. City of Chino, et al, (Civ. Case No. 117628), Judgment and Settlement Documents.)

The Basin is one of the richest and most plentiful sources of groundwater in the entire State, containing approximately 1.25 to 1.5 million AF of water available for use at the present time, and millions of acre-feet that could be produced in the future.[5] As reported in the 2014-2015 OCWD Engineer's Report, the Basin is not in a state of overdraft

As part of its Basin management function, OCWD operates an extensive groundwater monitoring program whereby OCWD routinely tests all groundwater production wells located within the Basin in compliance with Title 22 of the California Administrative Code. OCWD maintains a multi-million dollar laboratory whereby chemists test the well water for traces of pollution, hydrocarbons, pesticides, and other chemical components. OCWD's laboratories process tens of thousands of samples a year, and perform hundreds of thousands of analyses a year. As part of its monitoring and management duties, OCWD has developed and adopted a Groundwater Management Plan which is a program to increase water supplies and increase monitoring and groundwater contamination clean up.

State Senate Bill 1262 adopted in September 2016 amends Section 66473.7 of the Government Code to require WSAs to address certain elements regarding groundwater sustainability if the project relies in whole or in part on groundwater as a source of supply. The OC Basin has been designated as medium-priority pursuant to Section 10722.4 of the Water Code. The Sustainable Groundwater Management Act (SGMA) establishes OCWD as the exclusive local agency to manage groundwater within its statutory boundaries with powers to comply with the provisions of the SGMA (California Water Code Section 10723 (c) (1). OCWD adopted a Groundwater Management Plan, 2015 Update dated June 17, 2015, that includes the required elements for Groundwater Sustainability Plans and additional plan elements have been incorporated into OCWD. Furthermore, as mentioned above DWR has not identified the Basin as overdrafted or has it projected that the Basin will become overdrafted if present management conditions continue.

Section 5 of this WSA sets forth various groundwater production scenarios as required by the Water Code (Single Dry Year, Multiple Dry Year). This additional information set forth in Section 5 will furnish further information pertaining to the sufficiency of the groundwater basin in various pumping scenarios as required by Water Code section 10910(f)(5).

Basin Production Percentage (BPP)

OCWD manages the OC Basin largely through financial incentives to encourage groundwater producers to pump a sustainable amount of water. The framework for the financial incentives is the Basin Production Percentage (BPP), which is the percentage a Basin producer can pump from the Basin in a given water year relative to its total water supply not including recycled water. Groundwater production at or below the BPP is assessed a Replenishment Assessment (RA). For Basin groundwater production above the

[5] Orange County Water District 2020 Master Plan Report. Chapter 3, Orange County Groundwater Basin Hydrology. 2000.

BPP, a Basin Equity Assessment (BEA) is assessed in addition to the RA. OCWD sets the BPP, the RA, and the BEA each water year with the combined RA + BEA assessment reflective of current Metropolitan imported water rates. Funds collected by OCWD through the RA and the BEA are used to finance groundwater replenishment, recharge, and recycling programs aimed at ensuring the long-term viability and stability of the Basin.

The BPP is set based on groundwater conditions, availability of imported water supplies, and basin management objectives. The supplies available for recharge must be estimated for a given year including: (1) Santa Ana River stormflow, (2) Natural incidental recharge, (3) Santa Ana River base flow, (4) GWRS supplies, and (5) other supplies such as imported water and recycled water purchased for the Alamitos Barrier, which is discussed in Section 5.

The BPP was initially established in 1969 and has generally ranged from 62 to 89 percent. The average BPP for the past twenty years is approximately 73 percent.

Resolution No. 13-1-6 adopted on January 16, 2013 by the OCWD Board of Directors stated the District's goal to develop the necessary supplies and facilities to achieve and maintain a 75 percent BPP, long-term. OCWD's transition to the 75 percent BPP was due to construction of the GWRS Initial Expansion Project, which was completed in 2015. This expansion provided an additional 33,600 AFY of water for recharging the groundwater basin. OCWD is planning to increase GWRS treatment capacity to 130 MGD through its final expansion. Although the BPP is set at 75 percent, a BPP of 70 percent was assumed in the District's 2015 UWMP through 2040 to be conservative.

BEA Exemption

In some cases, OCWD encourages the pumping of groundwater that does not meet drinking water standards in order to protect water quality. This is achieved by using a financial incentive called the BEA Exemption. A BEA Exemption is used to encourage pumping of groundwater that does not meet drinking water standards in order to clean up and contain the spread of poor quality water. OCWD uses a partial or total exemption of the BEA to compensate a qualified participating agency or Producer for the costs of treating poor-quality groundwater. When OCWD authorizes a BEA exemption for a project, it is obligated to provide the replenishment water for the production above the BPP and forgoes the BEA revenue that OCWD would otherwise receive from the producer.

Mesa Water constructed the MWRF in 2012 to remove organic amber color from the groundwater pumped from two District wells, which as a result, enables the water to be utilized as potable water in the District's water system. Other than excess organic color, the water meets all water quality standards. A nanofiltration treatment process removes the organic color, while sand separators and other filters remove inorganic materials. Chloramines are used to disinfect the water before leaving the facility. The water is stored in a 1.0 MG onsite reservoir before being pumped into the District's potable water distribution system. For every gallon of water moved through the MWRF, 98 percent is delivered as drinking water to District customers.

Approximately 70 to 75 percent of the potable groundwater supply for the District comes from six District wells that provide clear groundwater from the main production aquifer. The clear groundwater only requires disinfection (chloramination) prior to entering the distribution system. The balance of the potable groundwater supply is MWRF-treated groundwater from two District wells. MWRF groundwater production is BEA Exempt, which allows the District to forego using more expensive imported water to meet demands.

It is projected that the District will be able to meet all future normal, dry-year and multiple dry-year water demand scenarios with a clear groundwater supply ratio [clear groundwater/(clear groundwater + treated groundwater)] of 70 percent, which puts the clear groundwater supply below the BPP of 75 percent set by OCWD without the need to utilize imported water as part of the regular supply regiment.

4.3.2 Imported Water (Surface Water)

The information in this section is intended to provide the information required by Water Code section 10910(d).

Mesa Water has connections to receive imported water purchased from the Municipal Water District of Orange County (MWDOC), a member agency of the Metropolitan Water District of Southern California (Metropolitan). Metropolitan imports water to Southern California from the Colorado River and from northern California via the State Water Project (SWP).

The construction of the SWP was authorized by the State Legislature in 1951. Eight years later, the Legislature passed the Burns-Porter Act, which provided a mechanism for bonds to be issued to pay for the construction of certain portions of the SWP facilities. The DWR has entered into contracts with water districts and regional agencies (SWP Contractors) specifying the amount of SWP water to be delivered to each SWP Contractor. Each SWP Contractor was provided with a contract amount (Table A Amount) and capacity rights to the SWP aqueduct and storage system in return for payments intended to cover operation and maintenance, bondholder obligations, and repayment of moneys loaned from the California Water Fund. DWR water supply contracts contemplate that the SWP would deliver 4.2 million AFY to 29 SWP Contractors.

Although the SWP is not fully constructed and cannot yet deliver the full 4.2 million AFY in all years, since the end of the six-year drought in 1992, the SWP has fully met SWP Contractors' water needs twelve out of the next 16 years, except the dry years of 1994, 2001, 2007 and 2008. Of SWP water deliveries, about 70 percent is delivered to SWP urban contractors and about 30 percent is delivered to SWP agricultural contractors. Kern County Water Agency and Metropolitan are the largest Contractors with DWR for SWP water.[6]

From a statewide perspective, the maximum capacity of the overall SWP transportation system is generally limited by the capacity of the system pumps. The capacity of the California Aqueduct is 10,300 cubic feet per second (cfs) at its northern end, and 4,480 cfs below the Edmonston pumping plant (1,000 cfs equates to approximately 82.6 acre-feet

[6] Bulletin No. 132-06 and later supplements to Bulletin No. 132.

per hour, 1,980 acre-feet per day and 725,000 AFY). If these transportation rates were maintained for a full year, they would result in the transport of approximately 7.2 million acre-feet near the Delta and 3.2 million acre-feet to users in Southern California.[7]

Demand can have a significant effect upon the reliability of a water system. For example, if the demand occurs only three months in the summer, a water system with a sufficient annual supply but insufficient water storage may not be able to reliably meet the demand. If, however, the same amount of demand is distributed over the year, the system could more easily meet the demand because the need for water storage is reduced. Because the Mesa Water overlies the Orange County Groundwater Basin and can utilize the Basin to smooth out seasonal peaks, its imported water reliability is enhanced.

Metropolitan's SWP imported water is stored at Castaic Lake on the western side of Metropolitan's service area, at Silverwood Lake near San Bernardino and at Diamond Valley Reservoir near Hemet. Metropolitan water imported from the Colorado River via the Colorado River Aqueduct (CRA) is stored at Diamond Valley Lake and Lake Mathews in Riverside County.

Through the 1996 Integrated Resources Plan and subsequent updates, Metropolitan has worked toward identifying and developing water supplies to provide 100 percent reliability. Due to competing needs and uses for all of the water sources and regional water operation issues, Metropolitan undertook a number of planning processes: the Integrated Resources Planning (IRP) Process, the Water Surplus and Drought Management (WSDM) Plan, the Strategic Planning Process, the Urban Water Management Plan (UWMP), and the Water Supply Allocation Plan (WSAP). Combined, these documents provide a framework and guidelines for optimum water planning into the future. Reliability of Metropolitan's supply is further discussed in Section 5.0, Reliability of Water Supplies.

Metropolitan member agencies receive imported water at various delivery points along the Metropolitan transmission system, and pay for it at tiered and/or uniform rates established by the Board depending on the class of service.

Historical water demands in the Metropolitan service area increased from 3.1 million acre feet (MAF) in 1980 to 3.9 MAF in 2000. However, water demands decreased to 3.4 MAF in 2010 and further decreased to 3.1 MAF primarily due to SBx7-7 water conservation. Total water use is projected to rebound to 3.7 MAF in 2020 after the end of the drought, but is then only forecast to increase to 4.0 MAF by 2040 (7.7 percent) with the implementation of long-term water conservation measures.[8]

For the Orange County service area, according to Metropolitan, demands are projected to increase approximately 14.8 percent between 2015 and 2040.[9] Table 4.3 shows the historic and projected total retail water demands for Metropolitan's Orange County service area. The water demand forecasts account for water savings resulting from plumbing codes,

[7] DWR, Bulletin No. 132-05, December 2006.
[8] Metropolitan Water District of Southern California, Urban Water Management Plan, June 2016.
[9] ibid.

price effects, and actual and projected implementation of water conservation Best Management Practices.[10]

Table 4.3
Total Retail Water Demand in Metropolitan's Service Area for Orange County - Includes Municipal and Industrial, and Agriculture (AF)

	Reported				Projected				
County	2000	2005	2010	2015	2020	2025	2030	2035	2040
Orange	660,000	629,000	546,000	539,000	604,000	613,000	617,000	613,000	619,000

Source: The Urban Water Management Plan for the Metropolitan Water District of Southern California, Appendix 1 Demand Forecast. June 2016.

Because Mesa Water can pump and treat organic amber-tinted water at the MWRF, using this treated groundwater along with their clear-groundwater supply to meet normal, single-dry, and multiple-dry year scenarios without having to pay the OCWD BEA, the District currently only utilizes imported water as a backup supply to their groundwater supply. The cost to purchase imported water is greater than the District's cost to produce potable groundwater.

4.2.3 Recycled Water Supply

OCWD owns and operates the Green Acres Project (GAP), a water recycling system that provides recycled water to Orange County water purveyors including Mesa Water. The total annual demand for GAP water in FY 2015 was approximately 4,320 AF (3.86 MGD). Orange County Sanitation District (OCSD) wastewater flows are treated to a tertiary level (Title 22 of the California Code of Regulations) at the 7.5 MGD treatment plant. The GAP distribution system consists of two pump stations, two reservoirs with a combined storage capacity of 7.5 MG, approximately 37 miles pipelines, a dedicated service pipeline to OCSD Plant #2, and an intertie pipeline to Irvine Ranch Water District's (IRWD) recycled water distribution system.

Currently, Mesa Water has 42 recycled water service connections. Customers include the City of Costa Mesa, the County of Orange, CalTrans, Costa Mesa Country Club, Orange Coast Community College, and several shopping and business centers. In FY 2015, 1,158 AF of recycled water from OCWD's GAP was used in the Mesa Water service area for landscape irrigation. Recycled water use accounts for approximately six percent of annual demand.

4.3.4 Projected District Water Supply

Projected normal–year, i.e. non dry-year, supply by source for the District through the year 2040 is shown in Table 4.4. The supplies, as developed and presented in Table 3-3 of the

[10] ibid.

District's 2015 UWMP, include supply as needed to satisfy the additional demands of the Proposed Project.

Table 4.4
Projected Normal District Water Supply (AF)

Supply Sources/Demands	FY 2020	FY 2025	FY 2030	FY 2035	FY 2040
Supply[(a)]	Normal Year				
Clear Groundwater	14,427	14,473	14,519	14,566	14,612
MWRF Treated Groundwater	5,083	5,103	5,123	5,143	5,162
Recycled Water	1,100	1,100	1,100	1,100	1,100
Total Supply	20,610	20,676	20,742	20,809	20,874

(a) From Table 3-3, Mesa Water District 2015 UWMP

4.2.5 Non-Revenue Water (Water Loss)

Non-revenue water (water loss) is defined by the International Water Association (IWA) and AWWA as the difference between distribution systems input (supply) volume, and billed authorized consumption (demand). In essence, water loss is an extraneous demand on the water system. In the District's 2015 UWMP, non-revenue potable water was calculated at 4.3 percent of the water supplied into the District's distribution system in FY 2015 not including recycled water, which was not estimated. Additional demands for the Proposed Project were increased by 4.3 percent to account for system water supply losses in meeting these demands.

5 RELIABILITY OF WATER SUPPLIES

This section provides a description of OCWD's and Metropolitan's efforts in securing adequate groundwater and imported water supply, respectively, as well as the reliability of regional and District normal, single dry year, and multiple dry year water supplies.

The Southern California region faces a challenge in satisfying its water requirements and securing firm water supplies. Increased environmental regulations and the competition for water from outside the region have resulted in reduced supplies of imported water. Continued population and economic growth correspond to increased water demands within the region, putting an even larger burden on local supplies.

Reliability is a measure of a water system's ability to manage water shortages. Reliability planning requires information about the following: (1) expected frequency and severity of shortages; (2) how additional water management measures are likely to affect the frequency and severity of shortages; and (3) how available contingency measures can reduce the impact of shortages when they occur.

The reliability of the District's water supply is primarily dependent on clear and color-treated groundwater produced from the OC Basin, which is managed by OCWD. However, having imported water delivered by Metropolitan as a reliable backup is also a key to providing Mesa Water with a reliable water supply.

State funding has been made available, through California voters' approval, to increase reliability of State water supplies. In March 2000, California voters approved Proposition 13, which authorized the State to issue $1.97 billion of its general obligation bonds for water projects. Additionally, California voters approved Proposition 50 in November 2002 and Proposition 84 in November 2006, which authorized the issuance by the State of $3.4 billion and $5.4 billion, respectively, of its general obligation bonds for water projects. Types of water projects that were eligible for funding under Propositions 13, 50, and 84 of these programs included water conservation, groundwater storage, water treatment, water quality, water security and Colorado River water management projects, many of which are within the scope of the California Plan. The 2014 Water Bond, through Proposition 1, provides funding to implement the three broad objectives of the California Water Action Plan:

1. More reliable water supplies
2. Restoration of important species and habitat
3. A more resilient, sustainably managed water resources system

It includes $372.5 million administered by the California Department of Fish and Wildlife under Chapter 6 for watershed restoration and Delta water quality and ecosystem restoration grants. Proposition 1 also includes the following funding administered by DWR: $610 million for regional water reliability under Chapter 7 including integrated regional water management (IRWM) and water conservation and water use efficiency (WUE), $2.7 billion for water storage projects that improve the operation of the state water system, $825 million for water recycling under Chapter 9 including desalination and

advanced treatment technology, $100 million for groundwater sustainability under Chapter 10 including local plans and projects to manage groundwater, $395 million for flood management under Chapter 11 including reducing risk of levee failure and flooding in the Delta and statewide flood management. Additionally, the 2015 Agricultural Water Use Efficiency Grants provide a funding limit of $30 million and CalConserve water use efficiency revolving fund loans provide another $10 million limit.

5.1 Orange County Water District Supply Reliability

The primary source of water for Mesa Water is the OC Basin. OCWD is responsible for the protection of water rights to the Santa Ana River in Orange County as well as the management and replenishment of the Basin.[11] OCWD replenishes and maintains the Basin at safe levels while significantly increasing the Basin's annual yield by utilization of the best available technology. Other than recycled water, OCWD primarily recharges the Basin with water from the Santa Ana River and to a lesser extent with imported raw water purchased from Metropolitan.

According to the OCWD's 2014/15 Engineer's Report, 114,061 acre-feet of water was supplied to the Basin as (1) directly from the percolation or injection of purchased imported water from the Colorado River and State Water Project, and (2) use of recycled water to supplement purchased imported water in the Alamitos seawater intrusion barrier, and (3) use of GWRS recycled water. For the five year period from July 1, 2010 to June 30, 2015, an annual average of approximately 120,000 acre-feet of supplemental water and recycled water was percolated or injected into the underground Basin for replenishment or used directly in place of pumping groundwater (i.e. In-Lieu Program). The average annual overdraft during the same five-year period was approximately 132,000 AF. As of January 2008, OCWD began recharging recycled water from the GWRS, which is discussed in Section 4.2.1.

Total water demand within OCWD was 425,349 AF for the 2014/15 water year (beginning July 1, 2014 and ending June 30, 2015). In the same period, groundwater production (including In-Lieu Program water and excluding Metropolitan Groundwater Storage Program extractions) for the water year totaled 305,259 AF. For the water year, a total of 60,870 AF of supplemental water was used for the purpose of groundwater replenishment and barrier maintenance to prevent seawater intrusion from occurring in areas of the groundwater basin adjacent to the Pacific Ocean in Huntington Beach, Costa Mesa, and Fountain Valley.

Based on the groundwater basin conditions for the water year ending June 30, 2015, OCWD may purchase up to 170,000 AF for groundwater basin replenishment during the ensuing water year, beginning July 1, 2016, pursuant to the District Act. Since the formation of OCWD in 1933, OCWD has made substantial investment in facilities, basin management and water rights protection, resulting in the elimination and prevention of

[11] OCWD Groundwater Management Plan, 2015 Update, June 17, 2015.

adverse long-term "mining" overdraft conditions. OCWD continues to develop new replenishment supplies, recharge capacity and basin protection measures to meet projected production from the basin during average/normal rainfall and drought periods.[12] OCWD has invested in seawater intrusion control (injection barriers), recharge facilities, laboratories and basin monitoring to effectively manage the basin. Some of these programs include:

Recharge Facilities - OCWD currently owns and operates more than 1,500 acres of surface water recharge facilities in and adjacent to the SAR and Santiago Creek. OCWD has built a recharge system that provides the majority of water supplied by the District. The 23 major facilities in the Anaheim/Orange area are grouped into four major components: the Main River System, the Off-River System, the Deep Basin System, and the Burris Pit/Santiago System. Each system has a series of percolation spreading basins, either shallow or deep, whose sidewalls and bottoms allow for percolation into the underlying aquifer.

Seawater Intrusion Barriers - OCWD's Talbert Barrier is composed of a series of injection wells that span the 2.5-mile-wide Talbert Gap between the Newport and Huntington mesas. The Talbert Barrier wells can inject approximately 42 MGD of water into four aquifer zones. Injecting water through the wells forms a hydraulic barrier to seawater that would otherwise migrate inland toward areas of groundwater production.

The Alamitos seawater intrusion barrier is composed of a series of injection wells that span the Los Angeles/Orange County line in the Seal Beach-Long Beach area. It is operated by the Los Angeles County Department of Public Works (LACDPW) in cooperation with OCWD and the Water Replenishment District (WRD). The source of this water is a blend of purified wastewater from WRD and potable supplies from Metropolitan. Also, the Alamitos Barrier System includes four extraction wells located seaward of the injection barrier to create a pumping trough to remove the degraded brackish groundwater.

Groundwater Monitoring – OCWD has one of the most sophisticated groundwater monitoring programs in the country. The District runs more than 350,000 analyses of water from more than 650 wells every year. OCWD performs nearly 50 percent more water quality tests than it is required to do in order to ensure the highest water quality possible. In 2004, OCWD completed a 10-year, $10 million Santa Ana River Water Quality and Health Effects Study, which demonstrated the safety of SAR water as a source for recharging the groundwater basin. A panel of nationally recognized experts provided an independent review of the study and validated its positive results.

[12] Orange County Water District, *Groundwater Management Plan, 2015 Update,* June 17, 2015.

5.1.1 OCWD Long Term Facilities Plan (LFTP)

OCWD developed a LTFP through a series of discussions in 2008-2009 with its Board of Directors and producers. It was received and filed by the Board in July 2009. Its purpose was to evaluate potential basin and water quality enhancement projects that may be implemented in the 20-year planning period. In 2012, OCWD staff made a presentation to the OCWD Board updating the progress on the 19 projects included in the LTFP and recommended the LFTP purpose going forward include the following:

- Identify and evaluate potential projects to:
    - cost effectively increase the amount of sustainable yield
    - protect and enhance groundwater quality
    - increase operational efficiency
- Prioritize efforts for next 3 to 5 years
- Assist with preparation of capital improvement program budget
- Becomes a living document, updated periodically

The LTFP utilizes the most recent information developed in OCWD's Groundwater Management Plan and Recharge Development Study. The LTFP includes a master list of developed and proposed projects. The various projects are grouped into five categories: (1) recharge facilities, (2) water source facilities, (3) basin management facilities, (4) water quality management facilities, and (5) operational improvements facilities. Each project is evaluated using criteria such as technical feasibility, cost, institutional support, functional feasibility, and environmental compliance. The LTFP currently tracks 19 projects that are either under construction or completed, in design or feasibility study completed, or in concept stage. Staff completed updating the LFTP and a copy of the LFTP 2014 Update, dated November 19, 2014 is on OCWD's website (ocwd.com).

5.1.2 OCWD Groundwater Management Plan (GMP)

OCWD finalized its GMP in June 2015, which updated its 2009 and 2004 GMPs. The GMP complies with SB 1938, passed in 2002, which includes a list of items to be included in a GMP. A copy of this GMP is available on OCWD's website (ocwd.com). The GMP's objectives include (1) protecting and enhancing groundwater quality, (2) increasing the basin's sustainable yield in a cost-effective manner, and (3) increasing operational efficiency.[13] Various programs, policies, goals, and projects are defined in the GMP to assist OCWD staff meet these objectives. The potential projects described in the GMP are discussed in further detail in the LTFP. The GMP describes the following:

- the background and purpose of the GMP

[13] Orange County Water District, Groundwater Management Plan, June 17, 2015.

- the hydrogeology of the basin
- the range of activities and management programs, including groundwater monitoring, groundwater quality management, production management, recharge water supply, and improvement projects
- the historical and future water demands and integrated demand/supply management strategies
- the financial management programs
- the recommendations for continued proactive basin management

5.1.3 OCWD 2020 Water Master Plan Report (MPR)

OCWD's 2020 Water Master Plan Report (MPR) describes local water supplies and estimates their availability extending to the year 2020. Specifically, OCWD states in their 2020 Water MPR that significant water supply sources will be available in the future for potable, non-potable, and recharge purposes. The 2020 Water MPR discusses source waters such as imported water from Metropolitan, base flows from the Santa Ana River, treated wastewater through the OCWD/OCSD GWRS program, and possibly desalinated ocean water. The local supplies' availability and projections from the 2020 Water MPR are incorporated in the LTFP.

5.1.4 OCWD Huntington Beach Sea Water Desalination Facility

As technology progresses, additional water supplies and facilities are being brought on line to further assure water supply reliability well into the future.

One recent example is the proposal by Poseidon Resources, Inc. to build a 50 MGD (56,000 AFY) seawater desalination project in Huntington Beach called the Huntington Beach Sea Water Desalination Facility. Poseidon Resources Corporation is working with local and state agencies to obtain the required permits to ensure proper safeguards to the community and environment. The Environmental Impact Report was certified in September 2005 by the Huntington Beach City Council. The City Council also approved the Coastal Development Plan, Conditional Use Permit, and Owner's Participation Agreement for the facility in February 2006. In 2014 the California Coastal Commission issued a staff report on the project requiring a revised intake facility that Poseidon Resources indicated could render the project infeasible and pulled their application pending additional studies. In 2015, OCWD announced it would spearhead efforts to move this project forward and is currently working on options to purchase all the capacity and distribute it directly to agencies within its boundary as well as use a portion of the capacity for injection along its seawater barrier.

Again, this is just one example of a new project and new technology ensuring water reliability into the future. Another example includes OCWD's Groundwater Replenishment System discussed above.

5.2 Metropolitan Water District Supply Reliability

Metropolitan was formed in the late 1920's. Collectively, charter members recognized the limited water supplies available within the region, and realized that continued prosperity and economic development of Southern California depended upon the acquisition and careful management of an adequate supplemental water supply. This foresight made the continued development of Southern California possible.

Metropolitan acquires water from Northern California via the State Water Project (SWP) and from the Colorado River to supply water to most of Southern California. As a wholesaler, Metropolitan has no retail customers, and distributes treated and untreated water directly to its 26 member agencies. One such member agency is MWDOC and Mesa Water is a member agency of MWDOC.

Through the Integrated Resources Plan and subsequent updates including the 2015 update, Metropolitan has worked toward identifying and developing water supplies to provide 100 percent reliability. Due to competing needs and uses for all of the water sources and regional water operational issues, Metropolitan has undertaken a number of planning processes: the Integrated Resources Planning (IRP) Process, the Water Surplus and Drought Management (WSDM) Plan, the Strategic Planning Process, the Urban Water Management Plan, and the WSAP. Combined, these documents provide a framework and guidelines for optimum water planning into the future.

The reliability and operational issues related to Metropolitan's various sources of supply are discussed in detail by major source in the subsequent sections.

5.2.1 State Water Project

The SWP is owned and operated by the California Department of Water Resources (DWR). The reliability of the SWP impacts Metropolitan's member agencies' ability to plan for future growth and supply. On an annual basis, each of the 29 SWP contractors, including Metropolitan, request an amount of SWP water based on their anticipated yearly demand. In most cases, Metropolitan's requested supply is equivalent to its full Table A Amount,[14] currently at 1,911,500 AFY. The full Table A amount is defined as the maximum amount of imported water to be delivered and is specified in the contract between the DWR and the contractor. After receiving the requests, DWR assesses the amount of water supply available based on precipitation, snow pack on northern California watersheds, volume of water in storage, projected carry over storage, and Sacramento-San Joaquin Bay Delta regulatory requirements. Due to the uncertainty in water supply, contractors are not

[14] Generally, two types of deliveries are assumed for all SWP contractors: Table A and Article 21. Table A Amount is the contractual amount of allocated SWP supply, set by percentage amount annually by DWR; it is scheduled and uninterruptible. Article 21 water refers to the SWP contract provision defining this supply as water that may be made available by DWR when excess flows area available in the Delta (i.e., Delta outflow requirements have been met, SWP storage south of the Delta is full, and conveyance capacity is available beyond that being used for SWP operations and delivery of allocated and scheduled Table A supplies). Article 21 water is made available on an unscheduled and interruptible basis and is typically available only in average to wet years, generally only for a limited time in the later winter.

typically guaranteed their full Table A Amount, but instead a percentage of that amount based on the available supply. Once the percentage is set early in the water year, the agency can count on that amount of supply or more in the coming year. The percentage is typically set conservative and then held or adjusted upwards later in the year based on a reassessment of precipitation, snow pack, etc.

SWP supplies are estimated using the 2015 SWP Delivery Capability Report distributed by DWR in July 2015. The 2015 Delivery Capability Report presents the current DWR estimate of the amount of water deliveries for current conditions and conditions 20 years in the future. These estimates incorporate restrictions on SWP and Central Valley Project (CVP) operations in accordance with the biological opinions of the U.S. Fish and Wildlife Service and National Marine Fisheries Service issued on December 15, 2008, and June 4, 2009, respectively. Under the 2015 Delivery Capability Report with existing conveyance and low outflow requirements scenario, the delivery estimates for the SWP for 2020 conditions as percentage of Table A amounts are 12 percent, equivalent to 230 thousand acre-feet (TAF) to Metropolitan, under a single dry-year (1977) condition and 51 percent, equivalent to 975 TAF, under the long-term average condition.

In dry, below-normal conditions, Metropolitan has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and transfer programs. Over the last two years under the pumping restrictions of the SWP, Metropolitan has worked collaboratively with the other contractors to develop numerous voluntary Central Valley/SWP storage and transfer programs. The goal of these storage/transfer programs is to develop additional dry-year supplies that can be conveyed through the California Aqueduct during dry hydrologic conditions and regulatory restrictions.

Metropolitan has made rapid progress to date developing SWP storage and transfer programs. Most notably, Metropolitan has utilized approximately 457 TAF to supplement its SWP supplies during the recent 2012-2015 unprecedented drought. Of this total, approximately 325 TAF are from SWP storage program extractions in Semitropic, Arvin, Kern Delta, and Mojave; 57 TAF are from the San Bernardino and SGV-Metropolitan programs; and 78 TAF of SWP transfer supplies were purchased from the State Water Contractors Buyers Group, Multi-Year Water Pool, and Yuba water purchase programs.

The Bay Delta Conservation Plan

Much of the SWP water supply passes through the San Francisco-San Joaquin Bay-Delta (Bay-Delta). The SWP consists of a series of pump stations, reservoirs, aqueducts, tunnels, and power plants operated by DWR. This statewide water supply infrastructure provides water to 29 urban and agricultural agencies throughout California. More than two-thirds of California's residents obtain some of their drinking water from the Bay-Delta system.

The Bay-Delta's declining ecosystem, caused by a number of factors that include agricultural runoff, predation of native fish species, urban and agricultural discharge, changing ecosystem food supplies, and overall system operation, has led to reduction in

water supply deliveries. SWP delivery restrictions due to regulatory requirements resulted in the loss of about 1.5 MAF of supplies to Metropolitan from 2008 through 2014, reducing the likelihood that regional storage can be refilled in the near-term. Operational constraints will likely continue until a long-term solution to the problems in the Bay-Delta is identified and implemented.

In April 2015, the Brown Administration announced California WaterFix, as well as a separate ecosystem restoration effort called California EcoRestore. Together, the California WaterFix and California EcoRestore will make significant contributions toward achieving the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem established in the Sacramento-San Joaquin Delta Reform Act of 2009. In addition to enhancing the Delta Ecosystem there are a number major actions, projects, and programs Metropolitan has undertaken to improve SWP reliability.

The Bay Delta Conservation Plan (BDCP) was prepared through a collaboration of state, federal, and local water agencies, state and federal fish agencies, environmental organizations, and other interested parties. At the outset of the BDCP process, a planning agreement was developed and executed among the participating parties and a Steering Committee was formed. The BDCP identified a set of conservation measures including water conveyance improvements and restoration actions to contribute to the recovery of endangered and sensitive species and their habitats in California's Sacramento-San Joaquin Delta. The BDCP was formulated to contribute to the state's co-equal goals of water supply reliability and ecosystem restoration.

Lead agencies for the EIR/EIS were the California Department of Water Resources, the USBR, the United States Fish and Wildlife Service, and National Oceanic and Atmospheric Administration's National Marine Fisheries Service, in cooperation with the California Department of Fish and Game, the United States Environmental Protection Agency and the United States Army Corps of Engineers. Metropolitan served on the steering committee. DWR and USBR are the lead agencies for the California WaterFix.

In order to select the most appropriate elements of the final conservation plan, the BDCP considered a range of options for accomplishing these goals using information developed as part of an environmental review process. Potential habitat restoration and water supply conveyance options included in the BDCP were assessed through an Environmental Impact Report (EIR)/Environmental Impact Statement (EIS). The BDCP planning process and the supporting EIR/EIS process is being funded by state and federal water contractors. The First Administrative Draft BDCP was released in March 2012, a Second Administrative Draft BDCP and EIR/S was released in March 2012 and the Public Draft BDCP and EIR/S was released December 2013. Each of the above draft documents were released to the public. The official public comment draft was released in December 2013.

A new permitting approach and associated new alternatives to the BDCP were announced in April 2015. The California WaterFix and California EcoRestore would be implemented under a different Endangered Species Act permitting process. This would fulfill the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of providing a more reliable water supply for California and protecting, restoring and

enhancing the Delta ecosystem. DWR and USBR serve as lead agencies for the California WaterFix. The new water conveyance facilities included in Alternative 4 (the BDCP) would be constructed and operated under the California WaterFix. Proposes changes to the design of the water conveyance facilities reduce the overall environmental/construction impacts to the environment, minimize disruptions to local communities, and increase long-term operational and cost benefits.

Some of the engineering improvements configuration improvements would include moving the tunnel alignment away from local communities and environmentally sensitive areas. The elimination of pumping plants, reduction of permanent power lines and power use, and the reconfiguration of intake and pumping facilities sediment basins and reconfiguration/relocation of the construction staging sites in the North Delta will lessen construction and longer term operational impacts. If implemented, these would result in reduced environmental and construction impacts and increase improved long-term operational and cost benefits.

The main objective under the EcoRestore Program is to pursue at least 30,000 acres of Delta habitats over the next five years. These restoration programs would include projects and actions that are in compliance with pre-existing regulatory requirements designed to improve the overall health of the Delta. Other priority restoration projects would also be identified by the Delta Conservancy and other local governments. Funding would be provided through multiple sources including state bonds and other state-mandated funds, State Water Project/Central Valley Project contractors' funds as part of existing regulatory obligations, and from various local and federal partners.

As part of the new alternatives and the state's proposed project, the regulatory approach to obtaining state and federal endangered species compliance is shifting from the BDCP Habitat Conservation Plan/Natural Community Conservation Plan strategy to an approach that contemplates a Biological Opinion pursuant to Federal Endangered Species Act (ESA) Section 7 and a State 2081 Permit. This approach as well as the proposed revision to the new water facilities and ecosystem restoration actions is evaluated in the partially Recirculated Draft EIR/EIS released in July 2015. The deadline for comments is October 2015.

The State Water Resources Control Board (SWRCB) is continuing its phased review and update of the 2006 Water Quality Control Plan (WQCP) for the Bay-Delta. The first phase focuses on the southern Delta salinity objectives for the protection of agriculture, San Joaquin River flow objectives for the protection of fish and wildlife, and a program of implementation for achieving those objectives. The second phase considers the comprehensive review of the other elements of the Bay-Delta WQCP, including but not limited to Sacramento River and Delta outflow objectives.

Metropolitan has been collaborating with water users and other stakeholders to develop sound science and technical analyses in support of the WQCP review process, including sharing results in technical forums and publishing findings in peer-reviewed scientific journals. Metropolitan has been meeting with Board members and staff to share findings as new science and analyses are developed and to encourage close coordination between BDCP and WQCP updates.

The goal for SWP supplies is to adaptively manage flow and export regulations in the near term and to achieve a long-term Delta solution that addresses ecosystem and water supply reliability challenges. Achieving this goal will require continued participation and successful outcomes in the California WaterFix and the California EcoRestore efforts. As previously discussed, the primary challenge to water supply reliability from the SWP is from the water required for regulatory and flow-based actions to protect environmental concerns. It is also expected that the scheduled review and revision to Biological Opinions and operating rules would present further challenges to water supply reliability. Continued participation in the California WaterFix and California EcoRestore efforts will have both a near-term and long-term effect.

In the near-term, the efforts to permanently address pumping and flow-based environmental through the California WaterFix and the attention to environmental and ecosystem restoration in the California EcoRestore is expected to facilitate a continuation of collaborative adaptive management with the key regulatory agencies. Collaborative adaptive management has been occurring for a number of years with current biological standards and has resulted in a better balance of water supply reliability and regulatory compliance than what would have occurred with a strict adherence to flow-based standards. With agencies committed to a long-term solution to these issues in the Delta, it is anticipated that collaborative adaptive management would continue in the face of more stringent flow-based standards that could result from a review and strengthening of Biological Opinions.

In the long-term, the preferred alternative identified in the California WaterFix is expected to provide more flexible water diversions through improved conveyance and operations. The new conveyance and diversion facilities will allow for increased water supply reliability and a more permanent solution for flow-based environmental standards. The preferred alternative in the California WaterFix would also provide additional access to storm flows and interruptible water supplies that are occasionally available hydrologically but cannot be diverted due to system conveyance constraints.

Based on modeling done for the California WaterFix, it is estimated that the goal for SWP supplies in the 2015 IRP Update[15] will result in an average of about 980,000 acre-feet of SWP supplies in 2020 and 1.2 million acre-feet on average starting in 2030 when a long-term Delta solution is estimated to be in place. Table 5.1 provides a Summary of SWP Supplies Available to Metropolitan with 2015 IRP Update target development.

[15] Metropolitan develops Integrated Resource Plans (IRPs), which lay out how Metropolitan will secure and provide water to its customer base. These IRPs utilize hydrological and other data provided by DWR and are updated periodically through IRP Implementation Reports to reflect changing conditions.

Table 5.1
Summary of SWP Supplies Available to Metropolitan
With 2015 IRP Update Target Development (AF)

SWP	2016	2020	2025	2030	2035	2040
Minimum	210,000	229,000	229,000	314,000	314,000	314,000
Average	1,202,000	984,000	984,000	1,213,000	1,213,000	1,213,000
Maximum	2,022,000	1,695,000	1,695,000	1,863,000	1,863,000	1,863,000

Source: 2015 IRP Update Report

5.2.2 Colorado River Aqueduct

The Colorado River was Metropolitan's original source of water after Metropolitan's establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River or its tributaries is also available to other users in California, as well as to users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the "Colorado River Basin States"), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 million acre-feet of Colorado River water annually, except in the event of extraordinary drought or serious accident to the delivery system in the United States, when the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 million acre-feet allotted to Mexico.

The Colorado River Aqueduct, which is owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. After deducting for conveyance losses and considering maintenance requirements, up to 1.2 million acre-feet of water a year may be conveyed through the Colorado River Aqueduct to Metropolitan's member agencies, subject to availability of Colorado River water for delivery to Metropolitan as described below.

California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona and Nevada when such supplies have been requested for use in California. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment of 4.4 million acre-feet. In addition,

Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment.

Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. Under a 1988 water conservation agreement (the "1988 Conservation Agreement") between Metropolitan and the Imperial Irrigation District (IID), IID has constructed and is operating a number of conservation projects that are currently conserving 105,000 acre-feet of water per year.

In 1992, Metropolitan entered into an agreement with the Central Arizona Water Conservation District (CAWCD) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of the State of Arizona. Pursuant to this agreement, CAWCD created 80,909 acre-feet of long-term storage credits that may be recovered by CAWCD for Metropolitan. Metropolitan, the Arizona Water Banking Authority, and CAWCD executed an amended agreement for recovery of these storage credits in December 2007. Metropolitan started recovering its credits in 2007. Water recovered by CAWCD under the terms of the 1992 agreement allows CAWCD to reduce its use of Colorado River water, resulting in Arizona having an unused apportionment. The Secretary of the Interior is making this unused apportionment available to Metropolitan under its Colorado River water delivery contract

In April 2008, Metropolitan's Board authorized the expenditure of $28.7 million to join the CAWCD and the Southern Nevada Water Authority (SNWA) in funding the construction of a new 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County. This reservoir was recently completed by the Bureau of Reclamation. The Drop 2 Reservoir is expected to save up to 70,000 acre-feet of water per year by capturing and storing water that would otherwise be lost. In return for its funding, Metropolitan received 100,000 acre-feet of water that is stored in Lake Mead until recovered, with annual long-term deliveries of up to 25,000 acre-feet of water through 2036. Besides the additional water supply, the new reservoir will add to the flexibility of Colorado River operations. SNWA will have stored approximately 330,000 acre-feet with Metropolitan through 2015. SNWA is not expected to call upon Metropolitan to return water until after 2019.

Metropolitan and the Palo Verde Irrigation District (PVID) signed the program agreement for a Land Management, Crop Rotation and Water Supply Program in August 2004. This program provides up to 133,000 acre-feet of water available to Metropolitan in certain years. The term of the program is 35 years. Fallowing of approximately 20,000 acres of land began on January 1, 2005. In 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 approximately 108,700 acre-feet, 105,000, and 72,300, 94,300, 120,200, 116,300, 122,200, 73,700, 32,800, and 43,000 acre-feet, respectively, of water were saved and made available to Metropolitan. In March 2009, Metropolitan and PVID entered into a one-year supplemental fallowing program within PVID that provides for the fallowing of additional acreage, with savings of 24,100 in 2009 and 32,300 acre-feet in 2010.

With Arizona's and Nevada's increasing use of their respective apportionments and the uncertainty of continued Colorado River surpluses, in 1997 the Colorado River Board of California, in consultation with Metropolitan, IID, PVID, CVWD, the Los Angeles Department of Water and Power and the San Diego County Water Authority (SDCWA), embarked on the development of a plan for reducing California's use of Colorado River water to its basic apportionment of 4.4 million acre-feet when use of that basic allotment is necessary (California Plan). In 1999, IID, CVWD, Metropolitan and the State of California agreed to a set of Key Terms aimed at managing California's Colorado River supply. These Key Terms were incorporated into the Colorado River Board's May 2000 California Plan that proposed to optimize the use of the available Colorado River supply through water conservation, transfers from higher priority agricultural users to Metropolitan's service area and storage programs.

To implement these plans, a number of agreements have been executed. One such agreement, the Quantification Settlement Agreement (QSA), is a landmark agreement signed by the four California Colorado River water use agencies and the U.S. Secretary of the Interior, which will guide reasonable and fair use of the Colorado River by California through the year 2037. The QSA was authorized in October 2003 and defined Colorado River water deliveries to the four California agencies as well as facilitated transfers from agricultural agencies to urban users. The QSA is a critical component of the California's Colorado River Water Use Plan.

The goal for CRA supplies is to maintain current levels of water supplies from existing programs, while also developing flexibility through dry-year programs and storage. Much of this goal involves protecting existing supply and storage programs in the face of risks that could impact CRA supplies in the future. Identified risks to future CRA supplies include increased demands from Colorado River uses whose rights to Colorado River water exceed Metropolitan's rights and climate change that can impact the frequency and depth of shortage declarations on the river.

In order to accomplish this goal, the 2015 IRP Update calls for developing sufficient base supply programs to ensure that a minimum of 900,000 acre-feet of diversions are available when needed and to ensure access to 1.2 million acre- feet of supplies in dry years through flexible programs and storage. This will require an approach that maintains existing base supply availability, minimizes reductions in base supplies from risks and challenges and augments base supply amounts to increase resilience to any reductions that may occur. Table 5.2 provides a summary of Colorado River diversion targets.

Table 5.2
Summary of Colorado River Diversion Targets (AF)

CRA	2016	2020	2025	2030	2035	2040
Minimum Diversion Target	900,000	900,000	900,000	900,000	900,000	900,000
Dry-Year Diversion Target	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000

Source: 2015 IRP Update Report

5.2.3 Storage

A key component of Metropolitan's water supply capability is the amount of water in Metropolitan's storage facilities. Storage is a major component of Metropolitan's dry-year resource management strategy. Metropolitan's likelihood of having adequate supply capability to meet projected demands, without implementing the Water Supply Allocation Plan (WSAP), is dependent on its storage resources.

In developing the supply capabilities in the 2015 UWMP, Metropolitan assumed the current (2015) storage levels at the start of simulation and used the median storage levels going into each of the five year increments based on the balances of supplies and demands. Under the median storage conditions, there is an estimated 50 percent probability that storage levels would be higher than the assumption used, and a 50 percent probability that storage levels would be lower than the assumption used. All storage capability figures shown in the 2015 UWMP reflect actual storage program conveyance constraints. Under some conditions, Metropolitan may choose to implement the WSAP in order to preserve storage reserves for a future year, instead of using the full supply capability. This can result in impacts at the retail level even under conditions where there may be adequate supply capabilities to meet demands.

Historically, local groundwater has been the most economical and reliable source of supply for Mesa Water. However imported Metropolitan water is available through the District's member agency, MWDOC. In FY 2015 all of Mesa Water was able to serve all of its water demands from groundwater (both clear and from the MWRF) and recycled water without reliance on imported water. Future demands are anticipated to be met without utilization of imported water as well; however this source is described below.

5.2.4 Supply Management Strategies

On the regional level, Metropolitan has taken a number of actions to secure a reliable water source for its member agencies. Metropolitan developed a water supply allocation plan (WSAP) [16] and has utilized it initially in 2009 and 2010 and in 2015 for dealing with potential shortages that took into consideration the impact on retail customers and the

[16] Metropolitan Water District Press Release dated February 12, 2008.

economy, changes and losses in local supplies, the investment in and development of local resources, and conservation achievements. Additional actions taken by Metropolitan over the past several years have increased spending on conservation, local projects and water supply/reliability enhancements significantly.

This spending plan included expenditures for the improvement of water conveyance facilities, water transfers, and providing financial assistance to member agency's local conservation, recycling, and groundwater clean-up efforts, and is continuing. To fund these past and future expenditures on conservation, recycling and other local projects, Metropolitan Tier 1 treated water rates were increased by almost 54% for the 5-year period from January 1, 2009 to January 1, 2014. Over the past two years, this rate increased more modestly by 3.7 and 2.0 percent each year for 2015 and 2016, respectively. And the rates recently approved by Metropolitan for 2017 and 2018 are similar at 3.9 and 3.7 percent, respectively.

5.2.5 Water Transfer and Exchange Programs

California's agricultural activities consume approximately 34 million acre-feet of water annually, which is 80 percent of the total water used for agricultural and urban uses and 40 percent of the water used for all consumptive uses. Voluntary water transfers and exchanges can make a portion of this agricultural water supply available to support the State's urban areas. Such existing and potential water transfers and exchanges are an important element for improving the water supply reliability within Metropolitan's service area and accomplishing the reliability goal set by Metropolitan's Board of Directors. Metropolitan is currently pursuing voluntary water transfer and exchange programs with state, federal, public and private water districts and individuals. The following are summary descriptions of some of these programs.

Arvin-Edison/Metropolitan Water Management Program. In December 1997, Metropolitan entered into an agreement with the Arvin-Edison Water Storage District (Arvin-Edison), an irrigation agency located southeast of Bakersfield, California. Under the program, Arvin-Edison stores water on behalf of Metropolitan. Up to 350,000 acre-feet of Metropolitan's water may be stored and Arvin-Edison is obligated to return up to 70,000 acre-feet of stored water in any year to Metropolitan, upon request. The agreement will terminate in 2035 unless extended.

Semitropic/Metropolitan Groundwater Storage and Exchange Program. In 1994 Metropolitan entered into an agreement with the Semitropic Water Storage District (Semitropic), located adjacent to the California Aqueduct north of Bakersfield, to store water in the groundwater basin underlying land within Semitropic. The minimum annual yield available to Metropolitan from the program is 31,500 acre-feet of water and the maximum annual yield is 223,000 acre-feet of water depending on the available unused capacity and the SWP allocation.

California Aqueduct Dry-Year Transfer Program. Metropolitan has entered into agreements with the Kern Delta Water District, the Mojave Water Agency (Demonstration Water Exchange Program) and the San Bernardino Valley Municipal Water District to

ensure against regulatory and operational uncertainties in the SWP system that could impact the reliability of existing supplies. The total potential yield for the three agreements is approximately 115,000 acre-feet of water per year.

Other Water Purchase, Storage and Exchange Programs in the San Joaquin and Sacramento Valleys. Metropolitan has been negotiating water purchase, storage and exchange programs with other agencies in the Sacramento and San Joaquin Valleys. These programs will involve the storage of both SWP supplies and water purchased from other sources to enhance Metropolitan's dry-year supplies and the exchange of normal year supplies to enhance Metropolitan's water reliability and water quality, in view of dry conditions and potential impacts from the ESA cases discussed above. Metropolitan has entered into agreements to purchase water transfer supplies for 2008 totaling 41,743 acre-feet from Western Canal Water District, Richvale Irrigation District, South Feather Water and Power Agency and South Sutter Water District. In addition, Metropolitan is pursuing water quality exchange partnerships with San Joaquin Valley agricultural districts, including the Friant Water Users Authority. The purpose of these partnerships is to improve the quality of water that Metropolitan receives via the California Aqueduct.

Yuba River Accord. Metropolitan entered into an agreement with the Department of Water Resources in December 2007 to purchase a portion of the water released by the Yuba County Water Agency (YCWA). YCWA was involved in a SWRCB proceeding in which it was required to increase Yuba River fishery flows. Metropolitan and other SWP contractors entered into agreements with the Department of Water Resources for purchase of portions of the water made available. Metropolitan's agreement allows Metropolitan to purchase 13,750 acre-feet to 35,000 acre-feet per year of water supplies in dry years through 2025.

Metropolitan/Coachella/Desert Water Agency Exchange and Advance Delivery Agreement. Metropolitan has agreements with the CVWD and the Desert Water Agency (Desert) that require Metropolitan to exchange its Colorado River water for those agencies' SWP entitlement water on an annual basis. Because Desert and Coachella do not have a physical connection to the SWP, Metropolitan takes delivery of Desert's and CVWD's SWP supplies and delivers a like amount of Colorado River water to the agencies. In accordance with an advance delivery agreement executed by Metropolitan, CVWD and Desert, Metropolitan delivers Colorado River water in advance to these agencies for storage in the Upper Coachella Valley groundwater basin. In years when supplies are needed to meet local demands, Metropolitan has the option to receive the water supply and must pay the associated SWP transportation costs and CVWD and Desert may use the stored water.

5.2.6 Metropolitan 2015 UWMP Supply Capability Projections

In their 2015 UWMP, Metropolitan estimated supply capability and projected demands for an average (normal) year based on an average of hydrologies for the years 1922-2012; for a single dry-year based on a repeat of the hydrology in the year 1977; and for multiple dry years based on a repeat of the hydrology of 1990-1992. These single and multiple-dry-year hydrologies were also used in Metropolitan's 2010 UWMP, 2010 IRP, and 2015 IRP as they historically represent the timing of the least amount of available water resources from the SWP, a major source of Metropolitan's supply.

Metropolitan developed demand forecasts by first estimating total retail demands for its service area and then factoring out water savings attributed to conservation. Projections of local supplies then were derived using data on current and expected local supply programs and the IRP Local Resource Program Target. The resulting difference between total demands net of conservation and local supplies is the expected regional demands on Metropolitan supplies. These estimates are summarized by category in Table 5.3 for average, single-dry and multiple-dry-year water supply scenarios. More detailed information on Metropolitan's forecasts and these tables can be found in their 2015 UWMP. In all scenarios shown in Table 5.3 there is a projected surplus, even without Metropolitan's Supplies under Development and Potential Supplies.

5.3 District Supply Reliability

OCWD and Metropolitan/MWDOC water supply reliability translates to District water supply reliability with groundwater from the OC Basin providing the District with 94 percent of its water supply needs (6 percent comes from recycled water), and Metropolitan/MWDOC imported water supply serving as a reliable backup water supply for the District.

The District pumps groundwater from the OC Basin via six wells that provide clear groundwater from the main production aquifer. The District operates, maintains, rehabilitates, and replaces these wells to ensure reliable clear groundwater production. Approximately 70 to 75 percent of the potable groundwater supply for the District comes from these six District wells.

Mesa Water constructed the MWRF in 2012 to remove organic amber color from the groundwater pumped from two District wells, which as a result, enables the water to be utilized as potable water in the District's water system. The balance of the potable groundwater supply for the District (25 to 30 percent) is MWRF-treated groundwater. These two wells are also well maintained and will be replaced as required to ensure reliable supply to help meet District demands. MWRF groundwater production is BEA Exempt, which allows the District to utilize groundwater to meet 100 percent of demands. Without the MWRF, District groundwater production would be restricted by the BPP pumping percentage, and more expensive imported water would need to be purchased to satisfy District water demands. Instead, imported water can be used as a reliable back-up water supply.

Table 5.3
Metropolitan Regional Water Demands
Single Dry, Multiple Dry and Average Years (AF)

Single Dry Year MWD Supply Capability and Projected Demands (1977 Hydrology)					
Forecast Year	2020	2025	2030	2035	2040
Capability of Current Programs	2,584,000	2,686,000	2,775,000	2,905,000	2,941,000
Projected Demands	2,005,000	2,066,000	2,108,000	2,160,000	2,201,000
Projected Surplus	579,000	620,000	667,000	745,000	740,000
Projected Surplus %[(a)]	29%	30%	32%	34%	34%
Programs under Development	63,000	100,000	316,000	358,000	398,000
Potential Surplus	642,000	720,000	983,000	1,103,000	1,138,000
Potential Surplus %[(a)]	32%	35%	47%	51%	52%
Multiple Dry Year MWD Supply Capability and Projected Demands (1990-1992 Hydrology)					
Forecast Year	2020	2025	2030	2035	2040
Capability of Current Programs	2,103,000	2,154,000	2,190,000	2,242,000	2,260,000
Projected Demands	2,001,000	2,118,000	2,171,000	2,216,000	2,258,000
Projected Surplus	102,000	36,000	19,000	26,000	2,000
Projected Surplus %[(a)]	5%	2%	1%	1%	0.1%
Programs under Development	43,000	80,000	204,000	245,000	286,000
Potential Surplus	145,000	116,000	223,000	271,000	288,000
Potential Surplus %[(a)]	7%	5%	10%	12%	13%
Average Year MWD Supply Capability and Projected Demands (1922 - 2012 Hydrology)					
Forecast Year	2020	2025	2030	2035	2040
Capability of Current Programs	3,448,000	3,550,000	3,658,000	3,788,000	3,824,000
Projected Demands	1,860,000	1,918,000	1,959,000	2,008,000	2,047,000
Projected Surplus	1,588,000	1,632,000	1,699,000	1,780,000	1,777,000
Projected Surplus %[(a)]	85%	85%	87%	89%	87%
Programs under Development	63,000	100,000	386,000	428,000	468,000
Potential Surplus	1,651,000	1,732,000	2,085,000	2,208,000	2,245,000
Potential Surplus %[(a)]	89%	90%	106%	110%	110%

(a) As a percentage of projected demand
Source – 2015 Metropolitan Urban Water Management Plan, June 2016

Normal-year, dry-year, and multiple dry-year demands projected for the District through FY 2040 as estimated in the District's 2015 UWMP, which included the Proposed Project demands, were compared with projected available groundwater and recycled water supplies as shown in Tables 5.4, 5.5, and 5.6, respectively. Demands for dry-year scenarios were increased 6.0 percent consistent with the District's 2015 UWMP.

The District is projected to have sufficient groundwater supply and supplementary recycled water supply to meet all normal, single-dry year, and multiple-dry year demands, including the Proposed Project demands, through the year 2040, with imported water as a back-up water supply source.

Table 5.4
District Projected Normal-Year Water Supply and Demand (AF)

Water Sources	2020	2025	2030	2035	2040
Supply	Normal Year				
Clear Groundwater	14,427	14,473	14,519	14,566	14,612
MWRF Treated Groundwater	5,083	5,103	5,123	5,143	5,162
Recycled Water	1,100	1,100	1,100	1,100	1,100
Total Supply[(a)]	20,610	20,676	20,742	20,809	20,874
Demand	Normal Year				
Total District Demand without Project	20,520	20,559	20,625	20,692	20,757
Additional Project Demand	90	117	117	117	117
Total Demand[(a)]	20,610	20,676	20,742	20,809	20,874

(a) From Table 3-5, Mesa Water District Final 2015 UWMP

Table 5.5
District Projected Single Dry-Year Water Supply and Demand (AF)

Water Sources	2020	2025	2030	2035	2040
Supply	Normal Year				
Clear Groundwater	15,293	15,341	15,390	15,440	15,489
MWRF Treated Groundwater	5,388	5,409	5,430	5,452	5,472
Recycled Water	1,166	1,166	1,166	1,166	1,166
Total Supply[(a)]	21,847	21,917	21,987	22,058	22,126
Demand	Single Dry Year				
Total District Demand without Project	21,755	21,798	21,868	21,939	22,008
Additional Project Demand	92	119	119	119	119
Total Demand[(a)]	21,847	21,917	21,987	22,058	22,126

(a) From Table 3-6, Mesa Water District Final 2015 UWMP (normal supply and demands increased by 6.0%)

Table may not total exactly due to spreadsheet rounding

Table 5.6
District Projected Multiple Dry-Year Water Supply and Demand (AF)

Supply Sources/Demands	2020	2025	2030	2035	2040
Supply	First Multiple Dry Year				
Clear Groundwater	15,293	15,341	15,390	15,440	15,489
MWRF Treated Groundwater	5,388	5,409	5,430	5,452	5,472
Recycled Water	1,166	1,166	1,166	1,166	1,166
Total Supply[(a)]	21,847	21,917	21,987	22,058	22,126
Total Demand[(a)]	21,847	21,917	21,987	22,058	22,126
Supply	Second Multiple Dry Year				
Clear Groundwater	15,293	15,341	15,390	15,440	15,489
MWRF Treated Groundwater	5,388	5,409	5,430	5,452	5,472
Recycled Water	1,166	1,166	1,166	1,166	1,166
Total Supply[(a)]	21,847	21,917	21,987	22,058	22,126
Total Demand[(a)]	21,847	21,917	21,987	22,058	22,126
Supply	Third Multiple Dry Year				
Clear Groundwater	15,293	15,341	15,390	15,440	15,489
MWRF Treated Groundwater	5,388	5,409	5,430	5,452	5,472
Recycled Water	1,166	1,166	1,166	1,166	1,166
Total Supply[(a)]	21,847	21,917	21,987	22,058	22,126
Total Demand[(a)]	21,847	21,917	21,987	22,058	22,126

(a) From Table 3-7, Mesa Water District Final 2015 UWMP (normal supply and demands increased by 6.0%)

Table may not total exactly due to spreadsheet rounding

6 CONCLUSION

The estimated buildout normal year water demand for the Proposed Project is projected to be 112 AF greater than the FY 2015 water demand for the existing land uses at the Project site (a total of 117 AF), which is less than 0.6 percent of the total demand estimated for the District in FY 2040 including water loss.

The information included in this WSA identifies a sufficient and reliable water supply for the District, now and into the future, including a sufficient water supply for the re-developed land uses proposed for the Proposed Project. These supplies are also sufficient to provide for overall District-wide growth at the rate projected in the District's 2015 UWMP.

7 REFERENCES

The following documents were used, in conjunction with discussions with Mesa Water staff, in preparing this water supply assessment:

Mesa Water District, *2015 Urban Water Management Plan*, *Final*, June 2016.

Department of Water Resources (DWR), *Bulletin 118-1 Basin Description for Coastal Plain of Orange County Groundwater Basin Number 8-1*, September 5, 2001.

DWR, *The State Water Project Final Delivery Reliability Report 2015, July 2015.*

Metropolitan Water District of Southern California (MWD), *Water Revenue Refunding Bonds, 2008 Series C*, *Appendix A*, July 2008.

Metropolitan Water District of Southern California (MWD), 2015 *Urban Water Management Plan, June* 2015.

Metropolitan Water District of Southern California (MWD), *Integrated Water Resources Plan 2015 Update,* January 2016.

Orange County Water District (OCWD), *Orange County Water District 2020 Master Plan Report,* 2000.

Orange County Water District (OCWD), *Engineer's Report,* 2014-2015, February 2016.

Orange County Water District (OCWD), *Resolution No. 13-1-6 Stating the District's Goal to Develop the Necessary Supplies and Facilities to Achieve and Maintain a 75% Basin Production Percentage*. Orange County Water District Board, January 16, 2013.

Orange County Water District (OCWD), The OCWD Act.

Orange County Water District (OCWD), OCWD v. City of Chino, et al, (Civ. Case No. 117628), Judgment and Settlement Documents.

Orange County Water District (OCWD), Groundwater Management Plan 2015 Update, June 17, 2015.

APPENDIX A

CITY OF COSTA MESA
WATER EFFICIENT LANDSCAPE
ORDINANCE (ORD. NO. 16-03)

ORDINANCE NO. 16-03

AN ORDINANCE OF THE CITY COUNCIL OF COSTA MESA, CALIFORNIA ADOPTING ZONING CODE AMENDMENT CO-15-05, AMENDING TITLE 13, CHAPTER VII, LANDSCAPE STANDARDS OF THE COSTA MESA MUNICIPAL CODE REGARDING WATER EFFICIENT LANDSCAPE STANDARDS

THE CITY COUNCIL OF THE CITY OF COSTA MESA DOES HEREBY ORDAIN AS FOLLOWS:

WHEREAS, consistent with the findings of the State Legislature, the City Council finds that the waters of the State are of limited supply and are subject to ever increasing demands;

WHEREAS, landscape design, installation, maintenance, and management can and should be water efficient;

WHEREAS, Article X, Section 2 of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served, and the right does not and shall not extend to waste or unreasonable method of use of water;

WHEREAS, allocation-based and tiered water rate structures allow public agencies to document water use in landscapes;

WHEREAS, all water services within the City are metered and billed based on volume of use;

WHEREAS, Costa Mesa is served by two water purveyors, Irvine Ranch Water District (IRWD) and Mesa Consolidated Water District (Mesa). IRWD is implementing budget- based tiered-rate billing and/or enforcement of water waste prohibitions for all existing metered landscaped areas throughout its service area, which includes a portion of City containing business and industrial parks south of the 405 Freeway. Mesa is implementing enforcement of water waste prohibitions for all existing metered landscaped areas within its jurisdiction by Water Conservation Ordinance No. 46 adopted on November 12, 2015, which limits the watering and irrigation of landscaping to one day a week;

WHEREAS, On January 19, 2010, the City Council adopted Water Efficient Landscape Ordinance and corresponding Guidelines consistent with the requirements of AB 1881;

WHEREAS, the purpose of the amendment to City's Water Efficient Landscape Ordinance and Guidelines is to establish an alternative model acceptable under Governor Brown's April 1, 2015 Drought Executive Order (B-19-25) as being at least as effective as the State Model Water Efficient Landscape Ordinance in the context of conditions in the City in order to:

3. New or rehabilitated landscape projects with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix A of the *Guidelines*;

4. New or rehabilitated projects using treated or untreated graywater or rainwater capture on site, any lot or parcels within the project that has less than 2,500 square feet of landscape area and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with the treated or untreated graywater or though stored rainwater capture on site is subject only to Appendix A of the *Guidelines*.

(d) This water Efficient Landscape Ordinance does not apply to:

1. Registered local or state historical sites;
2. Ecological restoration projects that do not require a permanent irrigation system;

SECTION 2: Title 13, Chapter VII, Section 13-106 of the Costa Mesa Municipal Code is hereby amended as follows:

(a) All required landscaped areas, including landscape areas within parking lots, shall consist of drought tolerant plan material and shall meet the following minimum requirements:

'[....]

(4) Groundcover: At least 70 per cent of all landscaped areas containing trees and shrubs shall be underplanted with groundcover, with the remaining areas to incorporate a layer of uncontaminated compost or mulch as required per Water Efficient Landscape Guidelines. Decorative (commercial) bark is not acceptable. Groundcover shall be planted in a triangular-spaced pattern to ensure 100 percent coverage within one year of planting. A minimum 2-foot diameter clearance, measured from each tree trunk, shall be maintained free of groundcover or turf. Uncontaminated shredded mulch or compost shall be applied and maintained in these areas.

(5) Turf: Turf incorporated into the landscape design shall not exceed thresholds established by the Guidelines, except for active play areas such as parks, sports fields and golf courses. All turf shall be of a drought tolerant variety. Redwood headerboard, or other material acceptable by the planning division, shall be installed to separate turf from planter and groundcover areas.

SECTION 3: Title 13, Chapter VII, Section 13-107, as follows:

"Sec. 13-107. IRRIGATION REQUIREMENTS

(a) Irrigation and drip systems shall be provided in accordance with Section 2.5 of the Water Efficient Landscape Guidelines. All landscaped areas as specified in the Guidelines shall be provided with an approved irrigation system Landscaped areas with an automatically time-controlled sprinkler system when the site is zoned commercial or industrial, or when the site is zoned residential and permits more than 2 dwelling units.

(b) **Irrigation system:** The Irrigation and/or drip system shall consist of underground piped water lines with low water flow sprinklers and/or a drip or trickle irrigation system as specified in the Guidelines. The system chosen shall be designed to provide adequate coverage to all plant material, existing and proposed. Water meter and line sizes shall be calculated from total water demand, which should be, at least, the sum of the maximum irrigation demand and all building demand. Due to varying irrigation requirements, separate control valves and/or sprinkler/emitter heads shall be used when shrubs and turf all appear on the same landscape plan. The irrigation system shall be designed so that overspray, runoff, and low-head drainage onto streets, sidewalks, windows, walls, and fences are minimized. Automatic systems for watering cycles shall be scheduled to maximize ground infiltration rates and further minimize runoff.

SECTION 4: ENVIRONMENTAL DETERMINATION. The project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA guidelines, and the City's environmental procedures, and has been found to be exempt pursuant to Section 15061 (b) (3) (general rule) of the CEQA Guidelines, in that the City Council hereby finds that it can be seen with certainty that there is no possibility that the passage of this ordinance amending the Municipal Code will have a significant effect on the environment.

SECTION 5: INCONSISTENCIES. Any provision of the Costa Mesa Municipal Code or appendices thereto inconsistent with the provisions of this ordinance, to the extent of such inconsistencies and or further, is hereby repealed or modified to the extent necessary to affect the provisions of this ordinance.

SECTION 6: APPLICABILITY. The provisions of this ordinance shall be applicable to all properties within City limits as applicable noted hereto.

SECTION 7: SEVERABILITY. If any provision or clause of this ordinance or the application thereof to any person or circumstances is held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect other provisions or clauses or applications of this ordinance which can be implemented without the invalid provision, clause or application; and to this end, the provisions of this ordinance are declared to be severable.

SECTION 8: PUBLICATION. This Ordinance shall take effect and be in full force thirty (30) days from and after the passage thereof, and prior to the expiration of fifteen (15) days from its passage shall be published once in the DAILY PILOT, a newspaper of general circulation, printed and published in the City of Costa Mesa or, in the alternative, the City Clerk may cause to be published a summary of this Ordinance and a certified copy of the text of this Ordinance shall be posted in the office of the City Clerk five (5) days prior to the date of adoption of this Ordinance, and within fifteen (15) days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post in the office of the City Clerk a certified copy of this Ordinance together with the names and member of the City Council voting for and against the same.

PASSED AND ADOPTED this 1st day of March, 2016.

Stephen M. Mensinger, Mayor

APPROVED AS TO FORM:

Thomas Duarte, City Attorney

ATTEST:

Brenda Green

Brenda Green, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF COSTA MESA)

I, BRENDA GREEN, City Clerk and ex-officio Clerk of the City Council of the City of Costa Mesa, hereby certify that the above foregoing Ordinance No. 16-03 as introduced and considered section by section at a regular meeting of said City Council held on the 16th day of February, 2016, and thereafter passed and adopted as a whole at the regular meeting of said City Council held on the 1st day of March, 2016, by the following roll call vote:

AYES:	COUNCIL MEMBERS:	GENIS, MONAHAN, RIGHEIMER, MENSINGER
NOES:	COUNCIL MEMBERS:	NONE
ABSENT:	COUNCIL MEMBERS:	FOLEY

IN WITNESS WHEREOF, I have hereby set my hand and affixed the Seal of the City of Costa Mesa this 2nd day of March, 2016.

Brenda Green

Brenda Green, City Clerk