Appendix A Initial Study/Notice of Preparation and Comments on the IS/NOP

CITY OF COSTA MESA
125 EAST BAKER STREET APARTMENT PROJECT
Initial Study

Final

Prepared for
City of Costa Mesa
Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, California 92628

Prepared by
Atkins
12301 Wilshire Boulevard, Suite 430
Los Angeles, California 90025

August 2013

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SECTION 1. **Introduction**

This checklist is to be completed for all projects that are subject to environmental review under the California Environmental Quality Act (CEQA). The information, analysis, and conclusions contained in the checklist form the basis for deciding whether an environmental impact report (EIR), a negative declaration (ND), or a mitigated negative declaration (MND) is to be prepared. Additionally, the checklist shall be used to focus an EIR on the effects determined to be potentially significant.

1. Project title:

Baker Street Apartment Project

2. Lead agency name and address:

City of Costa Mesa
Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, California 92628

3. Contact person and phone number:

Claire Flynn, AICP, Assistant Development Services Director
714.754.5245

4. Project location:

125 East Baker Street, City of Costa Mesa (Refer to Figure 1 [Regional Location])

5. Project sponsor's name and address:

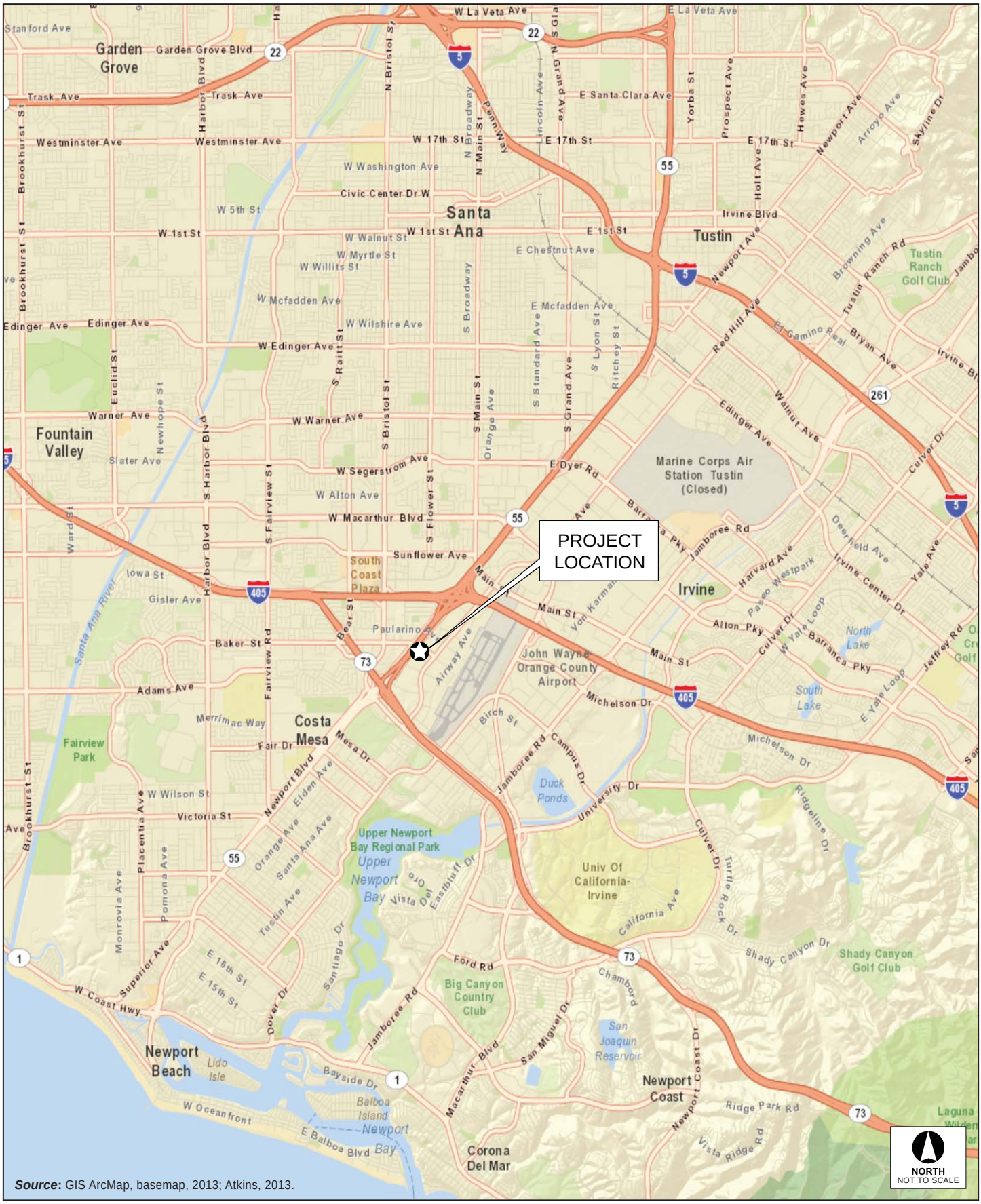
Red Oak Investments, LLC
2101 Business Center Drive, Suite 230
Irvine, CA 92660

6. General plan designation:

The project site is currently designated Industrial Park. A General Plan Amendment proposed as part of the project would change the designation to High Density Residential.

7. Zoning:

The project site is currently zoned Commercial Limited (CL). A Zone Change proposed as part of the project would rezone the site as Planned Development Residential – High Density (PDR-HD).



Source: GIS ArcMap, basemap, 2013; Atkins, 2013.

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Figure 1
Regional Location

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8. Description of project (describe the whole action involved, including, but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation):

Project Location

The 4.17-acre 125 East Baker Street site (project site) is located at the southwest corner of Baker Street and Pullman Street in the City of Costa Mesa, Orange County, California. The property is currently zoned CL (Commercial Limited) and has a General Plan Land Use Designation of Industrial Park (MP). The site is roughly triangular-shaped and is currently occupied by a 66,000-square-foot (sf) two-story office building developed in 1974, a surface parking lot, signage, and landscaped areas within the parking area and around the perimeter of the site planted with various mature-sized trees and other landscape materials. The office building on the project site has been in use for office/administration type operations since its development in 1974. Office is a permitted use under the existing Industrial Park Land Use designation and CL zoning for the site. The site is bounded to the north (across Baker Street) by buildings containing a church and various industrial uses zoned MP (Industrial Park), with a General Plan Land Use designation of Industrial Park; to the south and east (across Pullman Street) by various industrial buildings zoned MP (Industrial Park) with a General Plan Land Use designation of Industrial Park; and to the west by the off-ramp for the Costa Mesa Freeway (SR-55) and a drainage channel surrounded by chain link fencing.

The project site is located in a built-out area of the northeastern portion of the City, predominately built with industrial and office buildings. The site is also located approximately one-half mile to the west from John Wayne Airport (JWA).

Project Objectives

CEQA Guidelines Section 15124 requires an EIR include a statement of objectives sought by the proposed project. This disclosure assists in developing the range of project alternatives to be investigated in the EIR, as well as providing a rationale for the adoption of a Statement of Overriding Considerations, if one is in fact adopted. Identified below are goals and objectives related to the proposed project as set forth by the project applicant, Red Oak Investments, LLC.

City Objectives

The objectives of the proposed project <u>as identified by the City</u> are as follows:

1. Create a development that is compatible with and sensitive to the existing land uses in the project area.
2. Promote residential buildings that convey a high quality visual image and character.
3. Enhance the community image of Costa Mesa through the design and construction of a high quality development.
4. Ensure adequate utility infrastructure and public services for new development.
5. Achieve the development of projects that enable residents to live in proximity to their jobs, commercial services, transportation and entertainment, and reduce the need for automobile use.
6. Mitigate environmental impacts to the greatest extent possible.

Project Applicant Objectives

Additionally, the objectives of the proposed project, as identified by the Applicant are as follows:

Community Objectives

1. Provide local residents and employers with a luxury living alternative, and attract high-income renters from other areas whose spending power and consumption habits will provide support for surrounding retail businesses.
2. Accommodate demand for Class-A market rate rental housing otherwise unmet in the community.

Development and Site Design Objectives

1. Provide for the development of an underutilized site and replace the visual blight of existing office with the visual excitement of new, top-rate development.
2. Improve the open space environment through the addition of open spaces and increased landscaping including new landscaped courtyards and sidewalks, some of which will be accessible not only to the residents, but also to the public.
3. Provide parking with direct access to the development.
4. Create a development that maximizes opportunities for green building and environmentally sound design.

Economic Objectives

1. Maximize the value of the currently underutilized site through the development of new housing, consistent with anticipated market demands.
2. Accommodate sufficient residential density to make demolition of an operating office asset financially feasible.
3. Achieve premium apartment rents by meeting the high market demand for housing that is close to retail, jobs and transportation.
4. Accommodate future economic expansion by providing high density housing and retail within a community that has the necessary infrastructure to support the development.
5. Strengthen the economic vitality of the region by attracting new workers, through construction, rehabilitation, and operation of the project.
6. Increase the Tax to the city by increasing property value by roughly 10 times current value.

Project Description

Red Oak Investments, LLC is proposing to replace the office building and surface parking areas with an apartment building and parking structure. Specifically, the project consists of a five-story 240-unit residential apartment building (63 feet overall height) that wraps around a six-level parking structure (57 feet overall height) with 465 parking spaces in the structure and four outdoor on-grade parking spaces. The total density for the proposed 240-unit project is 57.7 dwelling units per acre; the current maximum density allowed under the proposed Zoning designation (PDR-HD) and General Plan designation (High Density Residential) for the property is 20 units per acre, or 83 dwelling units

maximum for the site. The apartments are planned to be mostly comprised of studios, one-bedrooms and 2 bedroom units. The proposed breakdown of units is as follows: 26 studio and studio+loft units (10.8 percent); 117 one-bedroom and one-bedroom+loft units (48.8 percent); 85 two-bedroom and two-bedroom+loft units (35.4 percent); and, 12 three-bedroom and three-bedroom+loft units (5 percent). The required on-site parking for the proposed development per Code is 541 parking spaces; 469 on-site parking spaces are proposed. On-site parking will include a tenant parking structure and surface parking for future tenant/leasing office parking. The parking structure would be located along State Route 55 (SR-55). The main vehicular entrance to the parking structure is proposed from Pullman Street and the secondary exit is provided on Baker Street.

On-site amenities would include common open space and recreation areas, a pool, and a clubhouse. A conceptual site plan is shown in Figure 2 (Architectual Site Plan). Conceptual elevations are shown in Figure 3 (North and West Conceptual Elevation) and Figure 4 (South and East Conceptual Elevation), and conceptual landscaping is shown in Figure 5 (Conceptual Landscape Plan).

Proposed Project Approvals

- **General Plan Amendment GP-13-02**—General Plan amendment to change the land use designation of the 4.17-acre development site from Industrial Park to High Density Residential. In addition to the change in land use designation, the General Plan amendment also involves text amendment(s) to the City's General Plan to reflect a site-specific density of 57 dwelling units per acres, and a site specific height of six-stories.

  The proposed General Plan Amendment (GP-13-02) would state the following:

  > In 2013, General Plan Amendment GP-13-02 was approved, and it consisted of a site-specific residential density increase for a 4.17-acre site at 125 East Baker Street. The maximum density allowed is 57.7 units/acre. This equates to a maximum density of 240 dwelling units.

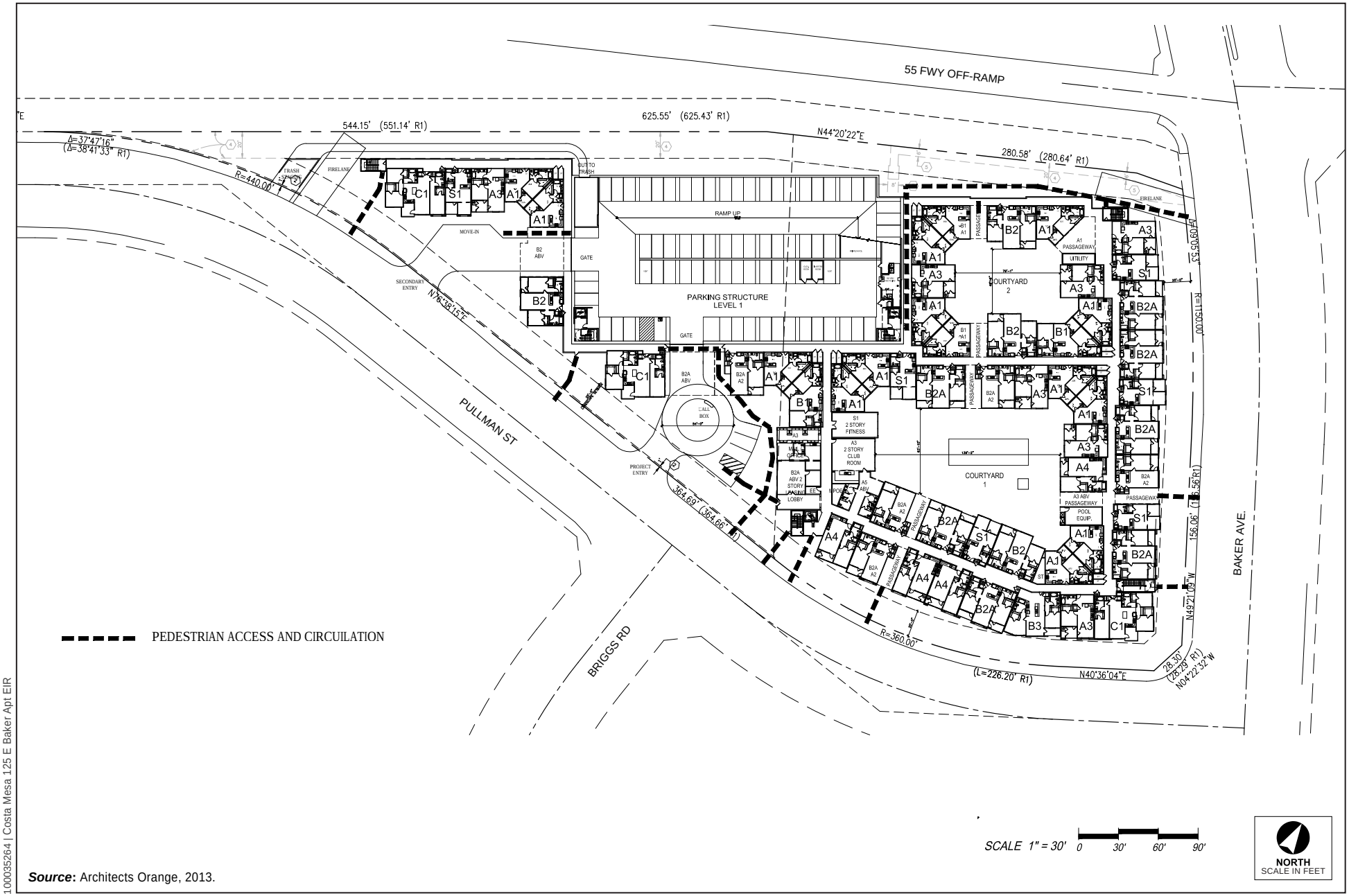
  Building Height

  The development standards for the proposed PDR-HD zone as specified in the Zoning Code does not specify a maximum building height requirement; however, a maximum building height of four stories for buildings south of the San Diego (I-405) Freeway is established as an objective in the City's 2000 General Plan Land Use Element. Because the subject property for the proposed development is south of the I-405 Freeway, the five-story maximum height would apply to the proposed development.

  The proposed General Plan Amendment (GP-13-02) would state the following:

  Objective LU-1C Promote land use patterns and development, which contribute to community and neighborhood identity.

  Policy LU-1C.2 Limit building height to four stories above grade south of the I-405 Freeway, except for special purpose housing, such as elderly, affordable, or student housing. An exception is for the Newport Plaza property at 1901 Newport Boulevard where a six-level parking structure is allowed, *and the 240-unit apartment*



***Source*:** Architects Orange, 2013.

Figure 2
Architectural Site Plan

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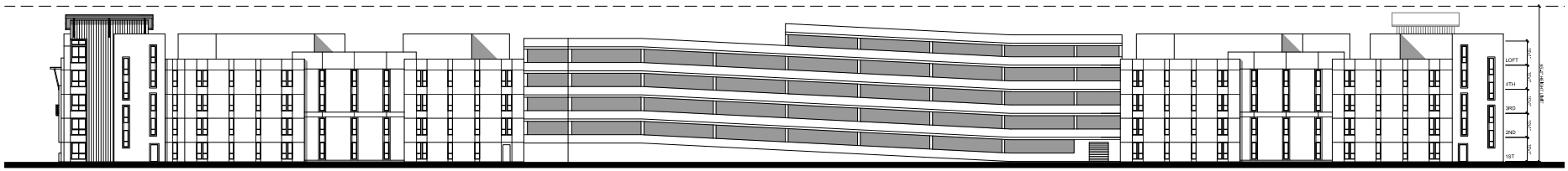
NORTH ELEVATION - BAKER ST.



WEST ELEVATION - 55 FWY OFF RAMP

0 20 40 60

***Source*:** Architects Orange, 2013.

Figure 3
North and West Conceptual Elevation

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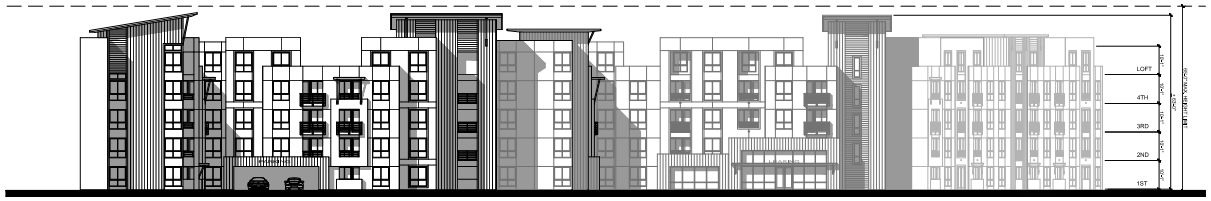
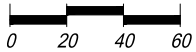


SOUTH ELEVATION

EAST ELEVATION - PULLMAN ST.



Source: Architects Orange, 2013.

Figure 4
South and East Conceptual Elevation

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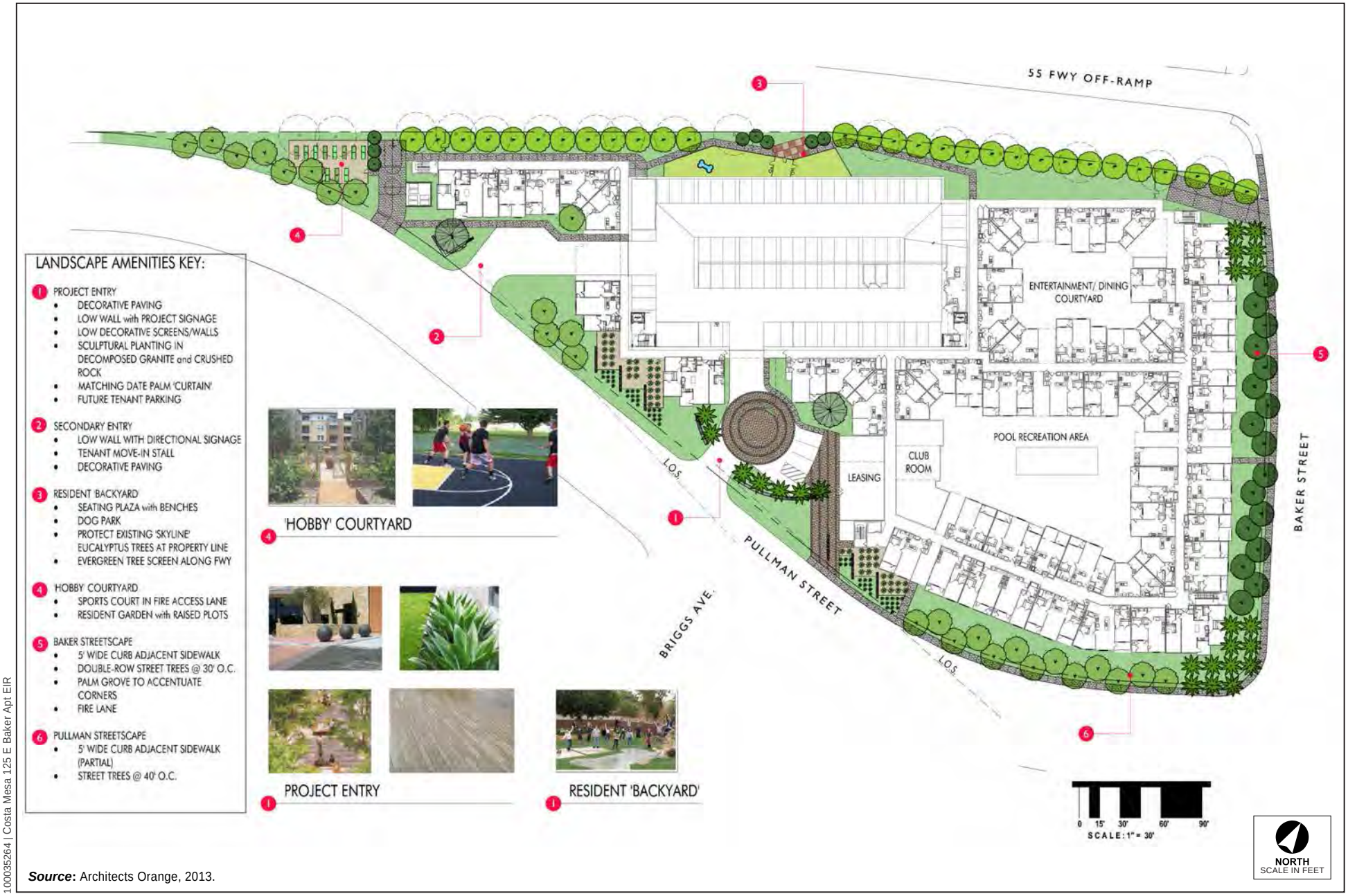

Source: Architects Orange, 2013.

Figure 5
Conceptual Landscape Plan

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project at 125 East Baker Street where a five-story apartment building and six-story parking structure are allowed under per GP-13-02.

- **Zoning Code Amendment CO-13-02**—A zoning ordinance to amend Costa Mesa Municipal Code Title 13 for a site-specific density of 57 dwelling units per acre and a site-specific height of six stories would be required.

  The site is proposed to be designated PDR-HD (Planned Development Residential-High Density) in the City's Zoning Code. The designation allows up to 20 dwelling units per acre, or 83 dwelling units maximum for the site. The proposed 240-unit project would require an amendment to Table 13-58 (Planned Development Standards) to allow a site-specific density of 57.7 dwelling units per acre for this project. The revised Table 13-58 is presented below as Table 1 (Revised Table 13-58 [Planned Development Standards]).

  The proposed Zoning Code Amendment CO-13-02 would state the following:

Table 1 Revised Table 13-58 (Planned Development Standards)

Development Standard	*PDR-LD*	*PDR-MD*	*PDR-HD*	*PDR-NCM*	*PDC*	*PDI*
Maximum Density per Section 13-59 MAXIMUM DENSITY CRITERIA. (dwelling units per acre)	8	12	20 Note: See North Costa Mesa Specific Plan for exceptions. Note: The maximum density for 125 East Baker Street is 57.7 dwelling units per acre.	35	20 Note: The maximum density for 1901 Newport Boulevard is 40 dwelling units per acre. See North Costa Mesa Specific Plan for exceptions.	

- **Rezone R-13-02**—A rezone (or change) of the zoning classification of the 4.17-acre development site from Commercial Limited (CL) to Planned Development Residential – High Density (PDR-HD).

  Master Plan PA-13-11—A Master Plan application for the proposed development of a five-story 240-unit residential apartment building (63 feet overall height) that wraps around a six-story parking structure (57 feet overall height) with 465 parking spaces in the structure and four outdoor on-grade parking spaces with variances from the following zoning code development standards: (A) overall open space (42 percent minimum required; 33 percent proposed); (B) private open space (100 sf minimum per unit required; 61 sf minimum proposed); (C) on-site parking spaces (541 parking spaces required; 469 parking spaces proposed)

- A review of the project for consistency with the Airport Environs Land Use Plan (AELUP) by the Airport Land Use Commission (ALUC) due to its close proximity to John Wayne Airport.

Preliminary Project (Screening) Review

City Council Policy 500-2 sets forth the criteria to evaluate General Plan amendment requests. Council takes action on whether or not a proposal should be accepted for processing by using these criteria as guidance. City Council Policy 500-2 establishes a procedure for processing privately initiated General

Plan amendments. The policy also acknowledges these criteria are only guidelines and City Council may accept an application that does not meet the criteria if it finds there are overriding reasons to do so.

The City Council approved a General Plan Screening for the proposed project on February 19, 2013. It should be noted, however, that the number of units and overall density of the project that was screened by the City has slightly increased from the initial request.

9. Surrounding land uses and setting (briefly describe the project's surroundings):

The project site is bounded by SR-55 on the north and west, Baker Street on the north, and Pullman Street on the east and south. Uses to the north, east, and south of the site include office complexes and light industrial parks. To the west of SR-55 there are two high-density residential complexes (Newport Village Apartments and Eaves South Coast Apartments). The surrounding land uses are shown in Figure 6 (Surrounding Land Uses). Site photographs of the project site and surrounding properties are provided in Figure 7 (Site Photographs 1 and 2), Figure 8 (Site Photographs 3 and 4), and Figure 9 (Site Photographs 5 and 6).

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

In addition to the City of Costa Mesa (Lead Agency), other agencies whose approval may be required include, but are not limited to:

- California Department of Toxic Substance Control (DTSC) Public Review
- California Department of Transportation (Caltrans)
- California Regional Water Quality Control Board (Permit for dewatering during construction and National Pollutant Discharge Elimination System [NPDES] permit)
- State Water Resources Control Board (General Construction Activity Stormwater Permit)
- Airport Land Use Commission (Master Plan/Design Review)
- Federal Aviation Administration (FAA)

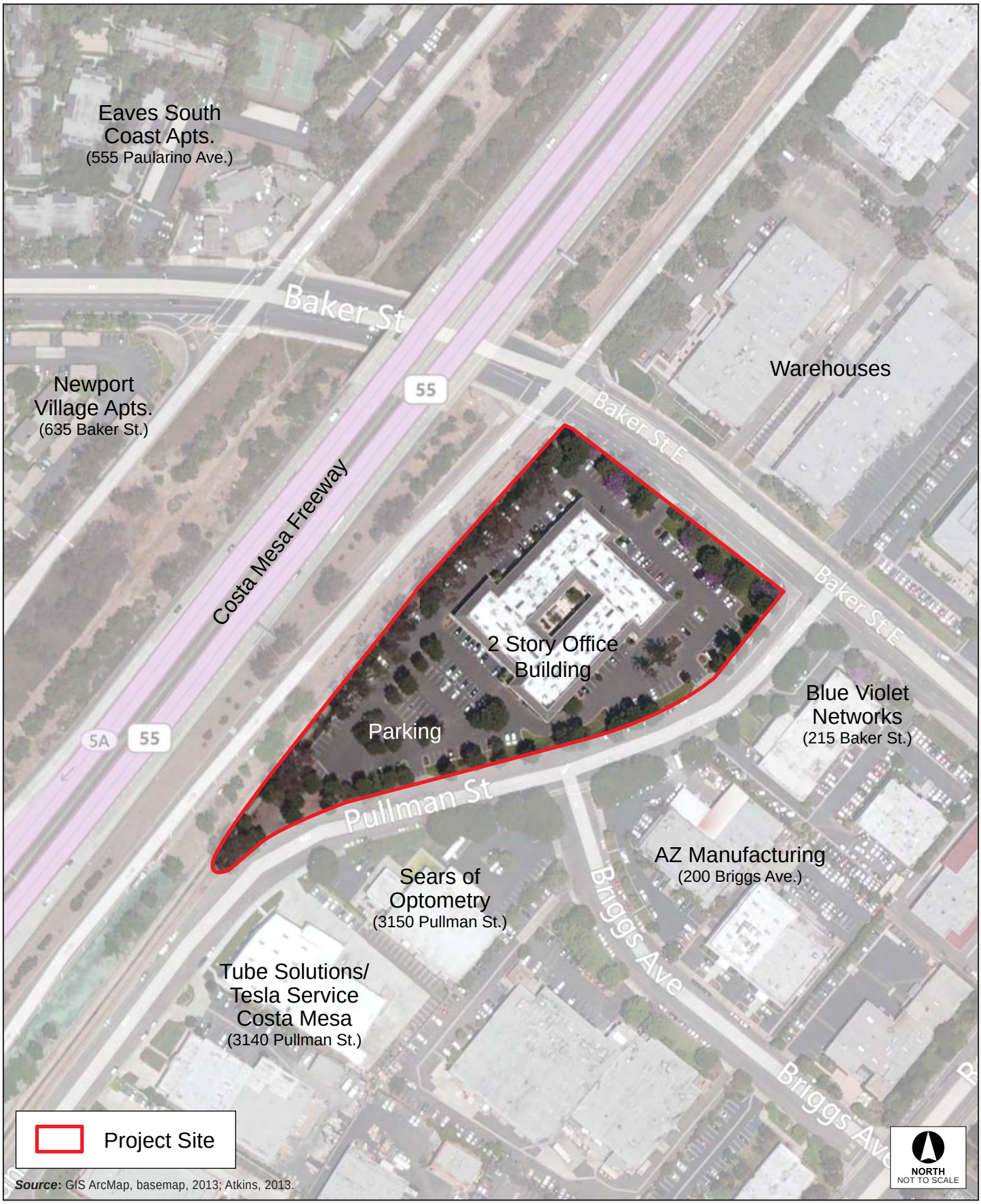
In accordance with CEQA and the CEQA Guidelines, a 30-day public review period for this Initial Study commenced on August 16, 2013, and will conclude on September 16, 2013. The Draft Initial Study has specifically been distributed to interested or involved public agencies, organizations, and private individuals for review. In addition, the Draft Initial Study is available for general public review at:

City of Costa Mesa
Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, CA 92628

The Costa Mesa/Donald Dungan Library
1855 Park Avenue
Costa Mesa, CA 92627

Mesa Verde Library
2969 Mesa Verde Drive East
Costa Mesa, CA 92626

City of Costa Mesa website: http://www.costamesaca.gov/



Source: GIS ArcMap, basemap, 2013; Atkins, 2013.

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Figure 6
Surrounding Land Uses

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Photo 1: Overview of project site, facing east.

Photo 2: Overview of project site from Baker Street, facing southeast.

Source: Atkins, 2013.

Figure 7
Site Photographs 1 and 2

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Photo 3: Overview of project site from Pullman Street and Briggs Avenue, facing north-northeast.

Photo 4: View of Baker Street and adjacent properties to the north of project site, facing north.

Source: Atkins, 2013.

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Figure 8

Site Photographs 3 and 4

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Photo 5: View of Pullman Street and adjacent properties to the southeast of project site, facing south.

Photo 6: View of Costa Mesa Freeway to the west of project site, facing southwest.

Source: Atkins, 2013.

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Figure 9

Site Photographs 5 and 6

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During the public review period, the public will have an opportunity to provide written comments on the information contained within this Draft Initial Study. Public comments on the Draft Initial Study and responses to public comments will be incorporated into the EIR prepared for the proposed project. The City's Development Services Department and City Council will use the EIR for all environmental decisions related to this project.

In reviewing the Draft Initial Study, affected public agencies and interested members of the public should focus on the sufficiency of the document in identifying and analyzing potential project impacts on the environment, ways in which the significant effects of the project are proposed to be avoided or mitigated, and those issues that are proposed to the analyzed in the Draft EIR. Comments on the Draft Initial Study should be submitted in writing before the end of the 30-day public review period and must be postmarked by September 16, 2013. Please submit written comments to:

Claire Flynn, AICP, Assistant Development Services Director
City of Costa Mesa, Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, California 92628
714.754.5245

SECTION 2. **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
- ☐ Biological Resources
- ☒ Greenhouse Gas Emissions
- ☒ Land Use/Planning
- ☒ Population/Housing
- ☒ Transportation/Traffic
- ☐ Agriculture/Forestry Resources
- ☐ Cultural Resources
- ☐ Hazards/Hazardous Materials
- ☐ Mineral Resources
- ☒ Public Services
- ☒ Utilities/Service Systems
- ☒ Air Quality
- ☐ Geology/Soils
- ☐ Hydrology/Water Quality
- ☒ Noise
- ☐ Recreation
- ☒ Mandatory Findings of Significance

SECTION 3. **Determination**

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 "less than 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 all 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.

Claire L. Flynn

Signature

August 16, 2013

Date

Claire Flynn

Name

Assistant Development Services Director

Title

SECTION 4. **Evaluation of Environmental Impacts**

EVALUATION PROCESS

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 Section XVII, "Earlier Analyses," 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 that 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.
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

I. AESTHETICS

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

Discussion

The project site is not designated as a scenic resource under the General Plan Community Design Element of the City of Costa Mesa General Plan. Development of the residential project would not disrupt any significant views. As a result, ***no impacts*** are anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

Discussion

There are no rock outcroppings or historic buildings that would be affected by the proposed project. There are some non-native ornamental trees on the project site, but the project is not located adjacent to a state scenic highway. As a result, ***no impacts*** are anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐

Discussion

The project site consists of a two-story office building, constructed in 1974 and is located adjacent to existing commercial uses and the SR-55 Freeway.

Building Scale and Character

Development of the project would replace the existing two-story office building with a five-story residential development with 240 residential units that wrap around a six-level parking structure located adjacent to SR-55 Freeway. Adjacent land uses are primarily comprised of single- and two-story structures, generally surrounded by landscaping and surface parking that serve the individual structures. Although the project would increase the height of the on-site structure, the new development would be surrounded by landscaping which would mimic the existing visual character and reduce the apparent visual mass of the new residential development from surrounding areas. The architectural style of the

project, both interior and exterior, will be a contemporary design. Building elevations are shown on Figure 3 and Figure 4.

The proposed residential units would be separated from existing uses to the west by the SR-55 Freeway, Baker Street to the north, and existing commercial uses to the south. In addition, the proposed project will incorporate landscape elements that would serve to soften the edges and would incorporate materials, colors and textures that would be compatible with the surrounding community. A landscaping plan that would include landscape treatments and materials would be prepared and submitted for review and approval by the Development Services Director. As such, impacts to the visual character would be considered ***less than significant***. No mitigation measures are required.

Shade and Shadow

The proposed project would introduce a five-story residential development to an area that is currently developed with commercial buildings. The proposed building may cast shadows on the adjacent uses. The City of Costa Mesa considers shade/shadow impacts to be significant if the proposed project casts a shade or shadow onto sensitive uses in adjacent off-site areas for more than two hours between the hours of 10:00 AM and 3:00 P.M. No sensitive use is located directly adjacent to the project site. Residential uses are located west of SR-55 and a church is located on the other side of Baker Street, but none of those uses would be impacted by shade or shadows cast by the new residential development. Shade and shadow impacts would be considered ***less than significant***. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion

The project site is located within a developed urban area. Sources of light and glare from existing and surrounding land uses include parking lot lighting, security lighting for structures, and street lighting. Lighting for the proposed development would include security lighting, lighting of the entries, internal streets, walkways, recreation facilities and common open space areas. The conversion of office uses to residential uses would not add a substantial number of light sources, but could increase in light in the surrounding area due to the increased height of development. Given the residential character of the proposed development, exterior sources of light are anticipated to be shielded with fixtures, and interior light sources would be intermittent due to the presence of window treatments. Thus, impacts would be ***less than significant***.

It should be noted that the City's Municipal Code contains no specific, numeric standards for limiting light spillage except that light/glare be minimized to the fullest extent possible for sensitive viewers. Standard Conditions require applicants for residential development projects to submit an electrical engineer's photometric survey prior to issuance of building permits to demonstrate that lighting requirements meet minimum security lighting requirements as well as minimize light/glare to residents.

Compliance with the City's standard conditions of approval listed below will reduce any significant light/glare impacts to below a level of significance.

Standard Condition

Prior to the issuance of grading permits, the developer shall submit a Lighting Plan and Photometric Study for the approval of the City's Development Services Department. The Lighting Plan shall demonstrate compliance of the following:

- The mounting height of lights on light standards shall not exceed 25 feet in any location on the project site;
- The intensity and location of lights on buildings shall be limited to minimize nighttime light and glare to residents and shall be subject to the Development Services Director's approval;
- All site lighting fixtures shall be provided with a flat glass lens. Photometric calculations shall indicate the effect of the flat glass lens fixture efficiency;
- Lighting design and layout shall limit spill light to no more than 0.5 foot-candle at the property line of the surrounding neighbors, consistent with the level of lighting that is determined necessary for safety and security purposes on site; and
- Structures shall use low reflective glass and building materials to minimize daytime glare to the fullest extent possible.

II. AGRICULTURE/FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 nonagricultural use?	☐	☐	☐	☒

Discussion

The project site is zoned CL and is occupied with an existing two-story office building. The proposed project would not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural uses. ***No impact*** would occur. No mitigation measures would be required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Conflict with existing zoning for agricultural use or with a Williamson Act contract?	☐	☐	☐	☒

Discussion

The project site is not subject to an agricultural contract under the Williamson Act and would not convert agricultural land to a non-agricultural use. The project is not located adjacent to any agricultural uses. Therefore, ***no impact*** would occur. No mitigation measures would be required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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))?	☐	☐	☐	☒

Discussion

The project site is developed with an office building and an informal parking/storage area and is not located adjacent to any forestland or timberland use zones. Therefore, ***no impact*** would occur. The project site is not zoned for forestland or timberland uses.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Result in the loss of forest land or conversion of forest land to nonforest use?	☐	☐	☐	☒

Discussion

The proposed project would include the demolition of an existing office building and the construction of a five-story residential development. The proposed project would not result in the loss of forest land or the conversion of forest land to nonforest use. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to nonforest use?	☐	☐	☐	☒

Discussion

As discussed above, the proposed project would include the demolition of an existing office building and the construction of a five-story residential development. The proposed project would not involve changes in the existing environment that could result in the conversion of farmland to nonagricultural uses or conversion of forestland to nonforest use. ***No impact*** would occur. No mitigation measures are required.

III. AIR QUALITY

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	☒	☐	☐	☐

Discussion

The proposed project site is located within the South Coast Air Basin (Basin) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), which is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants [reactive organic gases (ROG), nitrogen oxides, carbon monoxide, sulfur oxides, $PM_{2.5}$ and PM_{10}) for which the Basin is in nonattainment.[1] Strategies to achieve these reductions in emissions are developed in the Air Quality Management Plan (AQMP) prepared by SCAQMD for the Basin. The AQMP is based on regional population projections included in General Plans for those communities located within the Basin, including the City of Costa Mesa. Population growth is typically associated with the construction of residential units or large employment centers, which the proposed project would include. A project would be inconsistent with the AQMP if growth estimates resulting from the project would exceed growth projections for the area and/or exceeds the established thresholds for the identified criteria pollutants. Increased emissions associated with construction activities, vehicle trips and other emissions generated on site could potentially conflict with the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP), and this impact is ***potentially significant***. Therefore, the EIR will address potential project exceedance of the SCAQMD thresholds of significance, which may result in a conflict with the AQMP, and violation of any local and regional air quality standards during construction and operation of the proposed project.

[1] A nonattainment area is designated as a region or place that experiences concentration of air pollutants that are in excess of the standards set by the State of California or the United States Environmental Protection Agency.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐

Discussion

Construction activities would generate combustion emissions from utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions during the construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment would result in localized exhaust emissions. The type and amount of equipment expected to be used during construction have been specified based upon typical construction methods for the proposed development. The proposed development consists of demolition, site clearance, excavation, grading, and construction.

The EIR will include emissions calculations associated with the construction of the proposed project and identify if the daily thresholds for the criteria pollutants of nitrogen oxides (NO_X), volatile organic compounds (VOCs), carbon monoxide (CO), sulfur oxide (SO_X), and Respirable Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$) would be exceeded. This would be considered a potentially significant impact.

Long-term air emission impacts are those associated with any change in permanent use of the project site by on-site stationary and off-site mobile sources. Stationary sources include emissions associated with electricity consumption and natural gas usage. Mobile source emissions result from vehicle trips associated with the proposed project. The EIR will calculate long-term stationary and mobile source emissions associated with the proposed project to determine if emissions generated from operation of the proposed project (long-term emissions) would be below the SCAQMD thresholds for criteria pollutants. This would be considered a ***potentially significant*** impact.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐

Discussion

As discussed in Section III(b) above, exceedance of SCAQMD's criteria pollutant emission thresholds may occur for the proposed project. This may result in a cumulatively considerable net increase of the criteria pollutants that are in nonattainment status in the Basin. This would be considered a ***potentially significant*** impact. This issue will be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐

Discussion

The proposed project would introduce residential uses (sensitive receptors) to an existing commercial area. Residential uses and other sensitive receptors are located in the surrounding area. Construction activities associated with the proposed project may expose sensitive receptors to airborne particulates and fugitive dust, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). Additionally, the proposed project is located adjacent to the SR-55 freeway, which would potentially expose the residents of the new development to substantial concentrations of pollutants. This impact is considered ***potentially significant*** and will be further addressed in the EIR.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion

The project proposes to replace existing industrial uses with residential, creative arts, and retail uses, which would reduce the potential for objectionable odors at the site during operation uses. However, during construction of the proposed project, odors may result from construction equipment exhaust and application of asphalt and architectural coatings during construction activities. Standard construction requirements would be imposed upon the applicant to minimize odors from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature, and impacts associated with construction-generated odors are expected to be ***less than significant***.

Odors occurring during operation of the proposed project may result from the temporary storage of typical household solid waste (refuse) associated with residential (long-term operational) uses, as well as odors produced from the various commercial uses. It is expected that any project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. Implementation of City of Costa Mesa maintenance and waste management practices, and compliance with SCAQMD Rule 402 would reduce the potential for site-generated objectionable odors during project operation. This impact is considered ***less than significant***.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

Discussion

Existing on-site vegetation consists of minimal non-native ornamental landscaping. Because of the urban nature of the site and surrounding land uses, based on a check of the California Natural Diversity Database (CNDDB), included as Appendix A to this Initial Study, no candidate, sensitive, or special status species are expected within the project site. Therefore, implementation of the proposed project would not result in any impacts to any species listed as a candidate, sensitive, or special status species in any local, regional, state or federal plans, policies or regulations. ***No impact*** is anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

Discussion

No riparian habitat or sensitive natural communities are located within or adjacent to the project site. Therefore, implementation of the project would not result in any impacts to these types of habitats. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

No wetlands or natural drainages exist within or adjacent to the project site. As a result, ***no impacts*** are anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

The project site is in a developed area that includes office complexes and commercial uses and is not a part of any wildlife movement corridor. Therefore, the project will not interfere with the movement of any native resident or migratory fish or wildlife species. There are no native wildlife nursery sites located within the project site, and ***no impacts*** are anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

Discussion

Vegetation on site consists of minimal non-native ornamental landscaping, including many common ornamental trees located within the site perimeter. Parkway trees (located within the city right of way) are protected by City of Costa Mesa Municipal Code Sec. 15-132 and removal of any such trees requires a permit per Municipal Code Sec. 15-126. A condition of approval will be incorporated requiring existing mature trees be retained wherever possible. Should it be necessary to remove existing trees, the applicant shall submit a written request and justification to the Planning Division. A report from a California licensed arborist may be required as part of the justification. Replacement trees shall be of a size consistent with trees to be removed and may be required on a 1:1 basis. This requirement shall be completed under the direction of the Planning Division. This impact is considered ***less than significant***. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

The proposed project does not lie within any lands affected by an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional or state conservation plan. As a result, the proposed project will not result in any conflicts with an adopted NCCP/HCP. ***No impact*** would occur. No mitigation measures are required.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒

Discussion

The project site contains one single structure, constructed in 1974, which is not considered an historic structure or resource. Therefore, ***no impacts*** to historic resources are anticipated. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐

Discussion

Based on the results of a cultural resources survey (REF), included as Appendix B to this Initial Study, there are no known archaeological resources located on the proposed site. The project will incorporate the following City standard condition to protect any archaeological resources that may be discovered during grading. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

Standard Condition

In the event that archaeological materials are encountered during grading and construction, all construction activities shall be temporarily halted or redirected to permit the sampling, identification, and evaluation of archaeological materials as determined by the City, who shall establish, in cooperation with the project applicant and a certified archaeologist, the appropriate procedures for exploration and/or salvage of the artifacts.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Discussion

There are no known paleontological sites located on the proposed site. In order to protect any paleontological resources that may be discovered during grading, the following City Standard Condition

will be incorporated into the project. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

Standard Condition

In the event that paleontological resources are encountered during grading and construction operations, all construction activities shall be temporarily halted or redirected to permit a qualified paleontologist to assess the find for significance and, if necessary, develop a PRIMP for the review and approval of the City prior to resuming excavation activities.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion

There are no known human remains on or near the project site. However, if human remains are discovered during grading activities, then the following City Standard Condition will ensure that any remains that are found will be protected, and this impact would be ***less than significant***.

Standard Condition

If human remains are encountered, state Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

VI. GEOLOGY/SOILS

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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.	☐	☐	☒	☐

Discussion

Fault rupture occurs when an active fault displaces in two separate directions during an earthquake. Surface ground rupture is generally considered most likely to occur along pre-existing active faults. Geocon West Inc. prepared a geotechnical analysis, *Geotechnical Investigation, Proposed Multi-Family Residential Development 125 Baker Street East, Costa Mesa, California* for the proposed project in October 2012. Findings of this report have been summarized in this portion of the document. The project site is not located within an Alquist-Priolo Zone and there are no active or potentially active faults mapped or known to pass directly beneath the project site. Therefore, the potential for surface ground rupture at the project site is considered low. As a result, impacts are considered ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(ii) Strong seismic groundshaking?	☐	☐	☒	☐

Discussion

The subject property is not located within any Alquist-Priolo Special Studies Zones. According the October 2012 geotechnical report prepared for the proposed project, the closest surface trace of an active fault to the site is the Newport-Inglewood Fault Zone located approximately 5 miles west-southwest of the site. Other nearby active faults are the Palos Verdes Fault Zone, the Whittier Fault Zone, the Elsinore Fault Zone, and the Chino Fault located 16.5 miles southwest, 16.5 miles northeast, 18 miles northeast, and 20 miles northeast of the site, respectively. The active San Andreas Fault zone is located approximately 48 miles northeast of the site. The closest potentially active fault to the site is the Pelican Hill Fault located approximately 2.5 miles south of the site. Other nearby potentially active fault are the El Modeno Fault, Peralta Hills Fault, and the Los Alamitos Fault located approximately 10.5 miles north, 10.7 miles north, and 12.5 miles northwest of the site, respectively.

Several buried thrust faults, commonly referred to as "blind thrusts" underlie the Coastal Plain at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than 3.0 kilometers. The closest blind thrust fault to the site is the active San Joaquin Hills Fault that underlies the

site at depth. These thrust faults are not exposed at the surface and do not present a potential surface fault rupture hazard; however, these active features are capable of generating future earthquakes.

Project-specific impacts related to strong seismic ground shaking can be reduced to a less than significant level through compliance with the most recent Uniform Building Code (UBC) and the recommendations of the geotechnical report prepared from the project. All grading operations and construction will be conducted in conformance with the recommendations included in the geotechnical report on the proposed project site entitled *Geotechnical Investigation, Proposed Multi-Family Residential Development 125 Baker Street East, Costa Mesa, California* (October 2012), included as Appendix C to this Initial Study. Design, grading, and construction shall be performed in accordance with the requirements of the UBC applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the City of Costa Mesa Building official prior to issuance of demolition permits. With incorporation of the recommendations identified in the geotechnical report, impacts would be ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Discussion

Liquefaction commonly occurs when three conditions are present simultaneously: (1) high groundwater; (2) relatively loose, cohesionless (sandy) soil; and (3) earthquake-generated seismic waves. The presence of these conditions may cause a loss of shear strength and, in many cases, ground settlement. According to the State of California Seismic Hazard Zone, Newport Beach Quadrangle Map (1998), the project site is located within an area identified as having a potential for liquefaction. The City of Costa Mesa General Plan (2000) indicates the site is within an area with a moderate potential for liquefaction. Project-specific impacts related to liquefaction can be mitigated to a less than significant level through compliance with the most recent Uniform Building Code (UBC) and the recommendations of the geotechnical report prepared from the project. With incorporation of the recommendations identified in the geotechnical report, impacts would be ***less than significant***, and no further analysis would be required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(iv) Landslides?	☐	☐	☐	☒

Discussion

Landslides are a type of erosion in which masses of earth and rock move down slope as a single unit. Susceptibility of slopes to landslides and other forms of slope failure depend on several factors, including steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, and seismic activity. The project site and surrounding area is relatively flat and the potential for landslides is considered to be remote. As a result, ***no impacts*** are anticipated.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Discussion

Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil. Although the proposed project site does contain short, moderate slopes, major erosion typically occurs on long, steep slopes where stormwater and/or high winds can carry topsoil down hillsides. The proposed project is not located on a long steep slope. However, the construction of the proposed project would result in ground surface disruption that could create the potential for erosion. Construction of the proposed project would involve earth-moving activities, including excavation and grading for building foundations and roadways. Construction of the proposed project would minimize export from the site to the extent feasible by reusing select excavated material as backfill or for landscaping. Because development of the proposed project would cover an area greater than 1 acre in size, the developer's construction contractor would be required to prepare and comply with a Stormwater Pollution Prevention Plan (SWPPP) per §402 of the Clean Water Act. The SWPPP helps to identify the sources of pollution that may affect the quality of stormwater discharges, and describes and ensures the implementation of best management practices to reduce the pollutants in construction stormwater discharges. Compliance with the SWPPP and applicable local regulations, plans, and standards would reduce all impacts related to soil erosion to a ***less-than-significant*** level. No mitigation is required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

According to the City of Costa Mesa General Plan (2000), the site is not located in an identified as having a potential for slope instability. Additionally, according to the California Geological Survey (1999), the site is not located within an area identified as having a potential for seismic slope instability. The site and surrounding vicinity is generally flat or gently sloping. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. According to the Geotechnical Report prepared for the proposed project, the site does not have the potential for landslide hazards.

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. The area site is not located within an area of known ground subsidence. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned in the project area. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No 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?	☐	☐	☒	☐

Discussion

According to the October 2012 Geotechnical Report prepared for the proposed the project, remolded samples of the upper 5 feet of existing site soils, representing engineered fill, exhibit a "low" to "very high" expansive potential. However, project-specific impacts related to expansive soils can be mitigated to a less than significant level through compliance with the most recent Uniform Building Code (UBC) and the recommendations of the geotechnical report prepared from the project. With incorporation of the recommendations identified in the geotechnical report, impacts would be ***less than significant***, and no further analysis would be required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No 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?	☐	☐	☐	☒

Discussion

The project would not include the use of septic tanks or other alternative wastewater disposal system. As a result, ***no impacts*** are anticipated.

VII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐

Discussion

The proposed project would result in short-term greenhouse gas (GHG) emissions during construction activities and long-term direct and indirect emissions from occupation of the site. The construction and operation of the proposed project could result in significant impacts from the emission of GHGs. Operational activities will result in direct GHG emissions from traffic increases (mobile sources) and building heating (area sources), as well as indirect emissions, through electricity consumption, water use, and solid waste generation. The SCAQMD is responsible for improving air quality within the South Coast Air Basin, which includes assisting local governments in addressing climate change. While not officially adopted, the SCAQMD has established interim guidelines and Draft Thresholds of Significance

for the evaluation of GHG emissions at a project level. To date, the City lacks sufficient information to establish formal, permanent thresholds by which to classify projects with relatively small, incremental contributions to the state's total GHG emissions as significant or not. Until appropriate regulatory entities develop quantifiable CEQA thresholds for GHGs, the City will apply interim standards based on the SCAQMD's interim guidelines and draft thresholds. The impacts from GHG emissions from construction and operation are ***potentially significant*** and will be evaluated in the EIR.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Discussion

On August 31, 2006, the California Assembly passed Bill 32 (AB 32) (signed into law on September 27, 2006), which commits California to reduce GHG emissions to 1990 levels by 2020 and establishes a multi-year regulatory process under the jurisdiction of the California Air Resources Board (California ARB) to establish regulations to achieve these goals. On December 11, 2008, California ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of California ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. However, the Scoping Plan does state that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

The proposed project includes construction and operational activities that will result in the emission of GHGs that may impede performance standards set forth in City policies that promote sustainability and emission reduction, as well as state policies and strategies designed to meet the emission reduction objectives in AB 32. Therefore, this impact is ***potentially significant***, and the project's conformance with City policies as well as AB 32 will be evaluated in the EIR.

VIII. HAZARDS/HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Discussion

The proposed project consists of the demolition of an existing office building and the construction of a residential development. A Phase Environmental Site Assessment was prepared for the proposed project in November 2012 by Geocon, and is included as Appendix D to this Initial Study. The Phase revealed

no evidence of recognizable environmental conditions (RECs) in connection with the project site. Adherence to SCAQMD Rules 403 and 1166 requirements will prevent adverse impacts related to air monitoring and dust control measure to the community during construction. Substances used for home, such as cleaners, solvents, paints, fertilizer, and pesticides are subject to all applicable regulations and would not represent a significant hazard to the public or the environmental through the routine transport, use, of disposal of hazardous materials. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

The proposed project consists of the demolition of an existing office building and the construction of a residential structure. The Phase Environmental Site Assessment prepared for the proposed project identified no evidence of recognizable environmental conditions (RECs) in connection with the project site. Thus, it is considered unlikely that a reasonably foreseeable upset or accident conditions would result in the release of hazardous materials from the structure or site during demolition of the existing structure or construction of the new structure. Demolition and construction activities would involve the use of common construction materials and substances, including paints, solvents, cleaners, and diesel fuel, which if used improperly could be released during upset or accident conditions. Adherence to applicable laws and regulations regarding the use, storage, transport and disposal of such materials and substances would reduce potential impacts associated with upset or accident conditions. During operation of the new residential structure, common substances used in residential structures and associated landscaping, such as cleaners, solvents, paints, fertilizer, and pesticides would be used and all are subject to all applicable laws and regulations. Construction and operation of the proposed project would not create a significant hazard through the release of hazardous materials related to upset or accident conditions. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐

Discussion

There are no public school sites located within one-quarter mile of the proposed project. However, three private schools are located within a 0.25 mile radius of the project site. The Pacific Technology School is located approximately .11 mile to the north at 102 Baker Street. As discussed in Sections X(a) and (b), construction and operation of the proposed project would not result in the handling of hazardous

materials, beyond commonly used household cleaning and maintenance products and diesel fuel (for construction and landscape maintenance requirement. The proposed project would not result in the handling of any acutely hazardous materials. Redevelopment of the site would not emit hazardous emissions. As a result, potential impacts to nearby private schools resulting from hazardous emission or handling of hazardous materials, substances, or waste are considered ***less than significant***. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Be located on a site that 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?	☐	☐	☒	☐

Discussion

As part of the Phase conducted for the proposed project, EDR searched federal, state and local databases for information regarding the project site and surrounding properties and/or facilities. The project site is listed under HAZNET with four cases pertaining to the generation and offsite disposal of hazardous materials by three separate businesses. Additionally, five properties and/or facilities within a ⅛-mile radius of the proposed project site are listed in various databases according to the EDR search. These cases are shown in Table 2 (Geocon EDR Data Search Result).

No incidents or violations are listed. Inclusion on these databases does not constitute an REC in connection with the site.

The Phase included an Orphan Summary which identifies properties that have incomplete address information and could be specifically plotted. The Orphan Summary listed six facilities which appear to be greater than one mile from the project site. Based on the distances of these properties from the project site, the potential for the properties to have impacted the project site is low.

The State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) online mapping feature (http://maps.conservation.ca.gov/doms/index.html) shows one plugged well within 0.25 mile of the Site.[2] Based on the distance of the well from the project site and its plugged condition, it is unlikely to have impacted the project site.

Although the project site is included on a list of hazardous materials sites, based on the findings of the Phase conducted for the proposed project, these listing do not indicate that the project would create a significant hazard to the public or the environment and impacts are considered ***less than significant***. No mitigation measures are required.

[2] California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, DOGGR Online Mapping Feature (2012), http://maps.conservation.ca.gov/doms/index.html.

Table 2 Geocon EDR Data Search Result
On-Site Cases
Orange Coast Dental X-ray Lab—This facility is listed for generation and offsite disposal of "hydrocarbon solvents" from 2003 through 2006 and 2009 through 2011.
ABBA Products—This facility is listed for generation and offsite disposal of "unspecified solvent mixture" and "tank bottom waste" in 1998.
Gooing Chiropractic Clinic—This facility is listed for generation and offsite disposal of "photochemicals/photoprocessing waste" in 1997, unspecified waste in 1993, and "metal sludge" in 1993
Off-Site Cases
Listing A5—Disc Instruments at 102 Baker Street East (listed as being 73 feet north of on the site) is listed under the RCRA-SQG and FINDS databases. The facility is listed as a small- and large-quantity generator. The facility is listed under FINDS as a facility that generates, transports, and treats, stores, or disposes of hazardous waste. However, no violations have been reported for the Site. No other information is listed relative to this site. Based on the information provided, this facility is not considered an REC for the project site.
Listings B6 and B7—Creel Printing of California at 150 East Baker (listed as being 213 feet east/southeast (upgradient) of the site) is listed under the NPDES, HAZNET, and ENVIROSTOR databases from 2009 to 2010, and in RCRA-SQG, FINDS, MANIFEST, HAZNET and EMI databases for 1993, 1995, and 1996 through 2007. This facility is listed as having generated asbestos containing waste, unspecified solvent mixture, off-specification, aged or surplus organics. No violations have been reported for this facility. No other information is listed for this facility. Based on the information provided, this facility is not considered an REC for the project site.
Listing 8—3M Costa Mesa Surgical Prod at 225 Baker Street (listed as being 481 feet south/southeast of the project site) is listed under the RCRA-SQG and FINDS databases. No violations have been reported for this facility. Based on the information provided, this facility is not considered an REC for the project site
Listings C9 and C10—Environmental Communications Incorporated at 3150 Pullman Street (listed as being 514 feet south of the site) is listed under the RCRA-SQG and FINDS databases. This facility is listed as a small-and large-quantity generator of unspecified waste. No violations have been reported for this facility. Based on the information provided, this facility is not considered an REC for the project site. Betatron, Incorporated at 3150 Pullman Street(listed as being 514 feet south of the project site) is listed under the RCRASQG, FINDS, HAZNET, and EMI databases. This facility is listed as a small quantity generator of waste liquids with cyanides. No violations have been reported for this facility. Based on the information provided, this facility is not considered an REC for the site
SOURCE: Geocon West Inc. (2012).

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) If located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐

Discussion

The project site is located within the John Wayne Airport (JWA) planning area, and is located within two miles of the airport. Proposed development would be subject to review and approval by the Federal Aviation Administration (FAA) and the Airport Land Use Commission (ALUC) for Orange County. Proposed development would be constructed in conformance with the height restrictions set forth by the FAA Federal Aviation Regulations (FAR) Part 77, Caltrans Division of Aeronautics, and would not exceed 150 feet in height. Additionally, the ALUC specifies acceptable uses proximate to the airport. These are defined as uses that will not subject people to adverse noise impacts, will not concentrate people in areas with high potential for aircraft accidents, and will not adversely affect navigable airspace or aircraft operations. Due to the small number of off-airport accidents in the history of John Wayne Airport, the ALUC has not found it necessary to designate an accident potential zone. The City's General

Plan, Land Use Element, Policy LU-1C.3 prohibits construction of buildings that would present a hazard to air navigation.

As such, compliance with applicable regulations and the policies contained in the City's General Plan would ensure that implementation of the proposed project would not result in safety hazards for people residing in the project area, including residents of the proposed project. A ***less-than-significant*** impact would occur.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(f) If within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Discussion

The project is not located within the vicinity of a private airstrip. As previously indicated, the project site is located within a one-mile radius of John Wayne Airport and would require action by the ALUC. The proposed residential uses would not result in a safety hazard for people residing or working in the project area. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

Discussion

The City of Costa Mesa adopted an updated Emergency Operations Plan in July 2013, which does not identify any emergency response or evacuation routes in the vicinity of the project. Redevelopment of the site will not modify access to the site for emergency responders, nor impair implementation of or physically interfere with the use of adjacent streets or the off-ramp to the SR-55 freeway, and will not impair or interfere with emergency response or evacuation plans and ***no impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

The proposed project would replace an existing office building with a240-unit residential development. The project site is not located in an area designated as a high fire severity zone. As a result, ***no impacts*** are anticipated. No mitigation measures are required.

IX. HYDROLOGY/WATER QUALITY

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

Discussion

The proposed project would change the land use from an office use to a residential use. Since the project will disturb 1 acre or more of soil during construction, it is subject to the requirements of the State General Construction Activity National Pollutant Discharge Elimination (NPDES) permit. Permit applicants are required to submit a Notice of Intent to the State Water Resources Control Board, prepare a Stormwater Pollution Prevention Plan (SWPPP), and implement BMPs detailed in the SWPPP to reduce construction effects on receiving water quality by implementing erosion control measures using the best available or best conventional control technology. Typical BMPs include plastic sheeting over soil poles, berms to direct runoff to a designated area, sandbags, silt fencing, screens, and dust control.

Upper and Lower Newport Bay is considered an impaired waterbody for Chlordane, Copper, DDT, metals, PCBs and sediment toxicity. As required by federal Clean Water Act Section 303(d), total maximum daily loads (TMDLs) for metals, pesticides, and priority organics have already been developed for the Newport Bay Watershed by the Santa Ana Regional Water Quality Control Board (SARWQCB). The TMDL is the total amount of a constituent that can be discharged while meeting water quality objectives and protecting beneficial uses. It is the sum of the individual load allocations for point source (e.g., an industrial plant) inputs, load allocations for nonpoint source (e.g., runoff from urban areas) inputs, and natural background, with a margin of safety.

Under the municipal Orange County NPDES permit issued by the SARWQCB, the City of Costa Mesa is required to ensure that discharges from its municipal storm drain systems do not cause or contribute to exceedances of receiving water quality standards (designated beneficial uses and water quality objectives) for surface waters or ground waters.

All construction activities would be subject to existing regulatory requirements. As required by the Stormwater NPDES Permit and Construction General Permit, the project developer would file a notice of intent (NOI) with the State of California to comply with the requirements of the General Construction Permit. This would include the preparation of SWPPP incorporating BMPs for construction-related control of erosion and sedimentation contained in stormwater runoff. Typical BMPs that could be incorporated into the SWPPP would include, but are not limited to, the following:

- Diversion of off-site runoff away from the construction site
- Vegetation of proposed landscaped/grassed swale areas as soon as feasible following grading activities
- Re-vegetation of exposed soil surfaces as soon as feasible following grading activities
- Placement of perimeter straw wattles to prevent off-site transport of sediment

- Usage of drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved roadways
- Regular watering of exposed soils to control dust during construction
- Implementation of specifications for construction waste handling and disposal
- Usage of contained equipment wash-out and vehicle maintenance areas
- Maintenance of erosion and sedimentation control measures throughout the construction period
- Stabilization of construction entrances to avoid trucks from imprinting debris on city roadways
- Training of subcontractors on general site housekeeping

Pile driving (if required for building foundations), dewatering, and other construction activities could potentially encounter groundwater and may require temporary dewatering during construction activities in order to avoid potential groundwater contamination. If dewatering is required, compliance with the Construction Dewatering General Permit would be required.

The development of a construction SWPPP has been identified as a means to protect water quality during construction activities. Incorporation of required BMPs for materials and waste storage and handling, equipment and vehicle maintenance and fueling, as well as for outdoor work areas, would reduce potential discharge of stormwater pollutants from these sources, and this impact would be ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No 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 that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

Discussion

Water for City of Costa Mesa is supplied by Mesa Water District, which relies on local groundwater wells for approximately 75 percent of Mesa Water's water supply, and the other 25 percent is imported water provided by Municipal Water District of Orange County (MWDOC), who purchases imported water from the Metropolitan Water District of Southern California. The redevelopment of the site would result in a very minor increase in water demand, which would incrementally increase demand for both groundwater and imported water within Mesa Water's service area. However, this minor increase in demand would not substantially deplete groundwater supplies, and Mesa Water would continue to manage local groundwater supplies as described in the 2010 Urban Water Management Plan. Redevelopment of the project site would not substantially interfere with the City's ability to recharge local aquifers or substantially reduce the volume in those aquifers since the project study area is not located in a designated recharge area. Impacts related to ground water supply would be ***less than significant***, and no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/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 that would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐

Discussion

The project site is currently developed and redevelopment of the project site would not significantly alter drainage patterns. According to the *Preliminary Hydrology Study, Airport Gateway Apartments*, prepared by Fuscoe Engineering (July 2013) for the proposed project (included as Appendix E to this Initial Study), the on-site drainage for the northeast portion of the project flows to an existing adjacent storm channel via a catch basin and reinforced concrete pipe (rcp) connection. The remainder of the site flows to Pullman Street via surface flow. The proposed project would maintain the historic drainage patter. The northeast portion will continue to drain to the adjacent channel using the existing connection, while the remainder will drain to Pullman Street via parkway culvert outlets in the existing curb. The proposed project storm drain system will be designed to be consistent with the Orange County Hydrology and Orange County Local Drainage Manuals, which includes the following requirements:

- Onsite design storm is based on a 25-year frequency.
- Flow velocity should not exceed 20 feet per second (fps) in a standard wall rcp.
- On local streets, flow should not exceed top of curb, for a 10-year storm event, and in sump conditions, a 25-year storm event shall be used.
- Once water is picked up in a storm drain, it should remain in the system.

Table 3 (Summary of Existing and Proposed Storm Flow Conditions) shows the flow rates for the 2-year, 25-year, and 100-year storm on the project site.

Table 3 Summary of Existing and Proposed Storm Flow Conditions

Event	*Flow (cfs)*	*Volume (ac-ft)*	*Time Concentration (min)*
Existing			
2-year	6.47	0.55	7.7
25-year	13.96	1.30	7.7
100-year	17.86	1.63	7.7
Proposed Project			
2-year	6.35	0.49	7.6
25-year	13.76	1.21	7.6
100-year	17.64	1.54	7.6

SOURCE: Fuscoe Engineering, *Preliminary Hydrology Study, Airport Gateway Apartments* (July 2013).
cfs = cubic feet per second, ac-ft = acre-feet

As shown in Table 3, the proposed project results in a decrease in peak discharges, runoff volumes and times of concentration compared to existing conditions. As such, implementation of the proposed project would not result in erosion or siltation. There is a potential for erosion to occur during demolition and construction activities. However, BMPs for erosion control will be required during demolition and construction of the proposed project in as described under Section IX(a). As a result, impacts would be reduced to ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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 that would result in flooding on or off site?	☐	☐	☒	☐

Discussion

The project site is currently developed with an office building and surface parking. The proposed project would maintain the historic drainage patter. The northeast portion will continue to drain to the adjacent channel using the existing connection, while the remainder will drain to Pullman Street via parkway culvert outlets in the existing curb. As shown in Table 3 in Section IX(c), the proposed project results in a decrease in peak discharges, runoff volumes and times of concentration compared to existing conditions. As a result, impacts would be reduced to ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

Discussion

Implementation of the proposed project would alter the existing drainage pattern on the project site. The proposed project would maintain the historic drainage patter. The northeast portion will continue to drain to the adjacent channel using the existing connection, while the remainder will drain to Pullman Street via parkway culvert outlets in the existing curb. The proposed project storm drain system will be designed to be consistent with the Orange County Hydrology and Orange County Local Drainage Manuals. As shown in Table 3 in Section IX(c), the proposed project results in a decrease in peak discharges, runoff volumes and times of concentration compared to existing conditions. These results indicate that the proposed project can be constructed in a manner that does not adversely impact storm flows to the surrounding area while providing safe and adequate drainage operation for the proposed project. Therefore, the potential for long-term (operational) site runoff leading to on- or off-site flooding is considered low. During project site grading and construction, short-term flooding impacts could be addressed through preparation of a SWPPP, which would incorporate BMPs. As a result, impacts due to flooding would be ***less than significant***. No mitigation is required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(f) Otherwise substantially degrade water quality?	☐	☐	☒	☐

Discussion

As discussed in Sections IX(a) through (e) above, the proposed project would not result in a substantial degradation to water quality in the project area. As such, the proposed project would not otherwise degrade water quality and would result in a ***less-than-significant*** impact. No mitigation is required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

According to the City of Costa Mesa General Plan (2000), the site is not within an area of 100-year flood hazards. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒

Discussion

According to the City of Costa Mesa General Plan (2000), the site is not within an area of 100-year flood hazards. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

According to the City's General Plan, Exhibit SAF-5, the proposed project is not located in an area subject to potential flooding from the failure of any dams. In addition, the project study area is not located in an area of potential flooding from seiche or tsunami. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

The site is located approximately 5.5 miles from the Pacific Ocean at an elevation of approximately 44 feet MSL. A review of the City of Costa Mesa General Plan (2000) indicates the site is not located in an area with a potential for inundation hazards related to seiches. Therefore, tsunamis, seismic sea waves, are not considered a significant hazard at the site. ***No impact*** would occur. No mitigation measures are required.

X. LAND USE/PLANNING

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Physically divide an established community?	☐	☐	☐	☒

Discussion

The proposed project would result in the redevelopment of the project site by replacing an existing office building with a residential development. No established communities are located on the project site and the proposed development would not divide an established community. ***No impacts*** related to established residential communities are identified; therefore, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

The proposed project would replace the existing office building and surface parking areas with an apartment building and parking structure. A General Plan Amendment would be required to change the land use designation from Industrial Park to High Density Residential and to change the zoning from CL to PDR-HD. The proposed project would also include a Master Plan/Design Review of the development, a subdivision map (as applicable), and action by the Airport Land Use Commission (ALUC) due to its close proximity to John Wayne Airport. As the General Plan does not currently allow for residential development within the Industrial Park area, the proposed project would require a General Plan Amendment, and the impact would be ***less than significant***. Potential impacts associated with consistency with the General Plan and other adopted plans would be addressed in the EIR.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

The proposed project is not located within or adjacent to any habitat conservation plan or natural community conservation plan. Therefore, ***no impacts*** are anticipated.

XI. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	☐	☐	☐	☒

Discussion

The proposed project would result in the demolition of an existing two-story office building and the construction of a 240-unit residential development. Construction activities would involve the use of industrial minerals (e.g., aggregate, sand and gravel), but such uses would not result in the loss of availability of such materials. There are no known regionally or locally important mineral resources located on the project site. Development of the project would have ***no impact*** on mineral resources. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☐	☒

Discussion

The project site is not delineated on a local general plan, specific plan, or other land use plan as the location of a locally important mineral resource recovery site. The proposed redevelopment would not result in the loss of availability of a locally important mineral resource recovery site and ***no impact*** would occur. No mitigation measures are required.

XII. NOISE

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Result in the 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?	☒	☐	☐	☐

Discussion

Short-term noise impacts would be associated with the demolition, excavation, grading, and erection of buildings on site during construction of the proposed project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area today but would no longer occur once construction is completed.

Ambient noise levels that would occur as part of operation of the proposed project would be largely attributable to increases in local traffic volumes and general human activity at the site. The land uses immediately adjacent to the proposed project site to the south, and west are commercial uses that are not considered noise sensitive land uses (i.e., land uses whose daily activities are more affected by higher ambient noise levels). There is no existing development immediately to the east of the project site.

Additionally, development of the proposed project would potentially expose the occupants of the project to excessive noise levels due to the proximity of both the SR-55 freeway, as well as the John Wayne Airport. As such this impact is ***potentially significant***, and the potential for the proposed project to expose noise sensitive receptors to excessive noise levels will be evaluated in the EIR.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐

Discussion

Construction of the project could potentially result in significant groundborne vibration or groundborne noise on properties adjacent to the project site, particularly during grading, excavation, and installation of the foundation. This would be considered a ***potentially significant*** impact. The EIR will fully analyze potential impacts related to groundborne noise and vibration and recommend mitigation measures if necessary.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐

Discussion

The development of the proposed project site will result in an increase in daily traffic trips in the project vicinity; therefore, there will be a potential increase in traffic noise along access roads leading to the project site. The EIR will fully analyze impacts related to increases in ambient noise levels and will include mitigation measures as necessary. This would be a ***potentially significant*** impact.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐

Discussion

There would at times be high intermittent construction noise in the project area during project construction. Proposed construction may significantly affect land uses adjacent to the project site. Construction at the project site would comply with the hourly limits specified by the City's Noise Ordinance. The EIR will identify any significant impacts and will include mitigation measures as necessary. This would be considered a ***potentially significant*** impact.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) If located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in the exposure of people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐

Discussion

The project site is located within a one mile radius of John Wayne Airport. As stated in the Project Description, the proposed project would require action by the Airport Land Use Commission (ALUC) due to its close proximity to John Wayne Airport. While the proposed project is not located within the 65 CNEL Noise Contour, the proposed project would potentially result in the exposure of occupants to excessive noise levels. As such, this impact is considered ***potentially significant*** and will be further analyzed in the EIR for the proposed project.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(f) If within the vicinity of a private airstrip, result in the exposure of people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

The project site is not located within the vicinity of a private airstrip. Therefore, there are ***no impacts*** related to this issue.

XIII. POPULATION/HOUSING

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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)?	☐	☐	☒	☐

Discussion

The proposed project would include the development of 240 high density residential units, which would result in an increase to the supply of housing and associated population in the area. Since the apartments are planned to be marketed to professionals in the area, they would mostly be comprised of studios, one-bedrooms and two bedroom units. The proposed breakdown of units is as follows: 26 studio and studio+loft units; 117 one-bedroom and one-bedroom+loft units, 85 two-bedroom and two-bedroom+loft units; and, 12 three-bedroom and three-bedroom+loft units.

According to the Southern California Association of Governments (SCAG), the City of Costa Mesa had a population of 109,260 within approximately 39,946 households in 2010.[3] The proposed project is expected to add approximately 346 persons to the site.[4] The location of the proposed residential development could be desirable to professionals seeking housing in close proximity to major employers and transportation corridors and is not anticipated to attract residents with children.

Generally, the proposed project would contribute to the housing balance within the community by providing housing in close proximity to major employers. As a result, project implementation will not substantially increase the housing and population of the City of Costa Mesa. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

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[3] Southern California Association of Governments, *City of Costa Mesa Profile Report* (May 2011), http://scag.ca.gov/resources/pdfs/2011LP/Orange/CostaMesa.pdf (accessed July 23, 2013).

[4] This assumes 143 residents for the one-bedroom units, 170 residents for the two-bedroom units, and 33 residents for the three-bedroom units.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

The proposed project would replace an existing office building with a new 240-unit residential development. No residential uses are currently located on the site. Therefore, no residential uses would be displaced under the proposed project. ***No impact*** would occur. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

No housing will be destroyed nor will people be displaced as a result of project implementation. Therefore, ***no impacts*** are anticipated. No mitigation measures are required.

XIV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or in the 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:				
(i) Fire protection?	☐	☐	☒	☐

Discussion

Fire prevention, fire protection, and emergency medical services in the project study area are provided by the City of Costa Mesa Fire Department, which operates five paramedic engine companies, one rescue squad, and a battalion chief and aide on duty 24 hours a day, seven days a week. These fire personnel respond from six fire stations located within the City limits. Fire Station 2 (Baker Street Station) located at 800 Baker Street is less than 1 mile west of the project site.

A previous study of fire department responses concluded that the fire emergency service needs of one residential unit is comparable to the needs of approximately 10,000 sf of industrial development. The 240-unit residential development will generate additional calls for service.

Response time to the site will vary depending upon which apparatus are available and the number of simultaneous incidents. The Costa Mesa Fire Department has a goal to respond to emergencies within 5 minutes 80 percent of the time. Department goals are consistent with area-wide average response goals.

Currently, the Department averages response times to emergencies within five minutes approximately 55 percent of the time citywide, which is 25 percent short of the goal. The goal for non-emergencies is to respond by the time requested, which is met by the Department 100 percent of the time.

The project would be constructed to meet the requirements of the California Building Code and California Fire Code. These requirements include safe access, location and placement of fire protection services, water supply, hazardous materials and building construction for fire safety.

Implementation of the following City Standard Conditions will ensure that impacts to fire emergency response services are ***less than significant***.

Standard Conditions

- Each final master plan for a development in the project area shall provide sufficient capacity for fire flows required by the City of Costa Mesa Fire Department.
- Vehicular access must be provided and maintained serviceable throughout construction to all required fire hydrants.
- Fire Department response time goals shall to be continually monitored and reassessed as the area is redeveloped.
- Prior to the issuance of a building permit, the City of Costa Mesa Fire Department shall review and approve the developer's project design features to assess compliance with the California Building Code and California Fire Code. Fire staff shall examine the projected demands of the proposed project and make recommendations to ensure that adequate personnel/resources will be available to meet projected demand. Recommendations of the study shall be implemented to the satisfaction of the Fire Department to ensure that emergency response impacts are minimized to below a level of significance

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(ii) Police protection?	☐	☐	☒	☐

Discussion

The City of Costa Mesa Police Department (CMPD) provides law enforcement services to the project study area. The CMPD is comprised currently of 196 full-time positions, of which 130 are sworn and 66 are civilians, with various part-time positions to aid throughout the organization.[5] The project site is located in Police Service Area 2. Area 2 is bounded by Sunflower Avenue to the north, Tustin Avenue to the east, Joann and Victoria streets to the south, and the Santa Ana River to the west. The CMPD Facility is located at 99 Fair Drive, approximately 2 miles southwest from the project study area.

The CMPD's standard response time goals are as follows:

- Five minutes or less for emergency calls, 85 percent of the time

[5] City of Costa Mesa, Costa Mesa Police Department, http://www.costamesaca.gov/index.aspx?page=302 (accessed July 25, 2013).

- Fifteen minutes or less for non-emergency class, 85 percent of the time
- Thirty minutes or less for report calls, 85 percent of the time

The following standard condition would ensure that safety and security requirements are incorporated into the design of the proposed structures. Implementation of the following City Standard Conditions for police protection services will ensure that impacts remain ***less than significant***.

Standard Condition

As final building plans are submitted to the City of Costa Mesa for review and approval, the Costa Mesa Police Department shall review all plans for the purpose of ensuring that design requirements are incorporated into the building design to increase safety and avoid unsafe conditions. These measures focus on security measures and, include but not limited to, the following:

- Lighting shall be provided in open areas and parking lots.
- Required building address numbers shall be readily apparent from the street and rooftop building identification shall be readily apparent from police helicopters for emergency response agencies.
- Emergency vehicle parking areas shall be designated within proximity to buildings.
- The applicant shall fund all costs associated with police and fire radio reception enhancement, including a Bi-Directional Amplifying 800 MHz antenna (BDA).
- Prior to the issuance of a grading permit, the City of Costa Mesa Police Department shall review and approve the developer's project design features to ensure adequate security measures are incorporated into the project design and that sufficient personnel/resources are available to meet the demands of the proposed project. Any requirements with regard to additional resources shall be completed by the Developer and shall be implemented to the satisfaction of the Police Chief to ensure that emergency response impacts are minimized to below a level of significance.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(iii) Schools?	☐	☐	☒	☐

Discussion

The project site is located outside of the Newport-Mesa Unified School District (NMUSD), which serves most of the City of Costa Mesa with the exception of the airport industrial area.[6] While the proposed project would not preclude people with families, the proposed urban loft-style residential units located in industrial areas, such as those proposed under the proposed project are typically marketed to individuals who do not have minor children. The Project Applicant anticipates that the proposed project would primarily attract young couples, college age roommates and singles, and therefore would have limited need for school services. While the project site is currently outside the NMUSD boundaries, any school-aged children residing at the proposed project would be eligible to attend NMUSD schools through the

[6] Newport Mesa Unified School District, School Locator, http://web.nmusd.us/cms/page_view?d=x&piid=&vpid=1223740746931 accessed July 25, 2013.

District's permit process. Additionally, the NMUSD would require that prior to issuance of building permits, the Developer shall pay a school impact fee currently calculated at $1.84 per square foot for residential development. Therefore, this impact would be considered ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(iv) Parks?	☐	☐	☒	☐

Discussion

The proposed project will result in the addition of approximately 346 residents to the project site. Residents of the proposed project will most likely use Del Mesa Park, located approximately 0.5 mile to the north. The 4-acre park includes picnic tables, playground, volleyball, and basketball facilities.

The addition of 346 residents may place addition demands on the programming capability at Del Mesa Park. However, the proposed project would provide approximately 66,050 sf of common open space and on-site amenities, which include recreation areas, a pool, and a clubhouse, and would alleviate demands on Del Mesa Park and other parks.

The City of Costa Mesa General Plan requires 4.26 acres of parkland per 1,000 population.[7] Based upon an anticipated population of 346 residents, the proposed project would generate the need for 1.47 acres of parkland. The proposed project includes construction of a pool, clubhouse and fitness facility on site, as well as, sports courts. The City's Municipal Code, Title 13, Chapter XI, Article 5 (Park and Recreation Dedications) established the development impact fees for residential development. The proposed project would be required to pay the parks development impact fees to help mitigate the increased costs of parks services. Therefore, impacts to parks services of the proposed project would be ***less than significant***. No mitigation is required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(v) Other public facilities?	☐	☐	☒	☐

Discussion

The proposed residential development would have a need for public facilities such as libraries, postal service, hospitals, etc. Since the project area is already developed, these facilities already exist and would be able to provide the necessary services to the new residents. Construction of 240 residential units would have a less than significant impact on existing public facilities. Therefore, no mitigation measures are necessary.

The project site is located within the boundaries of the Orange County Public Library, Costa Mesa Branch. The branch maintains generation rates of 0.2 sf of facility space and 1.3 volumes per capita.

[7] City of Costa Mesa, *City of Costa Mesa General Plan*, OSR-8e.

Based on a population of 377, this equates to 75.4 sf of facility space and 490.1 volumes. According to the Orange County Public Library, the City of Costa Mesa has a current facility space deficit of 6,294 sf.

The Costa Mesa General Plan anticipates growth in the City from 113,134 residents to 128,483 residents by the Year 2025. The proposed project would allow for the addition of 346 residents to the area. The City of Costa Mesa is currently served by two public libraries and a technology library.

The 2000 General Plan EIR identified a current standard set by the Orange County Public Library system for 0.2 sf per capita of library space. While the Costa Mesa library facilities currently do not meet this standard in existing conditions, the General Plan EIR identified less than significant impacts to library services because the OCPL did not anticipate any direct significant impacts on these facilities.

If the same analytical approach regarding library service impacts were applied to the proposed project, less than significant impacts to library services would also be identified. Therefore, this environmental document concludes that the proposed project will result in ***less-than-significant*** library impacts.

XV. RECREATION

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	☐	☐	☒	☐

Discussion

The proposed project would include the development of 240 residential units. Approximately 346 residents would be added to the site under the proposed project. Residents would use existing nearby parks, including Del Mesa Park. The proposed project includes construction of a pool, clubhouse and fitness facility on site, as well as, sports courts. The City's Municipal Code, Title 13, Chapter XI, Article 5 (Park and Recreation Dedications) established the development impact fees for residential development. The proposed project would be required to pay the parks development impact fees to help mitigate the increased costs of parks services. Therefore, impacts to parks services of the proposed project would be ***less than significant***. No mitigation is required. Refer to Section XVI(iv).

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion

A total of 346 residents may be added to the project study area, who would most likely use Del Mesa Park. The proposed project would generate the need for 1.47 acres of parkland. The proposed project

would include on-site recreational amenities such as common open space and recreation area, a pool, and a clubhouse, and would not require the construction or expansion of new recreational facilities. As such, impacts would be considered ***less than significant***. Refer to Section XVI(iv) under Public Services.

XVI. TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 nonmotorized 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?	☒	☐	☐	☐

Discussion

The proposed project would replace an existing office building with a 240-unit residential development. Linscott, Law & Greenspan prepared a traffic analysis for the proposed project on July 18, 2013. According to the analysis, the proposed project would generate 1,090 additional daily trips, 65 net AM peak hour trips and 92 net PM peak hour when compared to the existing "occupied floor area." This would be considered a ***potentially significant*** impact. The EIR will analyze potential impacts to traffic and circulation and will include mitigation measures as necessary.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

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). Per the CMP guidelines, this number is based on the desire to analyze any impacts that will be 3.0 percent or more of the existing CMP highway system facilities' capacity. According to the traffic study prepared for the proposed project by Linscott, Law & Greenspan in July 18, 2013, the proposed project is expected to generate 1,596 daily trips, and thus does not meet the criteria required for a CMP traffic analysis. Therefore, the proposed project would not have any significant traffic impacts on the Congestion Management Program Highway System, and impacts would be ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

The proposed project would be located within a one-mile radius of John Wayne Airport. As stated in the Project Description, the proposed project would require approval from the Airport Land Use Commission (Master Plan/Design Review). The EIR will discuss consistency with the Airport Land Use Commission. However, the proposed project would not result in a change in air traffic patterns. This would be considered a ***less-than-significant*** impact.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

Discussion

The project would not change the existing roadway network, as redevelopment would be confined to the existing site. Access is provided off of Pullman Street. The project access driveways will be designed per the City of Costa Mesa standards. ***No impact*** is anticipated.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Result in inadequate emergency access?	☐	☐	☒	☐

Discussion

The project site would be accessible to fire, ambulance, and police vehicles from Pullman Street. In addition, the project will be required to comply with the Uniform Fire Code and access standards for emergency response. As a result, impacts would be ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

The General Plan of the City of Costa Mesa includes a list of goals and objects for a "balanced, uncongested, safe, and energy-efficient transportation system, incorporating all feasible modes of

transportation." The Costa Mesa General Plan Circulation Element Objective CIR-1A is "to provide specific programs and policies that address multimodal transportation, multi-agency coordination, mitigation of traffic impacts and the balancing of land uses with transportation systems. The City has established several policies to support this objective. The following policies apply to the proposed project:

CIR-1A.8 *Encourage the integration of compatible land uses and housing into major development projects to reduce vehicle use.*

The project is a residential development that places housing close to commercial uses, which will reduce vehicle miles traveled. In addition, the project is located in an area that has access to several Orange County Transit Authority (OCTA) bus routes. The OCTA serves the project area with the following bus routes and commuter links:

- Route 43: Fullerton to Costa Mesa
- Route 55: Santa Ana to Newport Beach
- Route 173: Huntington Beach to Costa Mesa

The proposed project is not anticipated to conflict with any alternative transportation goals, plans or policies, including the Costa Mesa General Plan Circulation Element, and impacts would be considered ***less than significant***.

XVII. UTILITIES/SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

Discussion

A Sewer Capacity Report was prepared for the proposed project by Fuscoe Engineering on May 15, 2013, and is included as Appendix F to this Initial Study. The existing public sewer mains for the site are located in Baker Street and Pullman Street which border the project. There is an existing 8-inch line in Baker Street and an existing 8-inch line in Pullman Street. The existing wastewater flow was calculated based on an average daily flow of 3,500 gallons per day per acre (gpd/ac), with an additional 800 gpd/ac to account for inflow and infiltration. Based on these rates, the existing uses generate approximately 83,300 gpd.

As shown in Table 4 (Estimated Sewer Flows for the Proposed Project), the proposed project would result in approximately 40,451 gpd of wastewater, a reduction of approximately 42,849 compared to existing conditions. This flow would be divided between the lines in Baker Street and Pullman Street. The proposed increase would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

Table 4	**Estimated Sewer Flows for the Proposed Project**		
Land use	***Quantity***	***Duty Factor***	***Estimated Flow***
Proposed Project			
Studio	26 du	111 gpd/du	2,886 gpd
One-bedroom	117 du	136 gpd/du	15,912 gpd
Two-bedroom	85 du	187 gpd/du	15,895 gpd
Three-bedroom	12	233 gpd/du	2,796 gpd
Amenities	4,375 sf	3,500 gpd/ac	352 gpd
Total			***40,451 gpd*** ***0.0405 mgd***

SOURCE: Fusco Engineering, *Sewer Capacity Report* (May 2013).
du = dwelling unit, gpd = gallons per day; mgd = million gallons per day

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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?	☐	☐	☒	☐

Discussion

The project site is currently served by water and sewer utilities. The existing public sewer mains for the project site are located in Baker Street and Pullman Street which border the project. There is an existing 8-ince line in Baker Street and an existing 8-inch line in Pullman Street. The slope of the Baker Street line is relatively steep at approximately 1.2 percent. Existing pipe flow for this line is 0.053 cfs. The slope of the Pullman Street line is approximately 0.43 percent. Existing pipe flow for this line is 0.296 cfs.

A Sewer Capacity Report was prepared for the proposed project by Fuscoe Engineering on May 15, 2013. As described in Section XVII(a), the proposed project would result in approximately 40,451 gpd of wastewater, and these sewer flows would be considered minor and no adverse conditions are anticipated in the public sewer system as a result of the project. The proposed project would not require the expansion of construction of new water or wastewater treatment facilities. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Discussion

According to the *Preliminary Hydrology Study, Airport Gateway Apartments*, prepared by Fuscoe Engineering (July 2013) for the proposed project (included as Appendix E to this Initial Study), the on-site drainage for the northeast portion of the project flows to an existing adjacent storm channel via a catch basin and reinforced concrete pipe (rcp) connection. The remainder of the site flows to Pullman Street via surface flow. The proposed project would maintain the historic drainage patter. The northeast portion will continue to drain to the adjacent channel using the existing connection, while the remainder will drain to Pullman Street via parkway culvert outlets in the existing curb. As shown in Table 3 in Section IX(c), the proposed project results in a decrease in peak discharges, runoff volumes and times of concentration compared to existing conditions. These results indicate that the proposed project can be constructed in a manner that does not adversely impact storm flows or the storm drain system. BMPs would be utilized during the grading and paving of the site as well as during project operation to minimize the discharge of sediments and non-visible pollutants from the project site. This impact would be ***less than significant***, and no mitigation would be required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Discussion

The Mesa Consolidated Water District (Mesa) provides water service to most of the City of Costa Mesa including the project site. The North Costa Mesa High Rise Residential Project Final Program Environmental Impact Report utilized an average domestic water use of 200 gpd per dwelling unit for residential uses. Based on this water demand rate, the proposed project would result in approximately 48,000 gpd, or 53.8 acre-feet per year. As noted above in Section IX (Hydrology/Water Quality), water supply for the site would be provided by Mesa, which primarily relies upon local groundwater wells for water supply, supplemented by imported water provided by MWDOC. Currently, the total water demand for retail customers served by Mesa is approximately 19,400 acre-feet annually consisting of 2,400 acre-feet of imported water, 15,900 acre-feet of local groundwater, and 1,100 acre-feet of recycled water. Mesa is projecting a flat demand in the next 25 years accompanying a projected 9 percent population growth. As such, Mesa is anticipating that water demand in 2035 would increase to 19,700 acre-feet per year. As such, the proposed project would result in an increase of less than 1 percent (0.003 percent) to Mesa's overall demand. The increase in water demand from redevelopment of the site is not expected to require new or expanded entitlements. This would be considered a ***less-than-significant*** impact. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(e) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐

Discussion

See Discussion (a) and (b) above.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Discussion

The Orange County Integrated Waste Management District (IWMD) owns and operates three active landfills, including the Olinda Alpha Landfill near Brea, the Frank R. Bowerman Landfill in Irvine, and the Prima Deshecha Landfill in San Juan Capistrano.[8] Although waste may be transported to any of the three sites, the Frank R. Bowerman Landfill is the closest facility to the project and is likely to be the solid waste facility most often receiving waste from the project. The Frank R. Bowerman Landfill located at 11002 Bee Canyon Access Road in Irvine serves the City of Costa Mesa. This 725-acre landfill has 534 acres permitted for landfill disposal. This landfill can accept 8,500 tons of solid waste per day, except that it may accept up to 11,500 tons per day. The expected closure date of this landfill is Year 2053. The proposed 240-unit residential development is expected to generate 2,029 lbs of solid waste per day (8.6 lbs/dwelling unit/day).[9]

The Costa Mesa Sanitation District (CMSD) is responsible for residential trash collection and transmittal to a recycling facility for recycling and disposal. CMSD is responsible for meeting the Assembly Bill 939 (AB 939) mandate of 50 percent disposal reduction and for preparing AB 939 solid waste planning documents, including the Source Reduction and Recycling Element (SREE), the Household Hazardous Waste Element (HHWE), and the Non-Disposal Facility Element (NDFE). The City has implemented a recycling program to help ensure that AB 939 requirements are met and reduce construction site waste. The City contracts with several permitted haulers of solid waste that are required to recycle 50 percent of the waste hauled (Ware Disposal, FM Linnes, Federal Disposal, etc.). The ongoing implementation of these programs will further reduce the anticipated solid waste.

Impacts related to solid waste would be considered ***less than significant***. Mitigation measures are not required.

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[8] Orange County Waste and Recycling, Landfill Information, http://oclandfills.com/landfill (accessed July 25, 2013).

[9] Cal Recycle, Residential Developments: Estimating Solid Waste Generation Rates, http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm (accessed July 25, 2013).

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

The project study area will remain in compliance with all statutes and regulations related to solid waste. In addition, the landfill serving the project has adequate capacity. As a result, potential impacts related to solid waste are considered ***less than significant***.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(h) Require or result in the construction of new energy production or transmission facilities, or expansion of existing facilities, the construction of which could cause a significant environmental impact?	☐	☐	☒	☐

Discussion

Southern California Edison is the primary supplier of electricity to the City of Costa Mesa and provides electrical service to the project site. SCE provided 87.34 billion kWh of electricity in 2011 and maintains a 50,000-square-mile service area.[10] Proposed electrical generation under the 240-unit residential development would not require the construction of new facilities or the expansion of existing facilities. This would be considered a ***less-than-significant*** impact. No mitigation measures would be required.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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 a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒

Discussion

The project site is within a developed urban area and there are no rare, endangered, threatened plant or animal species within the project study area. Implementation of the proposed project will not result in

[10] Southern California Edison, SCE: Who We Are, https://www.sce.com/wps/portal/home/about-us/who-we-are (accessed July 25, 2013).

the physical degradation of the environment nor adversely impact any sensitive biological species, cultural resources, or sensitive resources, and ***no impact*** would occur.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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)?	☒	☐	☐	☐

Discussion

Impacts to Aesthetics, Agricultural Resources, Biological Resources, Cultural Resources, Geology, Hazards, Hydrology, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities would be less than significant or would be mitigated to levels of insignificance. However, as identified in this Initial Study, the proposed project would result in potentially significant impacts to air quality, greenhouse gas emissions, land use, noise, and transportation. An EIR will be prepared to analyze ***potentially significant*** impacts and will include mitigation measures as necessary.

	Potentially Significant Impact	Less Than Significant w/Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Discussion

See discussion in (b) above. An EIR will be prepared to identify ***potentially significant*** impacts to air quality, greenhouse gas emissions, land use, noise, and transportation.

SECTION 5. **References Cited**

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Appendix A CNDDB Occurrences Map

Source: CNDDB, Jul 2013

ATKINS

FIGURE X

CNDDB Occurrences within One Mile of Baker Street Apartments Project

100035264

City of Costa Mesa

\\lanfs01\Projects\Projects - All Users\100030000+\100035264 Costa Mesa 125 E Baker Apt EIR\Data\CNDDB\GIS\mxd\FigX_BakerStreetAptsEIR_CNDDB.mxd

Appendix B Cultural Resources Report

Atkins North America, Inc.
650 East Hospitality Lane, Suite 460
San Bernardino, California 92408

Telephone: +1.909.890.5951
Fax: +1.909.890.3610

www.atkinsglobal.com/northamerica

July 30, 2013

Claire L. Flynn, AICP, Acting Development Services Director
City of Costa Mesa
77 Fair Drive
Costa Mesa, California 92628-1200

Subject: California Historical Resources Information System (CHRIS) Records Search, Native American Heritage Commission (NAHC) Sacred Lands File (SLF) Database Search, and Information-Scoping Results for the Baker Street Apartments Project, City of Costa Mesa, Orange County, California

Dear Ms. Flynn:

Atkins has completed a CHRIS records search, an NAHC SLF database search, and information-scoping efforts for the proposed Baker Street Apartments Project. The project area considers 4.45-acres at the southwest corner of the intersection of Baker Street and Pullman Street and is currently occupied by a two-story office building. The proposed project is the construction of a four-story, 236-unit residential development that wraps around a 5.5-level covered parking structure. The project area is located within an unplatted portion of Township 6 South, Range 10 West as found on the U.S. Geological Survey (USGS) Newport Beach, California 7.5-minute topographic quadrangle.

California Historical Resources Information System (CHRIS) Records Search

The CHRIS records search was conducted on July 18, 2013 by Atkins Archaeologist William R. Gillean, B.S., working under the supervision of Atkins Associate Project Manager/Archaeologist Jennifer M. Sanka, M.A., RPA. The records search was completed at the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton. The search included a review of previous cultural resources surveys and documented resources for the project area, and all lands found within one mile. To identify the presence/absence of cultural resources, Mr. Gillean examined various current inventories, including the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), the California State Historic Resources Inventory (HRI), and the Office of Historic Preservation Historic Property Data File (HPDF) for Orange County. Archival maps were additionally inspected for indications of historic age structures and features in the area.

The results of the records search indicated that no cultural resources have been recorded within the project area and that a total of 30 resources are known within the one mile search radius. All of the previously documented resources are located more than 0.25 mile from the project area. One resource is a prehistoric site consisting of a shell scatter with associated habitation features, while the remaining resources are historic age buildings and features. The buildings are primarily related to the Costa Mesa Air National Guard Station (ANGS) or are single-family residences located within suburban housing developments. These resources and their location relative to the project area are outlined in Table 1 below.

Table 1: Known Cultural Resources within the One Mile Records Search Radius

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
CA-ORA-001538	Prehistoric – A shell scatter and the remains of a house or floor. In 1999, it was assumed that intact portions of the site may be present beneath existing development and that such remains may be significant.	●	--	--	No
30-177456	Historic age – A one-story, industrial vernacular building constructed in 1964. This resource is the Reserved Forces Communications – Electronics building associated with the Costa Mesa ANGS. This building was recommended as ineligible for the NRHP.	●	--	--	No
30-177457	Historic age – A one-story, concrete building with a concrete foundation constructed in 1964. This resource is the Vehicle Maintenance Shop building associated with the Costa Mesa ANGS. This building was recommended as ineligible for the NRHP.	●	--	--	No
30-177458	Historic age – The Warehouse Supply and Equipment Base building associated with the Costa Mesa ANGS. The structure was built in 1966 and is comprised of vertical, corrugated metal siding. This building was recommended as ineligible for the NRHP.	●	--	--	No

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
30-177459	Historic age – A one-story, concrete block building constructed in 1966. This resource is the Base Engineering Maintenance Shop building associated with the Costa Mesa ANGS. This building was recommended as ineligible for the NRHP.	●	--	--	No
30-177460	Historic age – A one-story, concrete vault associated with the Costa Mesa ANGS and built in 1968. This resource was recommended as ineligible for the NRHP.	●	--	--	No
30-177166	Historic age – A one-story, L-shaped, single-family dwelling built in 1962. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	●	--	--	No
30-177167	Historic age – A one-story, Ranch style, single-family dwelling built in 1962. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	●	--	--	No
30-177168	Historic age – A one-story, L-shaped, single-family dwelling built in 1963. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	●	--	--	No
30-177169	Historic age – A one-story, L-shaped, single-family dwelling built in 1962. This resource has been	●	--	--	No

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
	assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.				
30-177170	Historic age – A one-story, single-family dwelling with an irregular floor plan built in 1962. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	●	--	--	No
30-177171	Historic age – A one-story, single-family dwelling with an irregular floor plan built in 1962. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	●	--	--	No
30-177172	Historic age – A one and one half-story, single-family dwelling with an irregular floor plan built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177173	Historic age – A one and one half-story, L-shaped, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
30-177174	Historic age – A one and one half-story, L-shaped, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177175	Historic age – A one and one half-story, L-shaped, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177176	Historic age – A one and one half-story, Ranch style, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177177	Historic age – A one and one half-story, single-family dwelling with an irregular floor plan built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177178	Historic age – A one and one half-story, L-shaped, Ranch style, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not	--	●	--	No

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
	been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.				
30-177179	Historic age – A one and one half-story, L-shaped, Ranch style, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177180	Historic age – A one and one half-story, L-shaped, Ranch style, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
30-177181	Historic age – A one and one half-story, L-shaped, Ranch style, single-family dwelling built in 1965. This resource has been assigned a status code of 6Y, indicating that it has been determined ineligible for the NRHP; but, the property has not been evaluated for the CRHR or local listing. It was recommended as ineligible for the CRHR in 2010.	--	●	--	No
186198	Historic age – A building constructed in 1965 and located at 930 Cheyenne Street. This resource has been assigned a status code of 6Y, indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.	●	--	--	No
186199	Historic age – A building constructed in 1965 and located at 934 Cheyenne Street. This resource has been assigned a status code of 6Y,	●	--	--	No

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
	indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.				
186200	Historic age – A building constructed in 1965 and located at 938 Cheyenne Street. This resource has been assigned a status code of 6Y, indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.	●	--	--	No
186201	Historic age – A building constructed in 1965 and located at 948 Cheyenne Street. This resource has been assigned a status code of 6Y, indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.	●	--	--	No
186202	Historic age – A building constructed in 1965 and located at 952 Cheyenne Street. This resource has been assigned a status code of 6Y, indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.	●	--	--	No
186203	Historic age – A building constructed in 1965 and located at 956 Cheyenne Street. This resource has been assigned a status code of 6Y, indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.	●	--	--	No
165768	Historic age – A building constructed in 1956 and located at 969 Post Road. This resource has been assigned a status code of 6Y, indicating that this resource is not	●	--	--	No

Site Number/ HPDF Property Number	Resource Description	Within ~One mile to 0.5-mile Radius	Within ~0.5-mile to 0.25-mile Radius	Within ~0.25-mile Radius	Within Project Area?
	eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.				
186191	Historic age – A building constructed in 1962 and located at 3158 Yellowstone Drive. This resource has been assigned a status code of 6Y, indicating that this resource is not eligible for inclusion in the NRHP; however, the property has not been evaluated for the CRHR or local listing.	●	--	--	No

Thirty-one area-specific cultural resource reports are on-file with the SCCIC for the one mile search radius. Collectively, these reports addressed approximately 60 percent of the records search radius. Two of these studies addressed the project area (ARI 1977 and ARMC 1979). In 1977, Archaeological Research, Incorporated (ARI) summarized the activities covered by their consultant contract with The Irvine Company between January 1, 1976 and May 1, 1977. This annual report presents the results of a variety of activities, including the preparation of Environmental Impact Report sections and field work on numerous resources. None of the recorded resources addressed in the annual report are located within the project area or search radius (ARI 1977). In 1979, Archaeological Resource Management Corporation (ARMC) prepared a comprehensive history of the archaeological research performed on the sizable Irvine Ranch property. At that time, approximately 100 sites on the Irvine Ranch lands had been investigated by surface collection or through excavation. This project did not include additional fieldwork (ARMC 1979). Thus, the project area has been previously addressed through research, but does not appear to have been subjected to intensive survey.

Topographic Map and Aerial Photograph Review

Archival maps and aerial photographs available from the SCCIC and on-line were reviewed for the presence of historic age structures and development within the project area (NETR 2013). The results of the review indicate that the project area was vacant from 1896 until at least 1972, though the Santa Ana and Newport Railroad was located to the northwest and west of the project area. This railroad was later known as the Southern Pacific Railroad and is presently occupied by the State Route 55 corridor. Between 1972 and 1980, the existing two-story office building and associated parking lot(s) were constructed within the project area. Thus, the existing building located within

the project area is aged no more than 41 years. As such, the project area does not currently contain historic age buildings (i.e. structures aged 50 years or older).

Native American Heritage Commission (NAHC) Records Search

On July 16, 2013, Atkins sent a letter to the NAHC to determine whether any sacred sites were listed in the SLF for the project area and the general vicinity. The response was received from the NAHC on July 24, 2013, and indicated that no recorded Native American resources were known within the project area. However, the NAHC noted that the SLF is not exhaustive and provided a listing of Native American contacts that might have knowledge about the project area, and might have knowledge about any sacred sites or resources not listed in the SLF. An information-scoping package was sent to all NAHC-named contacts on July 25, 2013. The package contained a project description, location maps, and a request for information about the presence/absence of cultural resources within the project area. As of the date of this letter report, no responses have been received. In the event that responses are received in the future, they will be forwarded to the client/Lead Agency.

The results of the NAHC SLF search are incorporated into Attachment A.

Summary and Recommendations

Summary

The results of the CHRIS records search indicated that no previously recorded cultural resources are located within the project area and that 30 resources are known within the one mile search radius. One resource is a prehistoric site consisting of a shell scatter with associated habitation features, while the remaining resources are historic age buildings and features. The buildings are primarily related to the Costa Mesa ANGS or are single-family residences located within suburban housing developments. All of the previously recorded resources are located more than 0.25 mile from the project area. The comparative lack of known archaeological resources within the search radius does not necessarily indicate that archaeological resources are not present within the subsurface. Rather, the project area and adjacent lands exhibit dense urbanization, which reflects development that occurred prior to the establishment of regulations requiring the assessment of project-related impacts on cultural resources, such as the California Environmental Quality Act (CEQA). The presence of CA-ORA-001538 within the search radius is a suitable example of such resource types. In addition, the records search showed that the project area has not been previously surveyed for the presence or absence of observable cultural resources. However, the project area has been indirectly addressed via studies on two occasions as part of the larger Irvine Ranch property (ARI 1977 and ARMC 1979). Including these two studies,

a total of 31 area-specific reports have been filed that address the project area and the one mile search radius. Collectively, these reports address approximately 60 percent of the search radius.

An archival topographic map and aerial photograph review revealed that the project area was vacant from 1896 until at least 1972. Between 1972 and 1980, the existing two-story office building located within the project area was constructed. Thus, the building located on-site consists of an office building aged no more than 41 years. As such, the project area does not currently contain historic age buildings (i.e. structures aged 50 years or older).

The NAHC response letter indicated that no Native American cultural resources have been recorded within the project area; however, the NAHC files are not exhaustive and the negative results of the SLF search does not preclude the presence of Native American resources. For this reason, information-request letters were sent to all contacts named by the NAHC as having knowledge of the project area. As of the date of this report, no responses have been received about the potential for the project area to contain cultural resources.

Based upon the results of the SCCIC and NAHC records searches, as well as an archival map and aerial photograph review, the project area does not contain known cultural resources. In addition, it is likely that the soils within the project area have been disturbed by the present development on-site. For this reason, the project area appears to have a low sensitivity for cultural resources. However, there is an unknown probability for encountering intact, significant subsurface archaeological resources within previously undisturbed soils. Such soils may be present beneath the existing development.

Recommendations

Historical and Archaeological Resources

No historical or archaeological resources pursuant to CEQA have been recorded within the project area. However, there is an unknown probability for encountering intact, significant subsurface archaeological resources within previously undisturbed soils. Such soils may be encountered if the proposed project will result in excavations exceeding the vertical depth of previous construction on-site. In the event that ground-disturbing activities occur in previously undisturbed soils and cultural resources are encountered, inadvertent discovery procedures should be implemented (see below).

Inadvertent Discovery of Cultural Resources

It is always possible that ground-disturbing activities may uncover presently obscured or buried and previously unknown cultural resources. In the event that construction activities occur within previously undisturbed soils and buried cultural resources are discovered, such resources could be damaged or destroyed, potentially resulting in significant impacts to cultural resources. If subsurface cultural resources are encountered during construction, if evidence of an archaeological site or if other suspected historic resources are encountered, it is recommended that all ground-disturbing activity cease within 100 feet of the resource. A qualified archaeologist shall be consulted to assess the find, and to determine whether the resource requires further study. The qualified archeological personnel shall assist the Lead Agency by generating measures to protect the discovered resources. Potentially significant cultural resources could consist of, but are not limited to, stone, bone, fossils, wood or shell artifacts or features, including structural remains, historic dumpsites, hearths and middens. Midden features are characterized by darkened soil, and could conceal material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Any previously undiscovered resources found during construction should be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and evaluated for significance under all applicable regulatory criteria.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect the resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

Human Remains

There are no known formal cemeteries present within the project area, and the results of the CHRIS records search did not indicate the presence of human remains at any of the previously recorded cultural resource sites. Therefore, it appears unlikely that human remains would be encountered during project implementation.

Inadvertent Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown and buried human remains. If human remains are discovered during any phase of construction, including disarticulated or cremated remains, all ground-disturbing activities should cease within 100 feet of the remains. California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and

disposition pursuant to Public Resources Code (PRC) § 5097.98. If the remains are determined by the County Coroner to be Native American, the NAHC shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including but not limited to, the excavation and removal of the human remains.

Please feel free to contact us at 909.890.5951 if you have any questions, or if Atkins can provide additional assistance regarding cultural resource management issues.

Sincerely,

William R. Gillean, B.S.
Field Technician II

Jennifer M. Sanka, M.A., RPA
Associate Project Manager/Archaeologist

Attachment A: NAHC SLF Search Documents

References

Archaeological Research, Incorporated (ARI). 1977. Annual Report to The Irvine Company (TIC) from Archaeological Research, Incorporated (ARI). OR-2534. Report on file at the South Central Coastal Information Center, California State University, Fullerton.

Archaeological Research Management Corporation (ARMC). 1979. The History of Archaeological Research on the Irvine Ranch Property: The Evolution of a Company Tradition. OR-305. Report on file at the South Central Coastal Information Center, California State University, Fullerton.

Nationwide Environmental Title Research, LLC (NETR). 2013. Historic Aerial and Topographic Map Review for 125 East Baker Street, Costa Mesa, California. Website accessed July 29-30, 2013. http://www.historicaerials.com/

Attachment A
NAHC SLF Search Documents

Atkins North America, Inc.
650 East Hospitality Lane, Suite 460
San Bernardino, California 92408

Telephone: +1.909.890.5951
Fax: +1.909.890.3610

www.atkinsglobal.com/northamerica

July 16, 2013

Native American Heritage Commission
c/o Dave Singleton
915 Capitol Mall, Suite 364
Sacramento, CA 95814-4801

VIA EMAIL: Dave Singleton (ds_nahc@pacbell.net)

Subject: Request for a Sacred Lands File Search for the Baker Apartments Project at 125 East Baker Street, located on 4.45-acres in the City of Costa Mesa, Orange County, California (USGS Newport Beach, CA. 7.5-minute topographic quadrangle)

Dear Mr. Singleton:

Atkins would like to determine whether any sacred sites are listed in the NAHC Sacred Lands File (SLF) for a project area relating to the Baker Apartments Project. The project proposes to construct a four-story, 236-unit residential development surrounding a 5.5-level covered parking structure. The project area measures 4.45-acres in the City of Costa Mesa, Orange County, California.

The project area is located in Orange County, and is found on the USGS Newport Beach, CA 7.5' topographic quadrangle in an unplatted portion of Township 6 South, Range 10 West.

Please notify us of any SLF-listed resources that may be affected by the proposed project. This project and impacts on cultural resources will be explained in further detail in forthcoming environmental documents.

If you have any questions or concerns, please do not hesitate to contact me via the contact information listed below. Atkins thanks you in advance for your time and effort.

Sincerely,

William R. Gillean
Field Technician II

william.gillean@atkinsglobal.com

STATE OF CALIFORNIA Edmund G. Brown, Jr. Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

July 24, 2013

Mr. William R. Gillean, Field Technician II
ATKINS North American, Inc.
650 East Hospitality Lane, Suite 460
San Bernardino, CA 92408

Sent By FAX to; 909-890-3610
No. of Pages: 3

Re: Request for Sacred Lands File Search and Native American Contacts list for the "**Baker Apartments Project Project;**" located on 4.4-acres in the City of Costa Mesa; Orange County, California

Dear Mr. Gillean:

A record search of the NAHC Sacred Lands File failed to indicate the presence of Native American traditional cultural place(s) in the project site submitted, based on the USGS coordinates submitted as part of the 'Area of Potential Effect. (APE). However, local Native American tribes and the NAHC consider this historic area very culturally sensitive. Also, note that the NAHC SLF Inventory is not exhaustive; therefore, the absence of archaeological or Native American sacred places does not preclude their existence. Other data sources for Native American sacred places/sites should also be contacted. A Native American tribe of individual may be the only sources of presence of traditional cultural places or sites.

In the 1985 Appellate Court decision (170 Cal App 3rd 604; *EPIC v. Johnson*), the Court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

Attached is a list of Native American tribes, individuals/organization who may have knowledge of cultural resources in or near the project area. As part of the consultation process, the NAHC recommends that local governments and project developers contact the tribal governments and individuals to determine if any cultural places might be impacted by the proposed action. If a response is not received in two weeks of notification the NAHC requests that a follow telephone call be made to ensure that the project information has been received.

If you have any questions or need additional information, please contact me at (916) 373-3715.

Sincerely,

Dave Singleton
Program Analyst

Attachment

Native American Contacts
Orange County
July 24, 2013

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
3094 Mace Avenue, Apt. B Gabrielino
Costa Mesa, , CA 92626
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino Tongva Nation
Sam Dunlap, Cultural Resources Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net

(909) 262-9351 - cell

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
32161 Avenida Los Amigos Juaneno
San Juan Capistrano CA 92675 m
chiefdavidbelardes@yahoo.
(949) 493-4933 - home
(949) 293-8522

Juaneno Band of Mission Indians Acjachemen Nation
Teresa Romero, Chairwoman
31411-A La Matanza Street Juaneno
San Juan Capistrano CA 92675-2674
(949) 488-3484
(949) 488-3294 - FAX
(530) 354-5876 - cell

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Juaneno Band of Mission Indians
Alfred Cruz, Cultural Resources Coordinator
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
alfredgcruz@sbcglobal.net
714-998-0721
714-998-0721 - FAX
714-321-1944 - cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SBaker Apartments Project; located in the City of Costa Mesa; Orange County, California for which a Sacred Lands file search and Native American Contacts list were requested.

Native American Contacts
Orange County
July 24, 2013

United Coalition to Protect Panhe (UCPP)
Rebecca Robles
119 Avenida San Fernando Juaneno
San Clemente CA 92672
rebrobles1@gmail.com
(949) 573-3138

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX
bacuna1@gabrielinotribe.org

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180 Gabrielino
Bonsall , CA 92003

760-636-0854 - FAX

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry, Representing Tribal Chairperson
4955 Paseo Segovia Juaneno
Irvine , CA 92612
kaamalam@gmail.com
949-293-8522

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SBaker Apartments Project; located in the City of Costa Mesa; Orange County, California for which a Sacred Lands file search and Native American Contacts list were requested.

Atkins North America, Inc.
650 East Hospitality Lane, Suite 460
San Bernardino, California 92408

Telephone: +1.909.890.5951
Fax: +1.909.890.3610

www.atkinsglobal.com/northamerica

July 25, 2013

SAMPLE

Subject: The Baker Apartments Project, located on 4.45-acres in the City of Costa Mesa, Orange County, California (USGS Newport Beach, CA 7.5-minute topographic quadrangle)

To Whom It May Concern:

Atkins has completed a California Historical Resources Information System (CHRIS) records search at the South Central Coastal Information Center (SCCIC) and a Native American Heritage Commission (NAHC) Sacred Lands File Search for a project area occupying 4.45-acres in the City of Costa Mesa, Orange County, California. The proposed project area is currently occupied by a 66,000-square-foot; two-story office building that was developed in 1974. The project proposes to replace this structure with a four-story, 236-unit residential development that wraps around a 5.5-level covered parking structure.

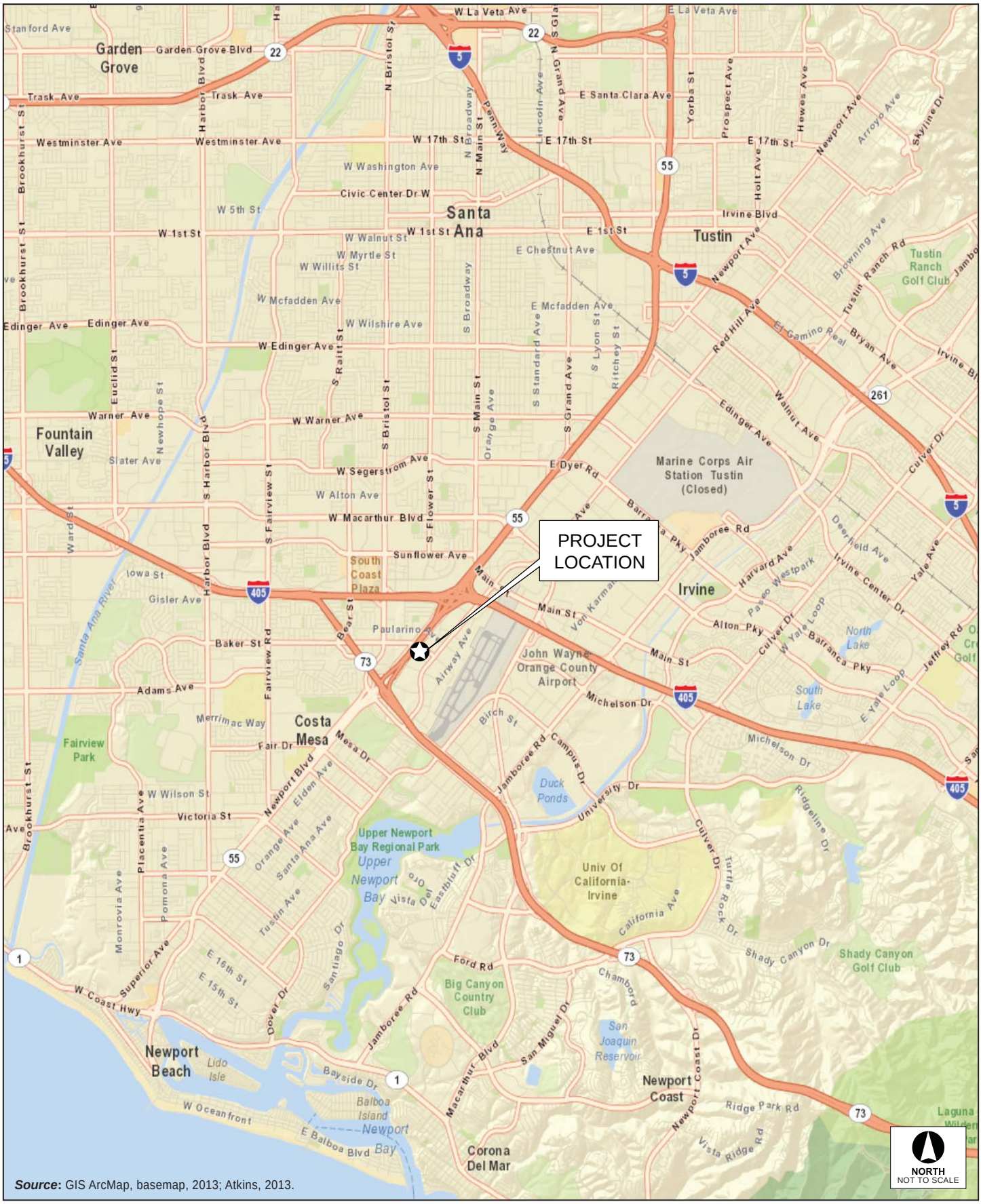
We have enclosed a map showing the Regional Location (Figure 1 – Regional Location Map) and a map showing the project area with reference to the USGS Newport Beach, CA topographic map (Record Search Map). The project area is generally found west of John Wayne (Orange County) International Airport and south of Interstate 405 in the northeast portion of the City of Costa Mesa. Specifically, the project area is situated immediately southeast of the 55 Freeway, south of Baker Street and immediately west of Pullman Street. The project is located within an unplatted portion of Township 6 South, Range 10 West on the Newport Beach, CA USGS 7.5-minute topographic quadrangle map (Record Search Map).

The Native American Heritage Commission has identified you as an individual who may have knowledge of cultural resources within the immediate project area. If you are aware of any such properties, or if you have any information or concerns about this project area, please feel free to contact me at 909.890.5951, x. 443.2505 or jennifer.sanka@atkinsglobal.com. You may also address and mail a response to my attention at our San Bernardino Office.

Sincerely,

Jennifer M. Sanka, M.A., RPA
Associate Project Manager/Archaeologist
Atkins
jennifer.sanka@atkinsglobal.com

Enclosures:
Figure 1 – Regional Location Map
Record Search Map

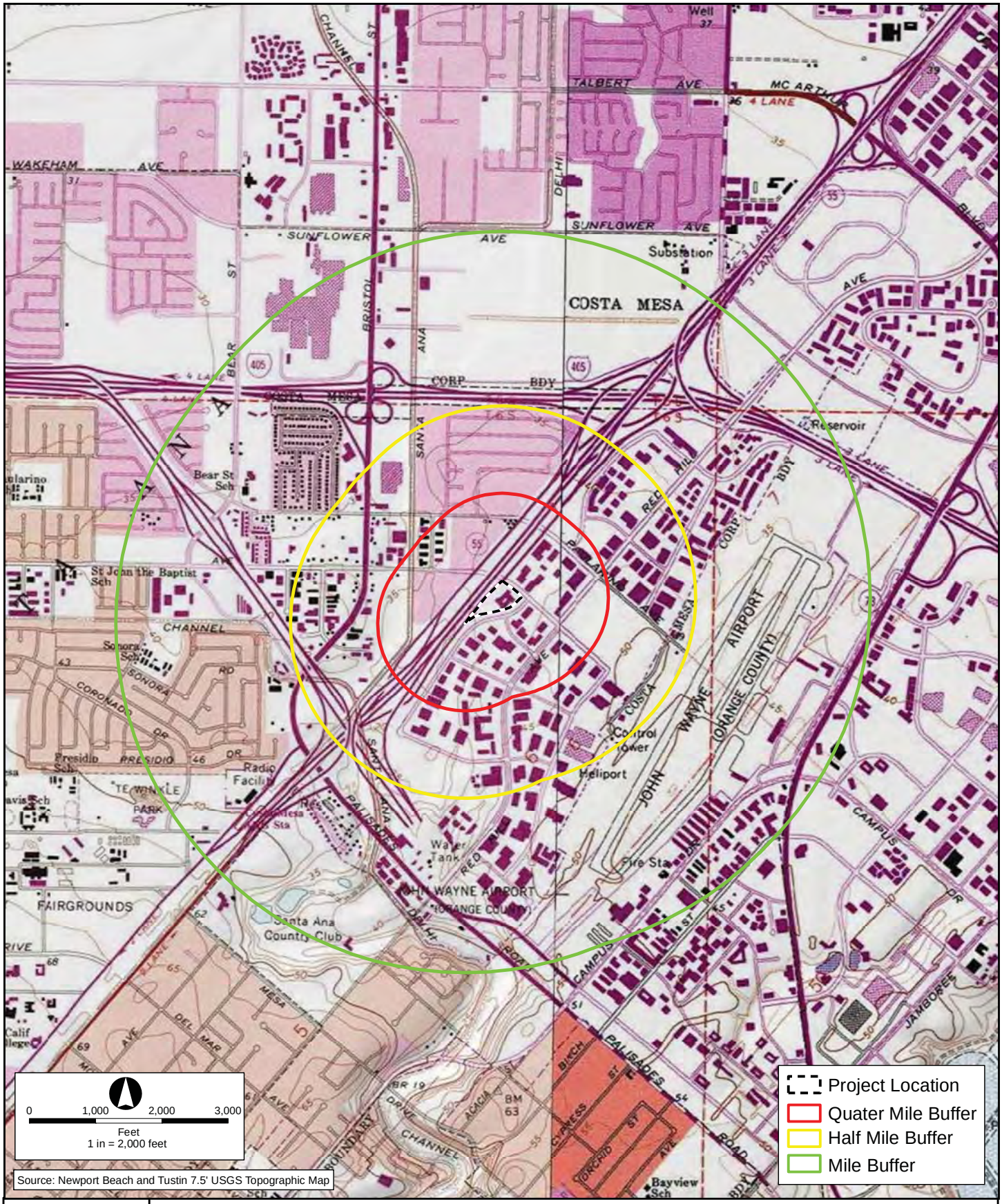


Source: GIS ArcMap, basemap, 2013; Atkins, 2013.

100035264 | Costa Mesa 125 E Baker Apt EIR

Figure 1
Regional Location

ATKINS



ATKINS

Record Seach Map

Costa Mesa Baker Street Apartments EIR

Appendix C Geotechnical Investigation

GEOTECHNICAL INVESTIGATION

PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT 125 BAKER STREET EAST COSTA MESA, CALIFORNIA

GEOCON
WEST, INC.

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR
RED OAK INVESTMENTS, LLC
IRVINE, CALIFORNIA

PROJECT NO. A8970-06-01

OCTOBER 30, 2012

GEOCON
WEST, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. A8970-06-01
October 30, 2012

Red Oak Investments, LLC
2101 Business Center Drive, #230
Irvine, CA 92612

Attention: Mr. Joe Flanagan

Subject: GEOTECHNICAL INVESTIGATION
PROPOSED MULTI-FAMILY RESIDENTIAL DEVELOPMENT
125 BAKER STREET EAST
COSTA MESA, CALIFORNIA

Dear Mr. Flanagan:

In accordance with your authorization of our proposal dated July 31, 2012, we have performed a geotechnical investigation for the proposed multi-family residential development at 125 Baker Street East in the City of Costa Mesa, California. The accompanying report presents the findings of our study and our conclusions and recommendations pertaining to the geotechnical aspects of proposed seismic upgrade and construction. Based on the results of our investigation, it is our opinion that the proposed project can be developed as proposed, provided the recommendations of this report are followed and implemented during design and construction.

If you have any questions regarding this report, or if we may be of further service, please contact the undersigned.

Very truly yours,

GEOCON WEST, INC.

REGISTERED PROFESSIONAL ENGINEER JELISA M. THOMAS 74946 CIVIL STATE OF CALIFORNIA

REGISTERED GEOLOGIST SUSAN FRANZER KIRKGARD #1754 CERTIFIED ENGINEERING GEOLOGIST STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER NEAL D. BERLINER 2576 GEOTECHNICAL STATE OF CALIFORNIA

Jelisa Thomas	Susan F. Kirkgard	Neal D. Berliner
PE 74946	CEG 1754	GE 2576

(4+1CD) Addressee

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GEOTECHNICAL INVESTIGATION

1. PURPOSE AND SCOPE

This report presents the results of a geotechnical investigation for the proposed multi-family residential development located at 125 Baker Street East in the City of Costa Mesa, California (see Vicinity Map, Figure 1). The purpose of the investigation was to evaluate subsurface soil and geologic conditions underlying the property, and based on conditions encountered to provide conclusions and recommendations pertaining to the geotechnical aspects of proposed design and construction.

The scope of this investigation included a site reconnaissance, field exploration, laboratory testing, engineering analysis, and the preparation of this report. The site was explored on September 27, 2012 by excavating three 8-inch diameter borings utilizing a truck-mounted hollow-stem auger drilling machine. The borings were advanced to depths between 24½ and 50½ feet below the existing ground surface. The approximate locations of the borings are indicated on the Site Plan (see Figure 2). A detailed discussion of the field investigation, including boring logs, is presented in Appendix A.

Laboratory tests were performed on selected soil samples obtained during the investigation to determine pertinent physical and chemical soil properties. Appendix B presents a summary of the laboratory test results.

The recommendations presented herein are based on analysis of the data obtained during the investigation and our experience with similar soil and geologic conditions. References reviewed to prepare this report are provided in the *List of References* section. If project details vary significantly from those described above, Geocon should be contacted to determine the necessity for review and possible revision of this report.

2. SITE CONDITIONS & PROJECT DESCRIPTION

The subject site is located at 125 Baker Street East in the City of Costa Mesa, California. The site is a triangular-shaped parcel and is bounded by Baker Street East to the northeast, by State Route 55 (Costa Mesa Freeway) to the northwest, and Pullman Street to the southeast. The site is currently occupied by a two-story concrete office building and surrounding asphalt parking lots.

The site is subject site is at roughly level with no pronounced highs or lows. Vegetation is located in isolated planter areas. Surface water drainage at the site appears to be by sheet flow along the existing ground contours towards Baker Street and Pullman Street on the north and east, respectively.

Information concerning the proposed project was furnished by the client. It is our understanding that the proposed development will consist of a multi-story, multi-family residential structure wrapped around a central parking structure, all to be constructed at or near present site grade.

Based on the preliminary nature of the design at this time, wall and column loads were not available. It is anticipated that column loads for the proposed residential structure will be up to 400 kips, and wall loads are estimated to be between 3 and 5 kips per linear foot. It is anticipated that column loads for the proposed parking structure will be between 300 and 1,000 kips, and wall loads will be up to 10 kips per linear foot.

Once the design phase and foundation loading configuration proceeds to a more finalized plan, the recommendations within this report should be reviewed and revised, if necessary. Any changes in the design, location or elevation of any structure, as outlined in this report, should be reviewed by this office. Geocon should be contacted to determine the necessity for review and possible revision of this report.

3. GEOLOGIC SETTING

The site is located on Newport Mesa, about 5.5 miles from the Pacific Ocean at an elevation of about 44 feet above the mean sea level (U.S. Geological Survey datum). Newport Mesa is one of several physiographic features that compromise the Orange County Coastal Plain that consists of a central lowland plain bound by uplifted and dissected mesas along the coast and hills and mountains to the north and east. The hills and mesas in the Newport area are separated by gaps that are incised into the late Pleistocene age land surface. Two such features are the Santa Ana Gap, which is occupied by the Santa Ana River northwest of the Newport Mesa, and Upper Newport Bay, which separates the Newport Mesa from the San Joaquin Hills to the east. The site is near the southern end of the Los Angeles Basin, a structural depression that contains great thickness of sedimentary rocks.

The prominent structural features within the Orange County Coastal Plain include the central lowland plain, the northwest trending line of low hills and mesas underlain by the Newport-Inglewood fault zone along the coast (Newport Mesa, Huntington Beach Mesa, Bolsa Chica Mesa, and Landing Hill), and the San Joaquin Hills to the southeast (Department of Water Resources, 1967).

4. GEOLOGIC MATERIALS

Based on our field investigation, a review of available geologic data, and a review of a previous geotechnical report for the property, the site is underlain by Pleistocene Age marine terrace deposits that consist of poorly sorted sand with varying amounts of clay, silt, and gravel (California Geological Survey, 2001; Morton and Miller, 1981). The marine terrace deposits are underlain by the Pleistocene Age San Pedro Formation that consists of marine silt, clay, sand and gravel (DWR, 1967). The soil and geologic units encountered at the site are discussed below. General soil profiles are provided on the boring logs in Appendix A.

Although artificial fill was not encountered during our exploration, the client should be aware that artificial fill may exist between excavations and in other portions of the site not directly explored.

4.1 Marine Terrace Deposits

The site is underlain by Pleistocene Age marine terrace deposits that consist of alternating beds of yellowish brown to olive brown silt and clay with varying amounts of fine sand. Locally, yellowish brown fine- to medium-grained sand is present beneath the site. The sand beds are typically less than 3 feet in thickness except in boring B1 where poorly graded sand was encountered between depths of 32 and 43 feet beneath the existing ground surface. The fine-grained soils are typically firm to hard and slightly moist to moist and the granular soils are slightly moist to wet and medium dense to dense.

5. GROUNDWATER

Based on a review of the Seismic Hazard Evaluation of the Newport Beach 7.5 Minute Quadrangle Orange County, California (California Geological Survey, 2001), the historically highest groundwater in the area is approximately 20 feet beneath the ground surface. Groundwater information presented in this document is generated from data collected in the early 1900's to the publication date.

Groundwater contour maps published by the Orange County Water District (2012) indicate the principal groundwater aquifer in the vicinity of the site was at approximate elevation of -40 feet below mean sea level (MSL) in June 2011. Based on a site elevation of approximately 44 feet MSL, this elevation corresponds to a depth of approximately 84 feet below the existing ground surface.

Perched water has been documented to be present above the elevation of the principal groundwater aquifer in the area. Minor amounts of perched water were encountered in the form of seepage in borings B1 and B2 at a depth of 27.5 feet beneath the existing ground surface. This depth to perched water corresponds to an elevation of 16.5 feet MSL.

Based on the data presented above, groundwater seepage related to the perched water condition should not affect the proposed development during or after construction. However, it is not uncommon for perched water levels to vary seasonally or for localized perched water to develop where none previously existed, especially in impermeable fine-grained soils which are heavily irrigated or after seasonal rainfall. Recent requirements for stormwater infiltration could also result in shallower seepage conditions in the region. Proper surface drainage of irrigation and precipitation will be critical for future performance of the project. Recommendations for drainage are provided in the S*urface Drainage* section of this report (see Section 7.18).

6. GEOLOGIC HAZARDS

6.1 Surface Fault Rupture

The numerous faults in Southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey (formerly known as California Division of Mines and Geology (CDMG) for the Alquist-Priolo Earthquake Fault Zone Program

(Bryant and Hart, 2007). By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years), but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive.

The site is not within a currently established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. No active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low. The site, however, is located in the seismically active Southern California region, and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active Southern California faults. The faults in the vicinity of the site are shown in Figure 3, Regional Fault Map.

The closest surface trace of an active fault to the site is the Newport-Inglewood Fault Zone located approximately 5 miles west-southwest of the site. Other nearby active faults are the Palos Verdes Fault Zone, the Whittier Fault Zone, the Elsinore Fault Zone, and the Chino Fault located 16.5 miles southwest, 16.5 miles northeast, 18 miles northeast, and 20 miles northeast of the site, respectively (Ziony and Jones, 1989). The active San Andreas Fault zone is located approximately 48 miles northeast of the site.

The closest potentially active fault to the site is the Pelican Hill Fault located approximately 2.5 miles south of the site. Other nearby potentially active fault are the El Modeno Fault, Peralta Hills Fault, and the Los Alamitos Fault located approximately 10.5 miles north, 10.7 miles north, and 12.5 miles northwest of the site, respectively (Ziony and Jones, 1989).

Several buried thrust faults, commonly referred to as “blind thrusts”, underlie the Coastal Plain at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than 3.0 kilometers. The October 1, 1987 M_w 5.9 Whittier Narrows earthquake, and the January 17, 1994 M_w 6.7 Northridge earthquake were a result of movement on the buried thrust faults. The closest blind thrust fault to the site is the active San Joaquin Hills Fault that underlies the site at depth. These thrust faults are not exposed at the surface and do not present a potential surface fault rupture hazard; however, these active features are capable of generating future earthquakes.

6.2 Seismicity

As with all of Southern California, the site has experienced historic earthquakes from various regional faults. The seismicity of the region surrounding the site was formulated based on research of an electronic database of earthquake data. The epicenters of recorded earthquakes with magnitudes equal to or greater than 4.0 within a radius of approximately 60 miles of the site are depicted on Figure 4, Regional Seismicity Map. A number of earthquakes of moderate to major magnitude have occurred in the Southern California area within the last 100 years. A partial list of these earthquakes is included in the following table.

LIST OF HISTORIC EARTHQUAKES

Earthquake (Oldest to Youngest)	Date of Earthquake	Magnitude	Distance to Epicenter (Miles)	Direction to Epicenter
San Jacinto-Hemet area	April 21, 1918	6.8	51	E
Near Redlands	July 23, 1923	6.3	42	ENE
Long Beach	March 10, 1933	6.4	6.6	SW
San Fernando	February 9, 1971	6.6	59	NW
Whittier Narrows	October 1, 1987	5.9	29	NNW
Sierra Madre	June 28, 1991	5.8	41	N
Landers	June 28, 1992	7.3	90	NE
Big Bear	June 28, 1992	6.4	70	NE
Northridge	January 17, 1994	6.7	53	NW
Hector Mine	October 16, 1999	7.1	108	NE

Based on our review of available reports published by CDMG and the USGS, the site has not experienced significant ground failure as a result of the events listed above. The site could be subjected to strong ground shaking in the event of an earthquake. However, this hazard is common in Southern California and the effects of ground shaking can be mitigated if the proposed structures are designed and constructed in conformance with current building codes and engineering practices.

6.3 Estimation of Peak Ground Accelerations

The seismic exposure of the site may be investigated in two ways. The deterministic approach recognizes the Maximum Earthquake, which is the theoretical maximum event that could occur along a fault. The deterministic method assigns a maximum earthquake to a fault derived from formulas that correlate the length and other characteristics of the fault trace to the theoretical maximum magnitude earthquake. The probabilistic method considers the probability of exceedance of various levels of ground motion and is calculated by consideration of risk contributions from regional faults.

6.3.1 Deterministic Analysis

Table 1 provides a list of known faults within a 60 mile radius of the site. The maximum earthquake magnitude is indicated for each fault. In order to measure the distance of known faults to the site, the computer program *EQFAULT*, (Blake, 2000), was utilized.

Principal references used within *EQFAULT* in selecting faults to be included are Jennings (1994), Anderson (1984) and Wesnousky (1986). For this investigation, the ground motion generated by maximum earthquakes on each of the faults is assumed to attenuate to the site per the attenuation relation by Sadigh et al. (1997). The resulting calculated peak horizontal accelerations at the site are indicated on Table 1. These values are one standard deviation above the mean.

Using this methodology, the maximum earthquake resulting in the highest peak horizontal accelerations at the site would be a magnitude 6.9 event on the Newport Inglewood Fault. Such an event would be expected to generate peak horizontal accelerations at the site of 0.51g.

While listing of peak accelerations is useful for comparison of potential effects of fault activity in a region, other considerations are important in seismic design, including the frequency and duration of motion and the soil conditions underlying the site.

The site could be subjected to moderate to severe ground shaking in the event of a major earthquake on any of the faults referenced above or other faults in Southern California. With respect to seismic shaking, the site is considered comparable to the surrounding developed area.

6.3.2 Probabilistic Analysis

The computer program *FRISKSP* (Blake, 2000) was used to perform a site-specific probabilistic seismic hazard analysis. The program is a modified version of FRISK (McGuire, 1978) that models faults as lines to evaluate site-specific probabilities of exceedance for given horizontal accelerations for each line source. Geologic parameters not included in the deterministic analysis are included in this analysis. The program operates under the assumption that the occurrence rate of earthquakes on each mapped Quaternary Fault is proportional to the faults' slip rate. The program accounts for fault rupture length as a function of earthquake magnitude, and site acceleration estimates are made using the earthquake magnitude and closest distance from the site to the rupture zone.

Uncertainty in each of following are accounted for: (1) earthquake magnitude, (2) rupture length for a given magnitude, (3) location of the rupture zone, (4) maximum magnitude of a given earthquake, and (5) acceleration at the site from a given earthquake along each fault. After calculating the expected accelerations from all earthquake sources, the program then calculates the total average annual expected number of occurrences of the site acceleration greater than a specified value. Attenuation relationships suggested by Sadigh et al. (1997) were utilized in the analysis.

The Maximum Considered Earthquake Ground Motion (MCE) is the level of ground motion that has a 2 percent chance of exceedance in 50 years, with a statistical return period of 2,500 years. According to the 2010 California Building Code and ASCE 7-05, the MCE is to be utilized for the design of critical structures such as schools and hospitals. The Design-Basis Earthquake Ground Motion (DBE) is the level of ground motion that has a 10 percent chance of exceedance in 50 years, with a statistical return period of 475 years. The DBE is typically used for the design of non-critical structures.

Based on the computer program *FRISKSP* (Blake, 2000), the MCE and DBE is expected to generate ground motions at the site of approximately 0.64g and 0.34g, respectively. Graphical representation of the analysis is presented on Figure 5.

6.4 Seismic Design Criteria

The following table summarizes site-specific design criteria obtained from the 2010 California Building Code (CBC; Based on the 2009 International Building Code [IBC]), Chapter 16 Structural Design Section 1613 Earthquake Loads. The values were derived using the computer program Seismic Hazard Curves and Uniform Hazard Response Spectra, provided by the USGS. The short spectral response uses a period of 0.2 second.

CBC SEISMIC DESIGN PARAMETERS

Parameter	Value	2010 CBC Reference
Site Class	D	Table 1613.5.2
Spectral Response – Class B (short), S_S	1.598	Figure 1613.5(3)
Spectral Response – Class B (1 sec), S_1	0.565	Figure 1613.5(4)
Site Coefficient, F_a	1.0	Table 1613.5.3(1)
Site Coefficient, F_v	1.5	Table 1613.5.3(2)
Maximum Considered Earthquake Spectral Response Acceleration (short), S_{MS}	1.598	Section 1613.5.3 (Eqn 16-36)
Maximum Considered Earthquake Spectral Response Acceleration – (1 sec), S_{M1}	0.847g	Section 1613.5.3 (Eqn 16-37)
5% Damped Design Spectral Response Acceleration (short), S_{DS}	1.065	Section 1613.5.4 (Eqn 16-38)
5% Damped Design Spectral Response Acceleration (1 sec), S_{D1}	0.565	Section 1613.5.4 (Eqn 16-39)

Conformance to the criteria in the previous table for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The intent of the code is "Life Safety," not to completely prevent damage to the structure, since such design may be economically prohibitive.

6.7 Liquefaction Potential

Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations.

The current standard of practice, as outlined in the "Recommended Procedures for Implementation of DMG Special Publication 117A, Guidelines for Analyzing and Mitigating Liquefaction in California" requires liquefaction analysis to a depth of 50 feet below the lowest portion of the proposed structure. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

According to the State of California Seismic Hazard Zone, Newport Beach Quadrangle Map (1998), the site is located within an area identified as having a potential for liquefaction. The City of Costa Mesa General Plan (2000) indicates the site is within an area with a moderate potential for liquefaction.

Liquefaction analysis of the soils underlying the site was performed using the spreadsheet template LIQ2_30.WQ1 developed by Thomas F. Blake (1996). This program utilizes the 1996 NCEER method of analysis. The liquefaction potential evaluation was performed by assuming historic high groundwater table of 20 feet below the ground surface, a magnitude 6.9 earthquake, and a peak horizontal acceleration of 0.43g (S_{DS}/2.5). This semi-empirical method is based on a correlation between values of Standard Penetration Test (SPT) resistance and field performance data.

Based on the enclosed liquefaction analysis, included herein as Figures 6 through 9, it is anticipated that the soils below the historic high groundwater table of 20 feet could be prone to between 0.5 and 0.7 inches of total settlement during S_{DS}/2.5 ground motion for borings B1 and B2, respectively. The differential settlement at the ground surface is anticipated to be less than ½ inch over a distance of 50 feet.

6.8 Seismically-Induced Settlement

Seismically-induced settlement is often caused by loose to medium-dense granular soils densified during ground shaking. Uniform settlement beneath a given structure would cause minimal damage; however, because of variations in distribution, density, and confining conditions of soils, seismically-induced settlement is generally non-uniform and can cause serious structural damage. Dry and partially saturated soils as well as saturated granular soils are subject to seismically-induced settlement. Generally, differential settlements induced by ground failures such as liquefaction, flow slides, and surface ruptures would be much more severe than those caused by densification alone.

The seismically-induced settlement calculations were performed in accordance with the American Society of Civil Engineers, Technical Engineering and Design Guides as adapted from the US Army Corps of Engineers, No. 9. The calculations provided herein indicate that the 20 feet of site soils would be prone to between 0.06 and 0.09 inches of total settlement during S_{DS}/2.5 ground motion for borings B1 and B2, respectively (see enclosed calculation sheets, Figures 10 and 11). Differential settlement at the ground surface is anticipated to be negligible.

6.9 Landslides

According to the City of Costa Mesa General Plan (2000), the site is not located in an identified as having a potential for slope instability. Additionally, according to the California Geological Survey (1999), the site is not located within an area identified as having a potential for seismic slope instability. The site and surrounding vicinity is generally flat or gently sloping. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. We do not consider the potential for a landslide to be a hazard to this project.

6.10 Earthquake-Induced Flooding

Earthquake-induced flooding is inundation caused by failure of dams or other large water-retaining structures due to earthquakes. Based on a review of the City of Costa Mesa General Plan (2000) the site is not located in an area with a potential for inundation hazards related to failure of a dam or other large water retention structures. Therefore, the potential for inundation at the site as a result of an earthquake-induced dam failure is considered low.

6.11 Tsunamis, Seiches, and Flooding

The site is located approximately 5.5 miles from the Pacific Ocean at an elevation of approximately 44 feet MSL. Therefore, tsunamis, seismic sea waves, are not considered a significant hazard at the site.

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. A review of the City of Costa Mesa General Plan (2000) indicates the site is not located in an area with a potential for inundation hazards related to seiches. No major water-retaining structures are located immediately up gradient from the project site. Flooding from a seismically-induced seiche is considered unlikely.

According to the City of Costa Mesa General Plan (2000), the site is not within an area of 100-year flood hazards. The southern portion of the site is located within an area of 500-year flood hazards.

6.12 Oil Fields & Methane Potential

Based on a review of the California Division of Oil, Gas and Geothermal Resources (DOGGR) Oil and Gas Well Location Map W1-6, and Newport Oil Field Map 136, the site is not located within the boundaries of an oil field. The nearest documented oil well to the site is an abandoned dry hole, ChevronTexaco “Irvine” 1, located approximately 0.25 mile to the north (Map W1-6). However, due to the voluntary nature of record reporting by the oil well drilling companies, wells may be improperly located or not shown on the location map. Other wells could be encountered during construction. Any wells encountered will need to be properly abandoned in accordance with the current requirements of the DOGGR.

6.13 Subsidence

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. The area site is not located within an area of known ground subsidence. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the site. There appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the site.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 General

7.1.1 It is our opinion that neither soil nor geologic conditions were encountered during the investigation that would preclude the construction of the proposed development provided the recommendations presented herein are followed and implemented during design and construction.

7.1.2 Artificial fill was not encountered during site exploration; however, the Client should be aware that artificial fill may exist between excavations and in other portions of the site not directly explored. Future demolition of the existing structure and improvements which occupy the site will likely disturb the upper few feet of site soils. The existing fill and terrace deposit soils are suitable for re-use as engineered fill provided the recommendations in the *Grading* section of this report are followed (see Section 7.4).

7.1.3 The enclosed seismically induced settlement analyses indicate that the site soils could be prone to settlement as a result of the $S_{DS}/2.5$ ground motion. The differential settlement at the ground surface is anticipated to be less than ½ inch over a distance of 50 feet. The grading and foundation recommendations presented herein are intended to mitigate the effects of differential settlement on proposed improvements.

7.1.4 Based on these considerations, it is recommended that the proposed on-grade structures be supported on a conventional foundation system deriving support on a blanket of newly placed engineered fill. As a minimum, the upper five feet of existing earth materials within the on-grade building footprint areas should be excavated and properly compacted for foundation and slab support. All foundations should be underlain by at least three feet of engineered fill. Any soft soil or existing fill encountered in the building footprint areas should be completely excavated as necessary at the direction of the Geotechnical Engineer (a representative of Geocon). The excavation should extend laterally a minimum distance of five feet beyond the building footprint area or a distance equal to the depth of fill below the foundation, whichever is greater. Recommendations for earthwork are provided in the *Grading* section of this report (see Section 7.4).

7.1.5 Foundations for small outlying structures, such as block walls less than 6 feet in height, planter walls or trash enclosures, which will not be tied-in to the proposed structures, may be supported on conventional foundations bearing on a minimum of 12 inches of newly placed engineered fill. Where excavation and compaction cannot be performed, such as adjacent to property lines, foundations may derive support in the competent terrace deposits found at or below a depth of 3 feet. If the soils exposed in the excavation bottom are soft, compaction of the soft soils will be required prior to placing steel or concrete. Compaction of the foundation excavation bottom is typically accomplished with a compaction wheel or mechanical whacker.

7.1.6 Where new paving is to be placed, it is recommended that all existing fill soils be excavated and properly recompacted for paving support. The client should be aware that removal and recompaction of all existing fill in the area of new paving is not required, however, paving constructed over existing uncertified fill or unsuitable soils may experience increased settlement and/or cracking, and may therefore have a shorter design life and increased maintenance costs. As a minimum, the upper twelve inches of soil should be scarified and recompacted. Paving recommendations are provided in the *Preliminary Pavement Recommendations* section of this report (see Section 7.11).

7.1.7 It is anticipated that stable excavations can be achieved with sloping measures. Excavation recommendations are provided in the *Temporary Excavations* section of this report (Section 7.17).

7.1.8 Once the design and foundation loading configuration proceeds to a more finalized plan, the recommendations within this report should be reviewed and revised, if necessary. If the proposed building loads will exceed those presented herein, the potential for settlement should be reevaluated by this office.

7.1.9 Any changes in the design, location or elevation of improvements, as outlined in this report, should be reviewed by this office. Geocon should be contacted to determine the necessity for review and possible revision of this report,

7.2 Soil and Excavation Characteristics

7.2.1 The in-situ soils can be excavated with moderate effort using conventional excavation equipment. Some caving should be anticipated in unshored excavations, especially where granular soils are encountered.

7.2.2 It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored and maintained in accordance with applicable OSHA rules and regulations to maintain safety and maintain the stability of adjacent existing improvements.

7.2.3 All onsite excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load. Penetrations below this 1:1 projection will require special excavation measures such as sloping and shoring. Excavation recommendations are provided in the *Temporary Excavations* section of this report (see Section 7.17).

7.2.4 Remolded samples of the upper five feet of existing site soils, representing engineered fill, exhibit a "low" to "very high" expansive potential (EI = 43 & 139). According to the 2010 California Building Code (CBC) Section 1803.5.3, soils which possess an expansive potential of less than 20 are considered to be "non expansive" and soils which possess an expansive potential of greater than 20 are considered to be expansive. Recommendations presented herein assume that the building foundations and concrete slabs-on-grade will be supported in engineered soils with a "very high" expansive potential.

7.3 Minimum Resistivity, pH and Water-Soluble Sulfate

7.3.1 Potential of Hydrogen (pH) and resistivity testing as well as chloride content testing were performed on representative samples of soil to generally evaluate the corrosion potential to surface utilities. The tests were performed in accordance with California Test Method Nos. 643 and 422 and indicate that a potential for corrosion of buried ferrous metals exists on site. The results are presented in Appendix B (Figure B10) and should be considered for design of underground structures.

7.3.2 Laboratory tests were performed on representative samples of soil anticipated to be encountered at the foundations to measure the percentage of water-soluble sulfate content. Results from the laboratory water-soluble sulfate tests are presented in Appendix B (Figure B10) and indicate that the on-site soils possess a "negligible" to "severe" sulfate exposure to concrete structures as defined by 2010 CBC Section 1904.3 and ACI 318-08 Sections 4.2 and 4.3. The following table presents a summary of concrete requirements set forth by 2010 CBC Section 1904.3 and ACI 318. The presence of water-soluble sulfates is not a visually discernible characteristic; therefore, other soil samples from the site could yield different concentrations.

REQUIREMENTS FOR CONCRETE EXPOSED TO SULFATE-CONTAINING SOLUTIONS

Sulfate Exposure	Exposure Class	Water-Soluble Sulfate Percent by Weight	Cement Type	Maximum Water to Cement Ratio by Weight	Minimum Compressive Strength (psi)
Negligible	S0	0.00-0.10	--	--	2,500
Moderate	S1	0.10-0.20	II	0.50	4,000
Severe	**S2**	**0.20-2.00**	**V**	**0.45**	**4,500**
Very Severe	S3	> 2.00	V+Pozzolan or Slag	0.45	4,500

7.3.3 Geocon West, Inc. does not practice in the field of corrosion engineering and mitigation. If corrosion sensitive improvements are planned, it is recommended that a corrosion engineer be retained to evaluate corrosion test results and incorporate the necessary precautions to avoid premature corrosion of buried metal pipes and concrete structures in direct contact with the soils.

7.4 Grading

7.4.1 Earthwork should be observed, and compacted fill tested by representatives of Geocon West, Inc. The existing soils encountered during exploration is suitable for re-use as an engineered fill, provided any encountered oversize material (greater than 6 inches) and any encountered deleterious debris is removed.

7.4.2 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer and geotechnical engineer in attendance. Special soil handling requirements can be discussed at that time.

7.4.3 Grading should commence with the removal of all existing vegetation and existing improvements from the area to be graded. All existing underground improvements planned for removal should be completely excavated and the resulting depressions properly backfilled. Once a clean excavation bottom has been established it must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon West, Inc.) prior to placing fill. Deleterious debris such as wood and root structures should be exported from the site and should not be mixed with the fill soils. Asphalt and concrete should not be mixed with the fill soils unless approved by the Geotechnical Engineer.

7.4.4 As a minimum, it is recommended that the upper five feet of existing site soils within proposed structure footprints be excavated and properly compacted for foundation and slab support. Any encountered soft soils or deeper artificial fill encountered within the building footprint areas should be completely excavated as necessary at the direction of the Geotechnical Engineer (a representative of Geocon). The limits of existing fill and/or soft soil removal will be verified by the Geocon representative during site grading activities. The engineered fill blanket should extend at least five feet beyond the edge of foundations or for a distance equal to the depth of fill below the foundations, whichever is greater. Proposed foundations should be underlain by at least three feet of newly compacted engineered fill.

7.4.5 All excavations must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon), prior to placing fill. If determined to be excessively soft, additional removals or stabilization of the excavation bottom may be required in order to provide a firm working surface upon which engineered fill can be placed and heavy equipment can operate.

7.4.6 If subgrade stabilization is required at the excavation bottom, rubber tire equipment should not be allowed in the excavation bottom until it is stabilized or extensive soil disturbance could result. It is suggested that excavation and grading be performed during the summer season to promote moisture control of the soils. In addition, the use of track equipment should be considered to minimize disturbance to the soils if they become wet at the excavation bottom. Bottom stabilization, if necessary, may be achieved by introducing a thin lift of three to six-inch diameter crushed angular rock into the soft excavation bottom. The use of crushed concrete will also be acceptable. The crushed rock should be spread thinly across the excavation bottom and pressed into the soils by track rolling or wheel rolling with heavy equipment. It is very important that voids between the rock fragments are not created so the rock must be thoroughly pressed or blended into the soils.

7.4.7 All fill and backfill soils should be placed in horizontal loose layers approximately 6 to 8 inches thick, moisture conditioned to 2 percent above optimum moisture content, and properly compacted to a minimum 90 percent of the maximum dry density in accordance with ASTM D 1557 (latest edition).

7.4.8 Where new paving is to be placed, it is recommended that all fill and soft terrace deposit soils be excavated and properly compacted for paving support. As a minimum, the upper twelve inches of soil should be scarified and compacted to at least 92 percent relative compaction for paving support. Paving recommendations are provided in *Preliminary Pavement Recommendations* section of this report (see Section 7.11).

7.4.9 Foundations for small outlying structures, such as block walls less than 6 feet high, planter walls or trash enclosures, which will not be tied-in to the proposed building, may be supported on conventional foundations bearing on a minimum of 12 inches of newly placed engineered fill which extends laterally at least 12 inches beyond the foundation area. Where excavation and proper compaction cannot be performed, foundations may derive support directly in the undisturbed terrace deposit soils found at or below a depth of 3 feet below the ground surface, and should be deepened as necessary to maintain a minimum 36 below the ground surface. If the alluvial soils exposed in the excavation bottom are soft or loose, compaction of the soils will be required prior to placing steel or concrete. Compaction of the foundation excavation bottom is typically accomplished with a compaction wheel or mechanical whacker and must be observed and approved by a Geocon representative.

7.4.10 All imported fill shall be observed, tested and approved by Geocon West, Inc. prior to use as backfill. Rocks larger than six inches in diameter shall not be used in the fill. If necessary, import soils to be used in the building pad areas should have an expansion index of less than 50 and corrosive characteristics that are equally or less detrimental than that of the existing onsite soils (see Figure B10). If import soils will be utilized in the building pad, the soils must be placed uniformly and at equal thickness at the direction of the Geotechnical Engineer (a representative of Geocon West, Inc.).

7.4.11 Utility trenches should be properly backfilled in accordance with the requirements of the Green Book (latest edition). The pipe should be bedded with clean sands (Sand Equivalent greater than 30) to a depth of at least one foot over the pipe, and the bedding material must be inspected and approved in writing by the Geotechnical Engineer (a representative of Geocon). The use of gravel is not acceptable unless used in conjunction with filter fabric to prevent the gravel from having direct contact with soil. The remainder of the trench backfill may be derived from onsite soil or approved import soil, compacted as necessary, until the required compaction is obtained. The use of minimum 2-sack slurry is also acceptable. Prior to placing any bedding materials or pipes, the excavation bottom must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon).

7.4.12 All excavation bottoms must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon), prior to placing bedding materials, fill, steel, gravel or concrete.

7.5 Shrinkage

7.5.1 Shrinkage results when a volume of material removed at one density is compacted to a higher density. A shrinkage factor of less than 5 percent should be anticipated when excavating and compacting the existing earth materials on the site to an average relative compaction of 92 percent.

7.6 Conventional Foundation Design

7.6.1 Subsequent to the recommended grading, a conventional foundation system may be utilized for support of the proposed structures provided foundations derive support exclusively in newly placed engineered fill. Foundations should be underlain by a minimum of 3 feet of newly placed engineered fill.

7.6.2 Continuous footings may be designed for an allowable bearing capacity of 2,000 pounds per square foot, and should be a minimum of 12 inches in width, 36 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.

7.6.3 Isolated spread foundations may be designed for an allowable bearing capacity of 2,300 pounds per square foot, and should be a minimum of 24 inches in width, 36 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.

7.6.4 The soil bearing pressure above may be increased by 150 psf and 300 psf for each additional foot of foundation width and depth, respectively. In order to minimize static settlement of the proposed foundations, a maximum allowable soil bearing value of 4,000 pounds per square foot should be utilized.

7.6.5 The allowable bearing pressure may be increased by up to one-third for transient loads due to wind or seismic forces.

7.6.6 Continuous footings should be reinforced with a minimum of four No. 4 steel reinforcing bars, two placed near the top of the footing and two near the bottom. Reinforcement for spread footings should be designed by the project structural engineer.

7.6.7 If depth increases are utilized for the exterior wall footings, this office should be provided a copy of the final construction plans so that the excavation recommendations presented herein could be properly reviewed and revised if necessary. Additional grading should be performed as necessary in order to maintain the required three-foot-thick engineered fill blanket beneath building foundations.

7.6.8 The above foundation dimensions and minimum reinforcement recommendations are based on soil conditions and building code requirements only, and are not intended to be used in lieu of those required for structural purposes.

7.6.9 Due to the expansive potential of the anticipated subgrade soils, the moisture content of the slab subgrade should be maintained and sprinkled as necessary to maintain a moist condition as would be expected in any concrete placement.

7.6.10 Foundation excavations should be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon West, Inc.), prior to the placement of reinforcing steel and concrete to verify that the exposed soil conditions are consistent with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required.

7.6.11 This office should be provided a copy of the final construction plans so that the excavation recommendations presented herein could be properly reviewed and revised if necessary.

7.7 Miscellaneous Foundations

7.7.1 Foundations for small outlying structures, such as block walls, planter walls or trash enclosures, which will not be tied-in to the proposed structures, may be supported on conventional foundations bearing on a minimum of 12 inches of newly placed engineered fill which extends laterally at least 12 inches beyond the foundation area. Where excavation and compaction cannot be performed, such as adjacent to property lines, foundations may bear in the undisturbed terrace deposit soils found at or below a depth of 3 feet.

7.7.2 If the soils exposed in the excavation bottom are soft, compaction of the soft soils will be required prior to placing steel or concrete. Compaction of the foundation excavation bottom is typically

accomplished with a compaction wheel or mechanical whacker and must be observed and approved by a Geocon representative. Miscellaneous foundations may be designed for a bearing value of 1,500 pounds per square foot, and should be a minimum of 12 inches in width, 36 inches in depth below the lowest adjacent grade and 12 inches into the recommended bearing material. The allowable bearing pressure may be increased by up to one-third for transient loads due to wind or seismic forces.

7.7.3 Foundation excavations should be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon West, Inc.), prior to the placement of reinforcing steel and concrete to verify that the excavations and exposed soil conditions are consistent with those anticipated.

7.8 Conventional Foundation Settlement

7.8.1 The enclosed liquefaction analyses and seismically-induced settlement calculations indicate that the terrace deposit soils underlying the site could be prone to between 0.56 and 0.79 inches of total settlement during $S_{DS}/2.5$ ground motion. The differential settlement at the ground surface is anticipated to be less than ½ inch over a distance of 50 feet. These settlements are in addition to the static settlements indicated below and must be considered in the structural design.

7.8.2 The maximum expected static settlement for the residential structure supported on a conventional foundation system bearing in engineered fill is estimated to be less than 1 inch and occur below the heaviest loaded structural element. Settlement of the foundation system is expected to occur on initial application of loading. Differential settlement is not expected to exceed ⅔ inch over a distance of twenty feet. Based on seismic considerations, the proposed structure should be designed for a combined static and seismically induced differential settlement of less than 1 inch over a distance of twenty feet.

7.8.3 The maximum expected static settlement for the parking structure supported on a conventional foundation system bearing in engineered fill is estimated to be less than 2 inches and occur below the heaviest loaded structural element. Settlement of the foundation system is expected to occur on initial application of loading. Differential settlement is not expected to exceed 1½ inches over a distance of twenty feet. Based on seismic considerations, the proposed structure supported on a mat foundation system should be designed for a combined static and seismically induced differential settlement of 1¾ inches over a distance of twenty feet.

7.8.4 If side by side construction is planned for the residential structure and parking structure it is recommended that the parking structure be constructed prior to the adjacent residential structure in order to allow the majority of the static settlement to occur. This will help to minimize differential settlements between the two structures. The utilization of a lesser bearing value would further reduce the anticipated settlements and could be evaluated further once the design becomes more finalized.

7.8.5 Once the design and foundation loading configurations for the proposed structures proceeds to a more finalized plan, the estimated settlements presented in this report should be reviewed and revised, if necessary. If the final foundation loading configurations are greater than the assumed loading conditions, the potential for settlement should be reevaluated by this office.

7.9 Lateral Design

7.9.1 Resistance to lateral loading may be provided by friction acting at the base of foundations, slabs and by passive earth pressure. An allowable coefficient of friction of 0.3 may be used with the dead load forces in the properly compacted engineered fill and in the terrace deposits found at or below a depth of 3 feet below the existing ground surface.

7.9.2 Passive earth pressure for the sides of foundations and slabs poured against properly compacted engineered fill or the terrace deposits found at or below a depth of 3 feet may be computed as an equivalent fluid having a density of 200 pcf with a maximum earth pressure of 2,000 pcf. When combining passive and friction for lateral resistance, the passive component should be reduced by one-third.

7.10 Concrete Slabs-on-Grade

7.10.1 Concrete slabs-on-grade subject to vehicle loading should be designed in accordance with the recommendations in the *Preliminary Pavement Recommendations* section of this report (Section 7.11).

7.10.2 Subsequent to the recommended grading, concrete slabs-on-grade for structures, not subject to vehicle loading, should be a minimum of 4-inches thick and minimum slab reinforcement should consist of No. 4 steel reinforcing bars placed 16 inches on center in both horizontal directions. Steel reinforcing should be positioned vertically near the slab midpoint.

7.10.3 Slabs that may receive moisture-sensitive floor coverings or may be used to store moisture-sensitive materials should be underlain by a vapor retarder placed directly beneath the slab. The vapor retarder used should be specified by the project architect or developer based on the type of floor covering that will be installed. The vapor retarder design should be consistent with the guidelines presented in Section 9.3 of the American Concrete Institute's (ACI) *Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials* (ACI 302.2R-06) and should be installed in general conformance with ASTM E 1643-98 and the manufacturer's recommendations. If California Green Code requirements apply to this project, the vapor retarder should be underlain by 4 inches of ½-inch clean aggregate and the vapor retarder should be in direct contact with the concrete slab. It is important that the vapor retarder be puncture resistant since it will be in direct contact with angular gravel.

7.10.4 For seismic design purposes, a coefficient of friction of 0.3 may be utilized between concrete slabs and subgrade soil without a moisture barrier, and 0.15 for slabs underlain by a moisture barrier.

7.10.5 Exterior slabs, not subject to traffic loads, should be at least 4 inches thick and reinforced with No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions, positioned near the slab midpoint. Prior to construction of slabs, the upper 12 inches of subgrade should be moisture conditioned to 2 to 3 percent above optimum moisture content and properly compacted to at least 92 percent relative compaction, as determined by ASTM Test Method D 1557 (latest edition). Crack control joints should be spaced at intervals not greater than 10 feet and should be constructed using saw-cuts or other methods as soon as practical following concrete placement. Crack control joints should extend a minimum depth of one-fourth the slab thickness. The project structural engineer should design construction joints as necessary.

7.10.6 Due to the expansive potential of the anticipated subgrade soils, the moisture content of the slab subgrade should be maintained and sprinkled as necessary to maintain a moist condition as would be expected in any concrete placement.

7.10.7 Due to the highly expansive nature of the site soils, slabs should be doweled into adjacent curbs and foundations to minimize movements and offsets which could lead to a potential tripping hazard. As an alternative, the upper 18 inches of soil could be replaced with granular, non-expansive soils which will reduce the potential for movements and offsets.

7.10.8 The recommendations of this report are intended to reduce the potential for cracking of slabs due to settlement. However, even with the incorporation of the recommendations presented herein, foundations, stucco walls, and slabs-on-grade may exhibit some cracking due to minor soil movement or concrete shrinkage. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics. Their occurrence may be reduced or controlled by limiting the slump of the concrete, proper concrete placement and curing, and by the placement of crack control joints at periodic intervals, in particular, where re-entrant slab corners occur.

7.11 Preliminary Pavement Recommendations

7.11.1 Where new paving is to be placed, it is recommended that all existing fill and soft or unsuitable soils be excavated and properly compacted for paving support. The client should be aware that excavation and compaction of all soft or unsuitable soils in the area of new paving is not required, however, paving constructed over existing unsuitable soils may experience increased settlement and/or cracking, and may therefore have a shorter design life and increased maintenance costs. As a minimum, the upper twelve inches of soil should be scarified and recompacted to at least 92 percent relative compaction, as determined by ASTM Test Method D 1557 (latest edition).

7.11.2 The following pavement sections are based on an assumed R-Value of 20. Once site grading activities are complete, it is recommended that laboratory testing confirm the properties of the soils serving as paving subgrade prior to placing pavement. The Traffic Indices listed below are estimates. Geocon does not practice in the field of traffic engineering. The actual Traffic Index for each area should be determined by the project civil engineer. If pavement sections for Traffic Indices other than those listed below are required, Geocon should be contacted to provide additional recommendations. Pavement thicknesses were determined following procedures outlined in the *California Highway Design Manual* (Caltrans). It is anticipated that the majority of traffic will consist of automobile and large truck traffic.

PRELIMINARY PAVEMENT DESIGN SECTIONS

Location	Estimated Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)
Automobile Parking	3.5	3	4
Driveways	5	3	7
Trash Truck & Fire Lanes	7	4	12

7.11.3 Asphalt concrete should conform to Section 203-6 of the "*Standard Specifications for Public Works Construction*" (Green Book). Class 2 aggregate base materials should conform to Section 26-1.02A of the "*Standard Specifications of the State of California, Department of Transportation*" (Caltrans). Crushed Miscellaneous Base should conform to Section 200-2.4 of the "*Standard Specifications for Public Works Construction*" (Green Book).

7.11.4 Unless specifically designed and evaluated by the project structural engineer, where concrete paving will be utilized for support of vehicles, it is recommended that the concrete be a minimum of 6 inches thick and reinforced with No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions. Concrete paving supporting vehicular traffic should be underlain by a minimum of 4 inches of aggregate base and a properly compacted subgrade. The subgrade and base material should be compacted to at least 95 percent relative compaction as determined by ASTM Test Method D 1557 (latest edition).

7.11.5 The performance of pavements is highly dependent upon providing positive surface drainage away from the edge of pavements. Ponding of water on or adjacent to the pavement will likely result in saturation of the subgrade materials and subsequent cracking, subsidence and pavement distress. If planters are planned adjacent to paving, it is recommended that the perimeter curb be extended at least 12 inches below the bottom of the aggregate base to minimize the introduction of water beneath the paving.

7.12 Retaining Wall Design

7.12.1 The recommendations presented below are generally applicable to the design of rigid concrete or masonry retaining walls having a maximum height of 7 feet. In the event that walls higher than 7 feet are planned, Geocon should be contacted for additional recommendations.

7.12.2 Retaining wall foundations may be designed in accordance with the recommendations provided in the *Foundation Design* sections of this report (see Section 7.6).

7.12.3 Retaining walls with a level backfill surface that are not restrained at the top should be designed utilizing a triangular distribution of pressure (active pressure) of 30 pcf. This soil pressure assumes that the backfill materials within an area bounded by the wall and a 1:1 plane extending upward from the base of the wall will have an EI of less than 30.

7.12.4 Restrained walls are those that are not allowed to rotate more than 0.001H (where H equals the height of the retaining portion of the wall in feet) at the top of the wall. Where walls are restrained from movement at the top, walls may be designed utilizing a triangular distribution of pressure (at-rest pressure) of 50 pcf.

7.12.5 The wall pressures provided above assume that the retaining wall will be properly drained preventing the buildup of hydrostatic pressure. If retaining wall drainage is not implemented, the equivalent fluid pressure to be used in design of undrained walls is 80 pcf. The value includes hydrostatic pressures plus buoyant lateral earth pressures.

7.12.6 Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent structures and should be designed for each condition as the project progresses. In addition, seismic lateral forces presented below should be incorporated into the design as necessary.

7.13 Dynamic (Seismic) Lateral Forces

7.13.1 In accordance with the 2010 California Building Code, if the project possesses a seismic design category of D, E, or F, the proposed retaining walls should be designed with seismic lateral earth pressure. The structural engineer should determine the seismic design category for the project. The maximum dynamic (seismic) lateral pressure is equal to the sum of the initial static active pressure and the dynamic (seismic) pressure increment.

7.13.2 The seismic lateral earth pressure on unbraced retaining walls is applied to check the overall sliding resistance of the structure. Braced retaining walls should be designed for the greater of either the at-rest earth pressure or the seismic lateral earth pressure.

7.13.3 The application of seismic loading should be performed at the discretion of the project Structural Engineer and in accordance with the requirements of the Building Official. If seismic loading is to be applied, we recommend a seismic load of 27 pounds per cubic foot be used for design applied as a triangular distribution of pressure along the wall height. This dynamic (seismic) pressure increment is for horizontal backfill behind the wall and does not account for an inclined backfill surface. The seismic pressure is based on a peak ground acceleration of 0.43g (S_{DS}/2.5) and by applying a pseudo-static coefficient of 0.5.

7.14 Retaining Wall Drainage

7.14.1 Retaining walls should be provided with a drainage system extended at least two-thirds the height of the wall. At the base of the drain system, a subdrain covered with a minimum of 12 inches of gravel should be installed, and a compacted fill blanket or other seal placed at the surface (see Figure 12). The clean bottom and subdrain pipe, behind a retaining wall, should be observed by the Geotechnical Engineer (a representative of Geocon), prior to placement of gravel or compacting backfill.

7.14.2 As an alternative, a plastic drainage composite such as Miradrain or equivalent may be installed in continuous, 4-foot wide columns along the entire back face of the wall, at 8 feet on center. The top of these drainage composite columns should terminate approximately 18 inches below the ground surface, where either hardscape or a minimum of 18 inches of relatively cohesive material should be placed as a cap (see Figure 13). These vertical columns of drainage material would then be connected at the bottom of the wall to a collection panel or a one-cubic-foot rock pocket drained by a 4-inch subdrain pipe.

7.14.3 Moisture affecting below grade walls is one of the most common post-construction complaints. Poorly applied or omitted waterproofing can lead to efflorescence or standing water. Particular care should be taken in the design and installation of waterproofing to avoid moisture problems, or actual water seepage into the structure through any normal shrinkage cracks which may develop in the concrete walls, floor slab, foundations and/or construction joints. The design and inspection of the waterproofing is not the responsibility of the geotechnical engineer. A waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to subterranean walls, floor slabs and foundations.

7.15 Elevator Pit Design

7.15.1 The elevator pit slab and retaining wall should be designed by the project structural engineer. As a minimum the slab-on-grade should be at least 4 inches thick and reinforced with No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions, positioned near the slab midpoint. The elevator slab and retaining wall footings may derive support in either newly placed

engineered fill or the terrace deposit soils found at or below a depth of 5 feet if exposed in the elevator pit excavation bottom. Elevator pit walls may be designed in accordance with the recommendations in the *Conventional Foundation Design and Retaining Wall Design* section of this report (see Sections 7.6 and 7.12).

7.15.2 Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent foundations and should be designed for each condition as the project progresses.

7.15.3 If retaining wall drainage is to be provided, the drainage system should be designed in accordance with the *Retaining Wall Drainage* section of this report (see Section 7.14).

7.15.4 Subdrainage pipes at the base of the retaining wall drainage system should outlet to a location acceptable to the building official.

7.15.5 It is suggested that the exterior walls and slab be waterproofed to prevent excessive moisture inside of the elevator pit. Waterproofing design and installation is not the responsibility of the geotechnical engineer.

7.16 Elevator Piston

7.16.1 If a plunger-type elevator piston is installed for this project, a deep drilled excavation will be required. It is important to verify that the drilled excavation is not situated immediately adjacent to a foundation, or the drilled excavation could compromise the existing foundation support.

7.16.2 Casing may be required if caving is experienced in the drilled excavation and the contractor should be prepared to use casing and should have it readily available at the commencement of drilling activities. Continuous observation of the drilling and installation of the elevator piston by the Geotechnical Engineer (a representative of Geocon West, Inc.) is required.

7.16.3 The annular space between the piston casing and drilled excavation wall should be filled with a minimum of 1½-sack slurry pumped from the bottom up. As an alternative, pea gravel may be utilized. The use of soil to backfill the annular space is not acceptable.

7.17 Temporary Excavations

7.17.1 Excavations on the order of five feet in vertical height may be required during excavation and grading activities. The excavations are expected to expose fill and terrace deposits, which are suitable for vertical excavations up to fivefeet in height where loose soils or caving sands are not present, and where excavations are not surcharged.

7.17.2 Vertical excavations greater than 5 feet will require sloping measures in order to provide a stable excavation. Where sufficient space is available, temporary unsurcharged embankments may be sloped back at a uniform 1:1 slope gradient or flatter. A uniform slope does not have a vertical portion. It is anticipated that sufficient space is available to complete the required earthwork for this project using sloping measures. If necessary, shoring and/or alternative temporary excavation recommendations will be provided in an addendum.

7.17.3 Where sloped embankments are utilized, the top of the slope should be barricaded to prevent vehicles and storage loads at the top of the slope within a horizontal distance equal to the height of the slope. If the temporary construction embankments are to be maintained during the rainy season, berms are suggested along the tops of the slopes where necessary to prevent runoff water from entering the excavation and eroding the slope faces. The soils exposed in the cut slopes should be inspected during excavation by our personnel so that modifications of the slopes can be made if variations in the soil conditions occur. All excavations should be stabilized within 30 days of initial excavation.

7.18 Surface Drainage

7.18.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the original designed engineering properties. Proper drainage should be maintained at all times.

7.18.2 All site drainage should be collected and controlled in non-erosive drainage devices. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. The site should be graded and maintained such that surface drainage is directed away from structures in accordance with 2010 CBC 1804.3 or other applicable standards. In addition, drainage should not be allowed to flow uncontrolled over any descending slope. Discharge from downspouts, roof drains and scuppers are not recommended onto unprotected soils within five feet of the building perimeter. Planters which are located adjacent to foundations should be sealed to prevent moisture intrusion into the soils providing foundation support. Landscape irrigation is not recommended within five feet of the building perimeter footings except when enclosed in protected planters.

7.18.3 Positive site drainage should be provided away from structures, pavement, and the tops of slopes to swales or other controlled drainage structures. The building pad and pavement areas should be fine graded such that water is not allowed to pond.

7.18.4 Landscaping planters immediately adjacent to paved areas are not recommended due to the potential for surface or irrigation water to infiltrate the pavement's subgrade and base course. Either a subdrain, which collects excess irrigation water and transmits it to drainage structures, or an impervious above-grade planter boxes should be used. In addition, where landscaping is planned adjacent to the pavement, it is recommended that consideration be given to providing a cutoff wall along the edge of the pavement that extends at least 12 inches below the base material.

7.19 Plan Review

7.19.1 Grading and foundation plans should be reviewed by the Geotechnical Engineer prior to finalization to verify that the plans have been prepared in substantial conformance with the recommendations of this report and to provide additional analyses or recommendations, if necessary.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The recommendations of this report pertain only to the site investigated and are based upon the assumption that the soil conditions do not deviate from those disclosed in the investigation. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that anticipated herein, Geocon West, Inc. should be notified so that supplemental recommendations can be given. The evaluation or identification of the potential presence of hazardous or corrosive materials was not part of the scope of services provided by Geocon West, Inc.

2. This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project and incorporated into the plans, and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

3. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.

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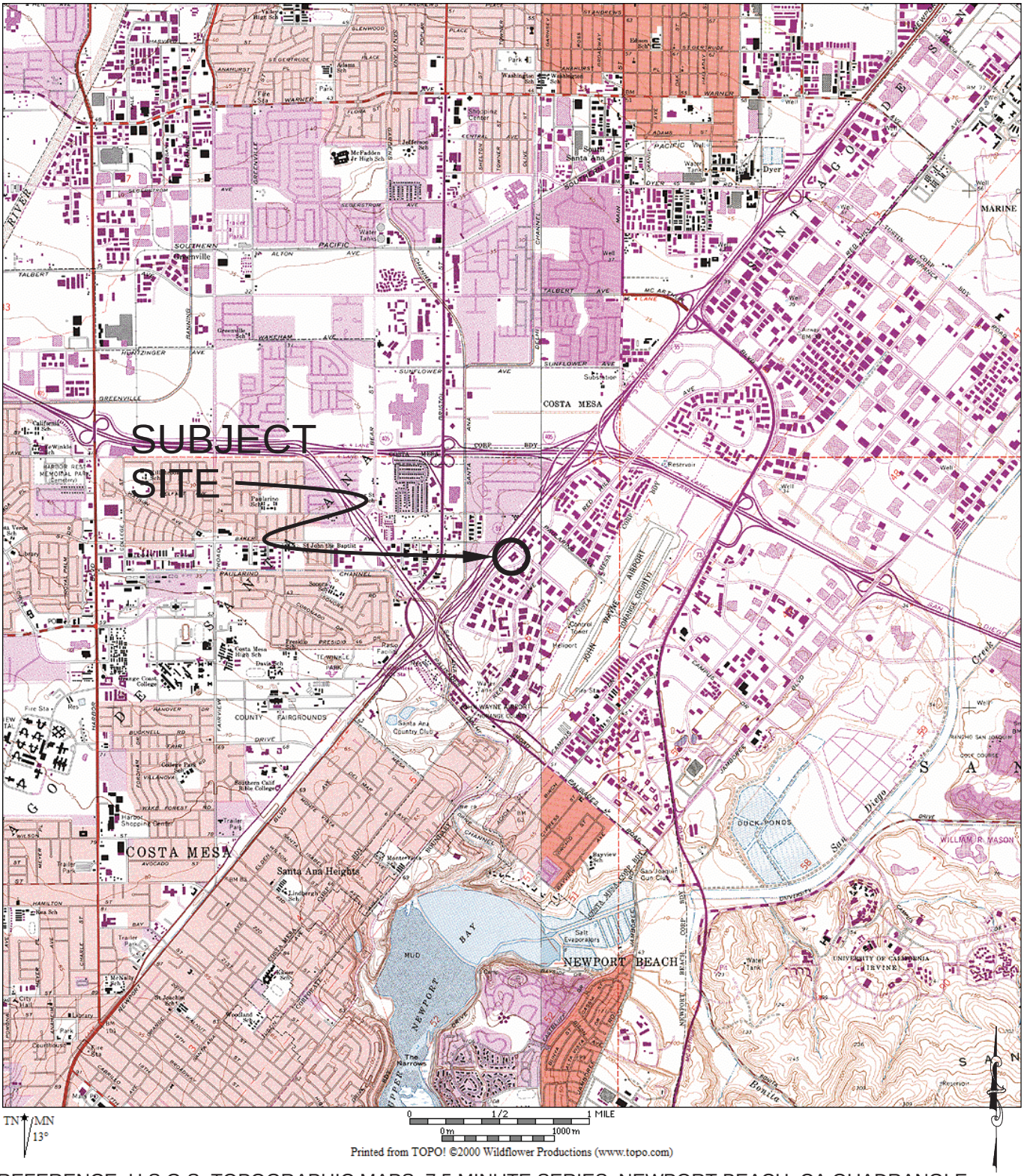

REFERENCE: U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE SERIES, NEWPORT BEACH, CA QUADRANGLE

GEOCON WEST, INC.

ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

VICINITY MAP

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

JMT		8000

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 1

LEGEND

B3 Approximate Boring Location

N

0 80' 160'

APPROXIMATE SCALE

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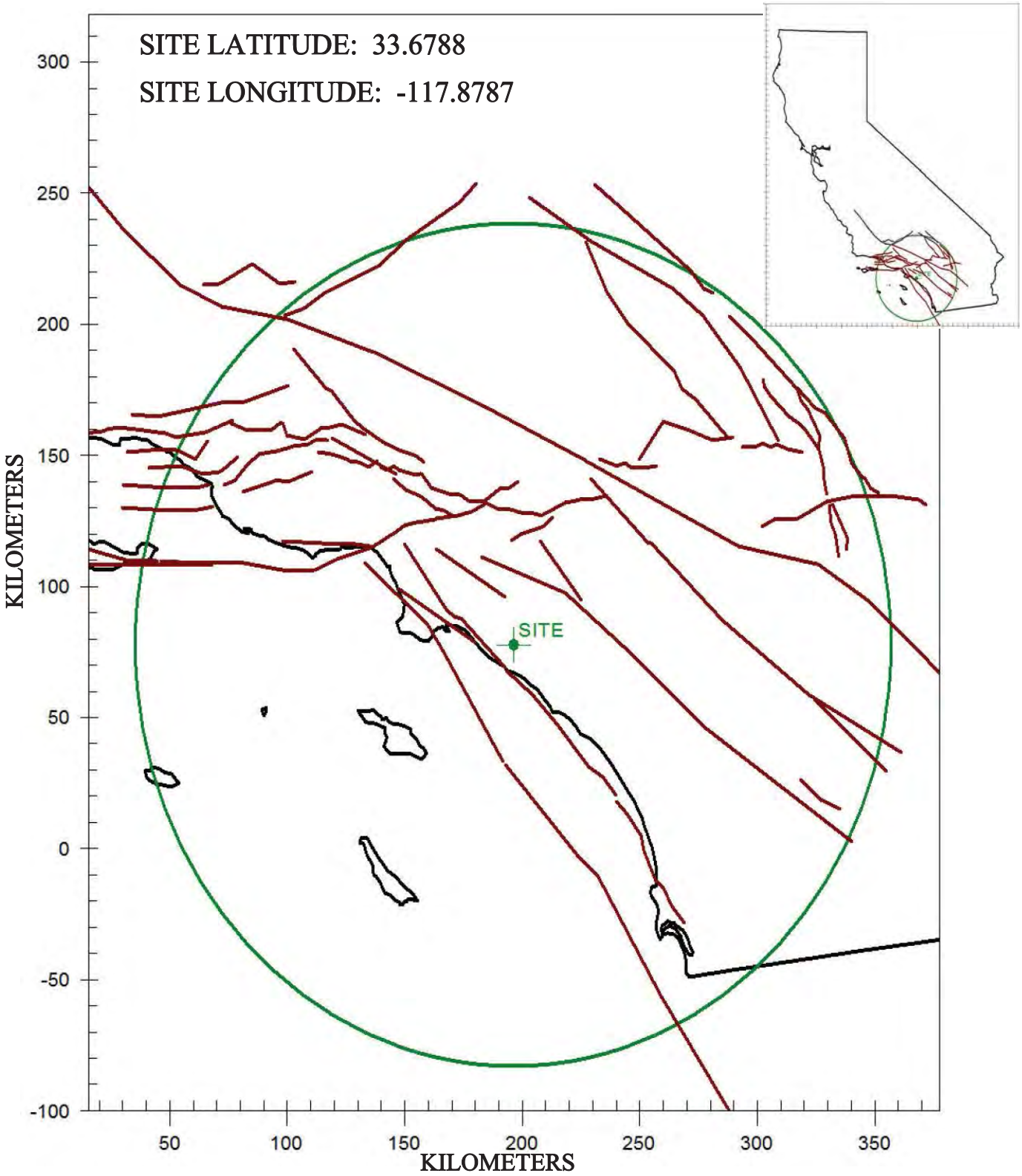
PHONE (818) 841-8388 - FAX (818) 841-1704

JMT		8000

SITE PLAN

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 2



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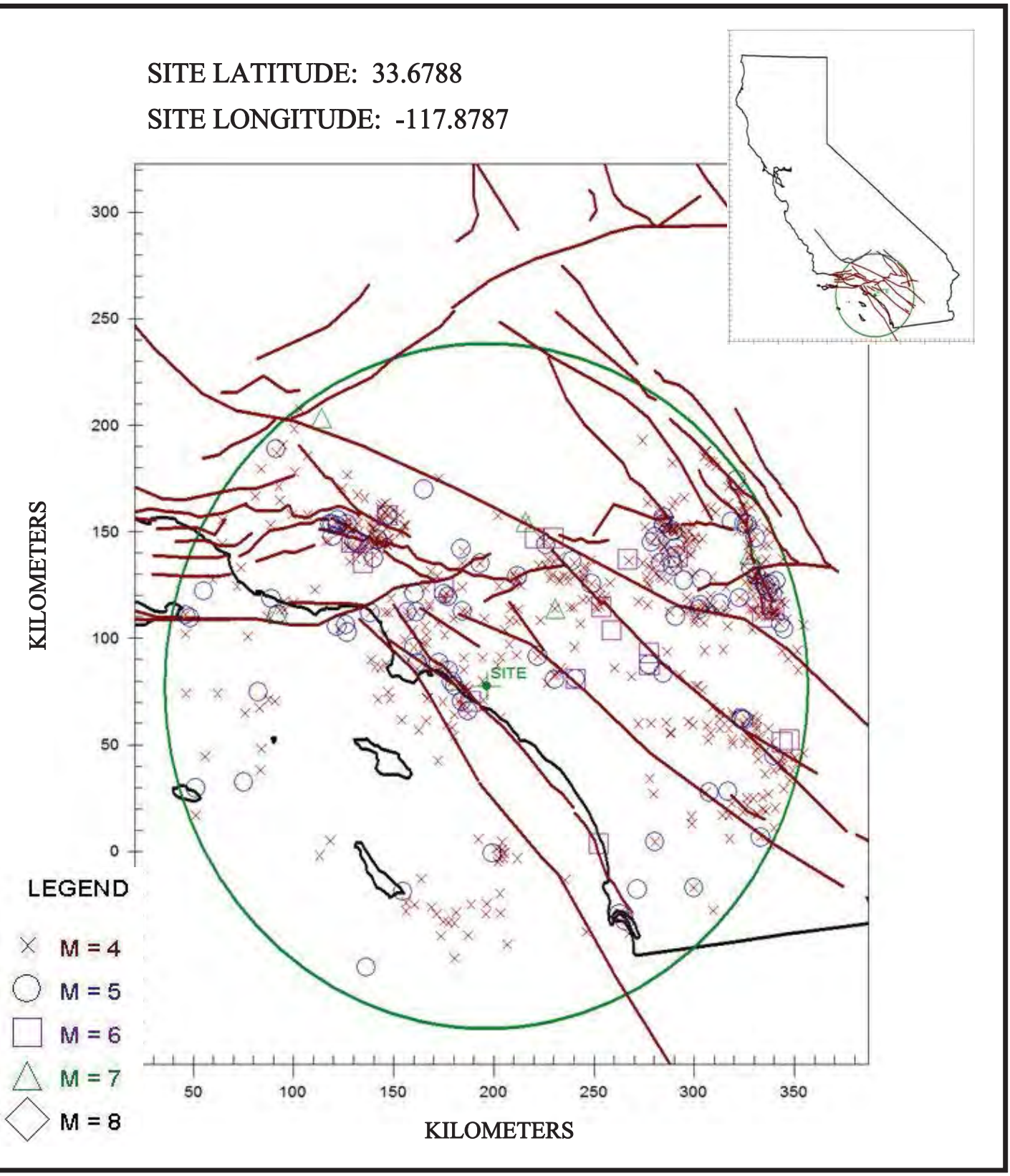
WEST, INC.
ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

REGIONAL FAULT MAP

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

GAK		8000	OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 3



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PHONE (818) 841-8388 - FAX (818) 841-1704

GAK		8000

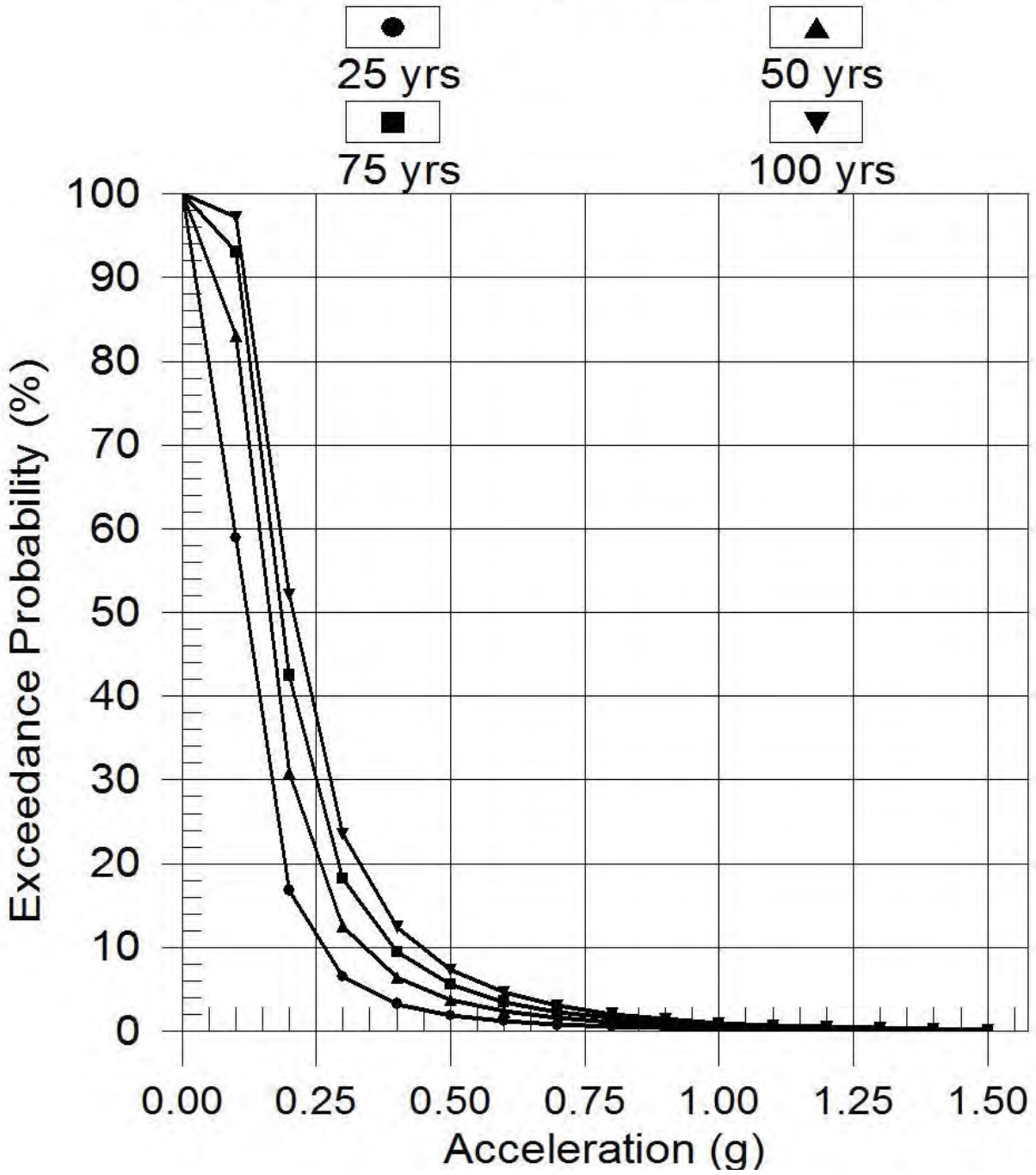
REGIONAL SEISMICITY MAP

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 4

PROBABILITY OF EXCEEDANCE

SADIGH ET AL. (1997) DEEP SOIL 1



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PHONE (818) 841-8388 - FAX (818) 841-1704

GAK		8000

PROBABILITY OF EXCEEDANCE

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 5

GEOCON

Client: Red Oak Investments, LLC
File No. A8970-06-01
Boring 1

EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL

NCEER (1996) METHOD
By Thomas F. Blake (1994-1996)
LIQ2_30.WQ1

EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.9
Peak Horiz. Acceleration (g):	0.43
Calculated Mag.Wtg.Factor:	0.812
Historic High Groundwater:	20.0
Groundwater Depth During Exploration	27.3

ENERGY & ROD CORRECTIONS:

Energy Correction (CE) for N60:	1.25
Rod Len.Corr.(CR)(0-no or 1-yes)	1.0
Bore Dia. Corr. (CB):	1.00
Sampler Corr. (CS):	1.20
Use Ksigma (0 or 1):	1.0

LIQUEFACTION CALCULATIONS:

Unit Wt. Water (pcf): 62.4

Depth to Base (ft)	Total Unit Wt. (pcf)	Water (0 or 1)	FIELD SPT (N)	Depth of SPT (ft)	Liq.Sus. (0 or 1)	-200 (%)	Est. Dr (%)	CN Factor	Corrected (N1)60	Eff. Unit Wt. (psf)	Resist. CRR	rd Factor	Induced CSR	Liquefac. Safe.Fact.
1.0	135.7	0	16.0	1.0	1		97	2.000	36.0	135.7	Infin.	0.998	0.226	--
2.0	135.7	0	16.0	2.0	1		94	2.000	36.0	135.7	Infin.	0.993	0.225	--
3.0	135.7	0	16.0	3.0	1		91	2.000	36.0	135.7	Infin.	0.989	0.224	--
4.0	135.7	0	16.0	4.0	1		88	2.000	36.0	135.7	Infin.	0.984	0.223	--
5.0	129.6	0	16.0	5.0	1	68	86	1.854	40.4	129.6	Infin.	0.979	0.222	--
6.0	129.6	0	16.0	6.0	1	68	84	1.683	37.3	129.6	Infin.	0.975	0.221	--
7.0	110.6	0	16.0	7.0	1	68	82	1.561	35.1	110.6	Infin.	0.970	0.220	--
8.0	110.6	0	16.0	8.0	1	68	81	1.469	33.4	110.6	Infin.	0.966	0.219	--
9.0	110.6	0	16.0	9.0	1	68	79	1.391	32.0	110.6	Infin.	0.961	0.218	--
10.0	110.6	0	16.0	10.0	1	68	78	1.325	30.9	110.6	Infin.	0.957	0.217	--
11.0	110.6	0	16.0	10.0	1	83	78	1.267	29.8	110.6	0.455	0.952	0.216	--
12.0	110.6	0	16.0	10.0	1	83	78	1.217	28.9	110.6	0.381	0.947	0.215	--
13.0	129.2	0	13.0	15.0	1	83	64	1.168	25.4	129.2	0.292	0.943	0.214	--
14.0	129.2	0	13.0	15.0	1	49	64	1.122	24.6	129.2	0.280	0.938	0.213	--
15.0	129.2	0	13.0	15.0	1	49	64	1.080	24.0	129.2	0.270	0.934	0.212	--
16.0	129.2	0	13.0	15.0	1	49	64	1.043	23.4	129.2	0.261	0.929	0.211	--
17.0	129.2	0	13.0	15.0	1	49	64	1.010	22.9	129.2	0.254	0.925	0.210	--
18.0	122.4	0	11.0	20.0	0			0.980	14.5	122.4	~	0.920	0.209	~
19.0	122.4	0	11.0	20.0	0			0.954	14.1	122.4	~	0.915	0.208	~
20.0	122.4	1	11.0	20.0	0			0.929	13.7	60.0	~	0.911	0.209	~
21.0	122.4	1	11.0	20.0	0			0.907	13.4	60.0	~	0.906	0.213	~
22.0	122.4	1	11.0	20.0	0			0.886	13.1	60.0	~	0.902	0.217	~
23.0	122.4	1	11.0	20.0	0			0.866	12.8	60.0	~	0.897	0.221	~
24.0	122.4	1	11.0	20.0	0			0.847	12.5	60.0	~	0.893	0.224	~
25.0	122.3	1	15.0	25.0	1	29	62	0.830	23.4	59.9	0.252	0.888	0.227	1.11
26.0	122.3	1	15.0	25.0	1	29	62	0.814	23.0	59.9	0.247	0.883	0.230	1.08
27.0	137.1	1	22.0	30.0	1	7	73	0.798	26.8	74.7	0.304	0.879	0.233	1.31
28.0	137.1	1	22.0	30.0	1	7	73	0.785	26.4	74.7	0.296	0.874	0.235	1.26
29.0	137.1	1	22.0	30.0	1	7	73	0.777	26.1	74.7	0.290	0.870	0.237	1.23
30.0	137.1	1	22.0	30.0	1	7	73	0.768	25.9	74.7	0.285	0.865	0.239	1.20
31.0	137.1	1	22.0	30.0	1	7	73	0.760	25.6	74.7	0.281	0.861	0.240	1.17
32.0	137.1	1	22.0	30.0	1	7	73	0.753	25.3	74.7	0.276	0.856	0.242	1.14
33.0	134.0	1	45.0	35.0	1		100	0.745	50.3	71.6	Infin.	0.851	0.243	Non-Liq.
34.0	134.0	1	45.0	35.0	1		100	0.738	49.8	71.6	Infin.	0.847	0.244	Non-Liq.
35.0	134.0	1	45.0	35.0	1		100	0.731	49.4	71.6	Infin.	0.842	0.245	Non-Liq.
36.0	134.0	1	45.0	35.0	1		100	0.725	48.9	71.6	Infin.	0.838	0.246	Non-Liq.
37.0	134.0	1	45.0	35.0	1		100	0.718	48.5	71.6	Infin.	0.833	0.247	Non-Liq.
38.0	132.5	1	36.0	40.0	1		87	0.712	38.5	70.1	Infin.	0.829	0.248	Non-Liq.
39.0	132.5	1	36.0	40.0	1		87	0.706	38.1	70.1	Infin.	0.824	0.249	Non-Liq.
40.0	132.5	1	36.0	40.0	1		87	0.700	37.8	70.1	Infin.	0.819	0.249	Non-Liq.
41.0	132.5	1	36.0	40.0	1		87	0.695	37.5	70.1	Infin.	0.815	0.250	Non-Liq.
42.0	132.5	1	36.0	40.0	1		87	0.689	37.2	70.1	Infin.	0.810	0.250	Non-Liq.
43.0	132.5	1	36.0	40.0	1		87	0.684	36.9	70.1	Infin.	0.806	0.250	Non-Liq.
44.0	126.4	1	9.0	45.0	0			0.679	9.2	64.0	~	0.801	0.251	~
45.0	126.4	1	9.0	45.0	0			0.674	9.1	64.0	~	0.797	0.251	~
46.0	126.4	1	9.0	45.0	0			0.669	9.0	64.0	~	0.792	0.251	~
47.0	126.4	1	9.0	45.0	0			0.665	9.0	64.0	~	0.787	0.251	~
48.0	120.2	1	11.0	50.0	0			0.660	10.9	57.8	~	0.783	0.251	~
49.0	120.2	1	11.0	50.0	0			0.656	10.8	57.8	~	0.778	0.251	~
50.0	120.2	1	11.0	50.0	0			0.653	10.8	57.8	~	0.774	0.251	~

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Client: Red Oak Investments, LLC
File No. A8970-06-01
Boring 2

EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL

NCEER (1996) METHOD

By Thomas F. Blake (1994-1996)

LIQ2_30.WQ1

EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.9
Peak Horiz. Acceleration (g):	0.43
Calculated Mag.Wtg.Factor:	0.812
Historic High Groundwater:	20.0
Groundwater Depth During Exploration	27.6

ENERGY & ROD CORRECTIONS:

Energy Correction (CE) for N60:	1.25
Rod Len.Corr.(CR)(0-no or 1-yes)	1.0
Bore Dia. Corr. (CB):	1.00
Sampler Corr. (CS):	1.20
Use Ksigma (0 or 1):	1.0

LIQUEFACTION CALCULATIONS:

Unit Wt. Water (pcf): 62.4

Depth to Base (ft)	Total Unit Wt. (pcf)	Water (0 or 1)	FIELD SPT (N)	Depth of SPT (ft)	Liq.Sus. (0 or 1)	-200 (%)	Est. Dr (%)	CN Factor	Corrected (N1)60	Eff. Unit Wt. (psf)	Resist. CRR	rd Factor	Induced CSR	Liquefac. Safe.Fact.
1.0	124.7	0	5.0	1.0	1	75.7	54	2.000	18.3	124.7	0.198	0.998	0.226	--
2.0	124.7	0	5.0	2.0	1	76	53	2.000	18.3	124.7	0.198	0.993	0.225	--
3.0	124.7	0	5.0	3.0	1	76	51	2.000	18.3	124.7	0.198	0.989	0.224	--
4.0	124.7	0	5.0	4.0	1	76	50	2.000	18.3	124.7	0.198	0.984	0.223	--
5.0	124.7	0	17.0	5.0	1	63	90	1.929	43.9	124.7	Infin.	0.979	0.222	--
6.0	124.7	0	17.0	6.0	1	63	87	1.745	40.4	124.7	Infin.	0.975	0.221	--
7.0	124.7	0	17.0	7.0	1	63	85	1.605	37.7	124.7	Infin.	0.970	0.220	--
8.0	124.7	0	17.0	8.0	1	63	84	1.494	35.6	124.7	Infin.	0.966	0.219	--
9.0	124.7	0	17.0	9.0	1	63	82	1.404	33.8	124.7	Infin.	0.961	0.218	--
10.0	104.8	0	13.0	12.5	1	63	67	1.333	26.5	104.8	0.313	0.957	0.217	--
11.0	104.8	0	13.0	12.5	1	49	67	1.278	25.7	104.8	0.297	0.952	0.216	--
12.0	104.8	0	13.0	12.5	1	49	67	1.228	25.0	104.8	0.285	0.947	0.215	--
13.0	104.8	0	13.0	12.5	1	87	67	1.184	24.3	104.8	0.275	0.943	0.214	--
14.0	104.8	0	13.0	12.5	1	87	67	1.145	23.7	104.8	0.266	0.938	0.213	--
15.0	98.9	0	9.0	17.5	1		52	1.110	12.8	98.9	0.140	0.934	0.212	--
16.0	98.9	0	9.0	17.5	1		52	1.079	12.5	98.9	0.136	0.929	0.211	--
17.0	98.9	0	9.0	17.5	1		52	1.050	12.1	98.9	0.132	0.925	0.210	--
18.0	98.9	0	9.0	17.5	1		52	1.024	11.8	98.9	0.129	0.920	0.209	--
19.0	98.9	0	9.0	17.5	1		52	0.999	11.5	98.9	0.126	0.915	0.208	--
20.0	122.9	1	4.0	22.5	0			0.974	5.4	60.5	~	0.911	0.210	~
21.0	122.9	1	4.0	22.5	0			0.948	5.3	60.5	~	0.906	0.214	~
22.0	122.9	1	4.0	22.5	0			0.924	5.1	60.5	~	0.902	0.219	~
23.0	122.9	1	4.0	22.5	0			0.901	5.0	60.5	~	0.897	0.222	~
24.0	122.9	1	4.0	22.5	0			0.880	4.9	60.5	~	0.893	0.226	~
25.0	122.9	1	4.0	22.5	0			0.861	4.8	60.5	~	0.888	0.229	~
26.0	119.8	1	7.0	27.5	0			0.843	8.7	57.4	~	0.883	0.233	~
27.0	119.8	1	7.0	27.5	0			0.826	8.5	57.4	~	0.879	0.235	~
28.0	119.8	1	7.0	27.5	0			0.815	8.4	57.4	~	0.874	0.238	~
29.0	119.8	1	7.0	27.5	0			0.807	8.3	57.4	~	0.870	0.241	~
30.0	132.3	1	18.0	32.5	1	51	66	0.799	28.6	69.9	0.351	0.865	0.243	1.44
31.0	132.3	1	18.0	32.5	1	51	66	0.791	28.4	69.9	0.343	0.861	0.245	1.40
32.0	132.3	1	18.0	32.5	1	51	66	0.783	28.1	69.9	0.336	0.856	0.246	1.37
33.0	132.3	1	18.0	32.5	1	51	66	0.775	27.9	69.9	0.330	0.851	0.248	1.33
34.0	132.3	1	18.0	32.5	1	51	66	0.767	27.7	69.9	0.325	0.847	0.249	1.30
35.0	132.3	1	18.0	32.5	1	53	66	0.760	27.5	69.9	0.320	0.842	0.250	1.28
36.0	132.3	1	18.0	32.5	1	53	66	0.753	27.3	69.9	0.315	0.838	0.251	1.25
37.0	124.1	1	8.0	37.5	1	53	43	0.746	16.0	61.7	0.162	0.833	0.252	0.64
38.0	124.1	1	8.0	37.5	1	53	43	0.740	15.9	61.7	0.162	0.829	0.253	0.64
39.0	124.1	1	8.0	37.5	1	53	43	0.734	15.8	61.7	0.161	0.824	0.254	0.63
40.0	119.6	1	9.0	42.5	0	53		0.728	16.8	57.2	~	0.819	0.255	~
41.0	119.6	1	9.0	42.5	0	53		0.723	16.8	57.2	~	0.815	0.256	~
42.0	119.6	1	9.0	42.5	0	53		0.718	16.7	57.2	~	0.810	0.257	~
43.0	119.6	1	9.0	42.5	0	53		0.713	16.6	57.2	~	0.806	0.257	~
44.0	119.6	1	9.0	42.5	0	53		0.708	16.6	57.2	~	0.801	0.258	~
45.0	125.0	1	9.0	42.5	0	53		0.703	16.5	62.6	~	0.797	0.258	~
46.0	125.0	1	9.0	42.5	0	53		0.698	16.4	62.6	~	0.792	0.258	~
47.0	125.0	1	7.0	47.5	0	53		0.693	14.3	62.6	~	0.787	0.258	~
48.0	125.0	1	7.0	47.5	0	53		0.688	14.2	62.6	~	0.783	0.258	~
49.0	123.4	1	7.0	47.5	0	53		0.683	14.2	61.0	~	0.778	0.258	~
50.0	123.4	1	7.0	47.5	0	53		0.679	14.1	61.0	~	0.774	0.258	~

GEOCON

Client: Red Oak Investments, LLC
File No. A8970-06-01
Boring 1

LIQUEFACTION SETTLEMENT ANALYSIS
AMERICAN SOCIETY OF CIVIL ENGINEERS

(SATURATED SAND AT INITIAL LIQUEFACTION CONDITION)

NCEER (1996) METHOD
EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.9
Peak Horiz. Acceleration (g)	0.43
Calculated Mag.Wtg.Factor:	0.812
Historic High Groundwater:	20.0
Groundwater @ Exploration:	27.3

DEPTH TO BASE	BLOW COUNT N	WET DENSITY (PCF)	TOTAL STRESS O (TSF)	EFFECT STRESS O' (TSF)	REL. DEN. Dr (%)	ADJUST BLOWS (N1)60	Tav/O'$_o$	LIQUEFACTION SAFETY FACTOR	Volumetric Strain [e_{15}} (%)	EQ. SETTLE. Pe (in.)
1	16	135.713	0.034	0.034	97	36	0.280	--	0.00	0.00
2	16	135.713	0.102	0.102	94	36	0.280	--	0.00	0.00
3	16	135.713	0.170	0.170	91	36	0.280	--	0.00	0.00
4	16	135.713	0.237	0.237	88	36	0.280	--	0.00	0.00
5	16	129.5876	0.304	0.304	86	40	0.280	--	0.00	0.00
6	16	129.5876	0.369	0.369	84	37	0.280	--	0.00	0.00
7	16	110.6116	0.429	0.429	82	35	0.280	--	0.00	0.00
8	16	110.6116	0.484	0.484	81	33	0.280	--	0.00	0.00
9	16	110.6116	0.539	0.539	79	32	0.280	--	0.00	0.00
10	16	110.6116	0.595	0.595	78	31	0.280	--	0.00	0.00
11	16	110.6116	0.650	0.650	78	30	0.280	--	0.00	0.00
12	16	110.6116	0.705	0.705	78	29	0.280	--	0.00	0.00
13	13	129.1613	0.765	0.765	64	25	0.280	--	0.00	0.00
14	13	129.1613	0.830	0.830	64	25	0.280	--	0.00	0.00
15	13	129.1613	0.894	0.894	64	24	0.280	--	0.00	0.00
16	13	129.1613	0.959	0.959	64	23	0.280	--	0.00	0.00
17	13	129.1613	1.023	1.023	64	23	0.280	--	0.00	0.00
18	11	122.4431	1.086	1.086		14	0.280	~	0.00	0.00
19	11	122.4431	1.148	1.148		14	0.280	~	0.00	0.00
20	11	122.4431	1.209	1.193		14	0.283	~	0.00	0.00
21	11	122.4431	1.270	1.223		13	0.290	~	0.00	0.00
22	11	122.4431	1.331	1.253		13	0.297	~	0.00	0.00
23	11	122.4431	1.392	1.283		13	0.303	~	0.00	0.00
24	11	122.4431	1.454	1.313		13	0.309	~	0.00	0.00
25	15	122.25	1.515	1.343	62	23	0.315	1.11	0.80	0.10
26	15	122.25	1.576	1.373	62	23	0.321	1.08	0.80	0.10
27	22	137.1334	1.641	1.407	73	27	0.326	1.31	0.00	0.00
28	22	137.1334	1.709	1.444	73	26	0.331	1.26	0.45	0.05
29	22	137.1334	1.778	1.482	73	26	0.335	1.23	0.45	0.05
30	22	137.1334	1.847	1.519	73	26	0.340	1.20	0.45	0.05
31	22	137.1334	1.915	1.556	73	26	0.344	1.17	0.45	0.05
32	22	137.1334	1.984	1.594	73	25	0.348	1.14	0.45	0.05
33	45	133.9786	2.051	1.630	100	50	0.352	Non-Liq.	0.00	0.00
34	45	133.9786	2.118	1.666	100	50	0.355	Non-Liq.	0.00	0.00
35	45	133.9786	2.185	1.702	100	49	0.359	Non-Liq.	0.00	0.00
36	45	133.9786	2.252	1.738	100	49	0.362	Non-Liq.	0.00	0.00
37	45	133.9786	2.319	1.773	100	48	0.366	Non-Liq.	0.00	0.00
38	36	132.4701	2.386	1.809	87	38	0.369	Non-Liq.	0.00	0.00
39	36	132.4701	2.452	1.844	87	38	0.372	Non-Liq.	0.00	0.00
40	36	132.4701	2.518	1.879	87	38	0.375	Non-Liq.	0.00	0.00
41	36	132.4701	2.585	1.914	87	38	0.377	Non-Liq.	0.00	0.00
42	36	132.4701	2.651	1.949	87	37	0.380	Non-Liq.	0.00	0.00
43	36	132.4701	2.717	1.984	87	37	0.383	Non-Liq.	0.00	0.00
44	9	126.3946	2.782	2.018		9	0.385	~	0.00	0.00
45	9	126.3946	2.845	2.050		9	0.388	~	0.00	0.00
46	9	126.3946	2.908	2.082		9	0.391	~	0.00	0.00
47	9	126.3946	2.972	2.114		9	0.393	~	0.00	0.00
48	11	120.1662	3.033	2.144		11	0.395	~	0.00	0.00
49	11	120.1662	3.093	2.173		11	0.398	~	0.00	0.00
50	11	120.1662	3.153	2.202		11	0.400	~	0.00	0.00

TOTAL SETTLEMENT = 0.5 INCHES

Figure 8

GEOCON

Client: Red Oak Investments, LLC
File No. A8970-06-01
Boring 2

LIQUEFACTION SETTLEMENT ANALYSIS
AMERICAN SOCIETY OF CIVIL ENGINEERS

(SATURATED SAND AT INITIAL LIQUEFACTION CONDITION)

NCEER (1996) METHOD
EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.9
Peak Horiz. Acceleration (g)	0.43
Calculated Mag.Wtg.Factor:	0.812
Historic High Groundwater:	20.0
Groundwater @ Exploration:	27.6

DEPTH TO BASE	BLOW COUNT N	WET DENSITY (PCF)	TOTAL STRESS O (TSF)	EFFECT STRESS O' (TSF)	REL. DEN. Dr (%)	ADJUST BLOWS (N1)60	Tav/O'$_o$	LIQUEFACTION SAFETY FACTOR	Volumetric Strain [e_{15}} (%)	EQ. SETTLE. Pe (in.)
1	5	124.6542	0.031	0.031	54	18	0.280	--	0.00	0.00
2	5	124.6542	0.093	0.093	53	18	0.280	--	0.00	0.00
3	5	124.6542	0.156	0.156	51	18	0.280	--	0.00	0.00
4	5	124.6542	0.218	0.218	50	18	0.280	--	0.00	0.00
5	17	124.6542	0.280	0.280	90	44	0.280	--	0.00	0.00
6	17	124.6542	0.343	0.343	87	40	0.280	--	0.00	0.00
7	17	124.6542	0.405	0.405	85	38	0.280	--	0.00	0.00
8	17	124.6542	0.467	0.467	84	36	0.280	--	0.00	0.00
9	17	124.6542	0.530	0.530	82	34	0.280	--	0.00	0.00
10	13	104.8347	0.587	0.587	67	27	0.280	--	0.00	0.00
11	13	104.8347	0.640	0.640	67	26	0.280	--	0.00	0.00
12	13	104.8347	0.692	0.692	67	25	0.280	--	0.00	0.00
13	13	104.8347	0.744	0.744	67	24	0.280	--	0.00	0.00
14	13	104.8347	0.797	0.797	67	24	0.280	--	0.00	0.00
15	9	98.8535	0.848	0.848	52	13	0.280	--	0.00	0.00
16	9	98.8535	0.897	0.897	52	12	0.280	--	0.00	0.00
17	9	98.8535	0.947	0.947	52	12	0.280	--	0.00	0.00
18	9	98.8535	0.996	0.996	52	12	0.280	--	0.00	0.00
19	9	98.8535	1.045	1.045	52	12	0.280	--	0.00	0.00
20	4	122.8692	1.101	1.085		5	0.284	~	0.00	0.00
21	4	122.8692	1.162	1.116		5	0.291	~	0.00	0.00
22	4	122.8692	1.224	1.146		5	0.299	~	0.00	0.00
23	4	122.8692	1.285	1.176		5	0.305	~	0.00	0.00
24	4	122.8692	1.347	1.206		5	0.312	~	0.00	0.00
25	4	122.8692	1.408	1.236		5	0.318	~	0.00	0.00
26	7	119.8048	1.469	1.266		9	0.324	~	0.00	0.00
27	7	119.8048	1.529	1.295		8	0.330	~	0.00	0.00
28	7	119.8048	1.589	1.323		8	0.336	~	0.00	0.00
29	7	119.8048	1.648	1.352		8	0.341	~	0.00	0.00
30	18	132.3196	1.711	1.384	66	29	0.346	1.44	0.00	0.00
31	18	132.3196	1.778	1.419	66	28	0.350	1.40	0.00	0.00
32	18	132.3196	1.844	1.454	66	28	0.354	1.37	0.00	0.00
33	18	132.3196	1.910	1.489	66	28	0.359	1.33	0.00	0.00
34	18	132.3196	1.976	1.524	66	28	0.362	1.30	0.00	0.00
35	18	132.3196	2.042	1.559	66	28	0.366	1.28	0.17	0.02
36	18	132.3196	2.108	1.594	66	27	0.370	1.25	0.70	0.08
37	8	124.107	2.173	1.627	43	16	0.373	0.64	1.70	0.20
38	8	124.107	2.235	1.657	43	16	0.377	0.64	1.70	0.20
39	8	124.107	2.297	1.688	43	16	0.380	0.63	1.70	0.20
40	9	119.634	2.358	1.718		17	0.384	~	0.00	0.00
41	9	119.634	2.417	1.747		17	0.387	~	0.00	0.00
42	9	119.634	2.477	1.775		17	0.390	~	0.00	0.00
43	9	119.634	2.537	1.804		17	0.393	~	0.00	0.00
44	9	119.634	2.597	1.832		17	0.396	~	0.00	0.00
45	9	125.001	2.658	1.862		16	0.399	~	0.00	0.00
46	9	125.001	2.720	1.894		16	0.402	~	0.00	0.00
47	7	125.001	2.783	1.925		14	0.404	~	0.00	0.00
48	7	125.001	2.845	1.956		14	0.407	~	0.00	0.00
49	7	123.4374	2.908	1.987		14	0.409	~	0.00	0.00
50	7	123.4374	2.969	2.018		14	0.411	~	0.00	0.00

TOTAL SETTLEMENT = 0.7 INCHES

Figure 9

GEOCON

CLIENT: Red Oak Investments, LLC
FILE NO. A8970-06-01 Boring 1

TECHNICAL ENGINEERING AND DESIGN GUIDES AS ADAPTED FROM THE US ARMY CORPS OF ENGINEERS, NO. 9
EVALUATION OF EARTHQUAKE-INDUCED SETTLEMENTS IN DRY SANDY SOILS

EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.9
Peak Horiz. Acceleration (g):	0.43

Depth of Base of Strata (ft)	Thickness of Layer (ft)	Depth of Mid-point of Layer (ft)	Soil Unit Weight (pcf)	Overburden Pressure at Mid-point (tsf)	Mean Effective Pressure at Mid-point (tsf)	Average Cyclic Shear Stress [Tav]	Field SPT [N]	Correction Factor [Cer]	Fig 4.1 Relative Density [Dr] (%)	Fig 4.2 Correction Factor [Cn]	Corrected [N1]60	rd Factor	Maximum Shear Mod. [Gmax] (tsf)	[yeff]*[Geff] [Gmax]	Fig 4.4 yeff Shear Strain	[yeff]*100%	Volumetric Strain M7.5 [E15] (%)	Number of Strain Cycles [Nc]	Corrected Vol. Strains [Ec]	Estimated Settlement [S] (inches)
1.0	1.0	0.5	135.7	0.03	0.02	0.009	16	1.25	96.7	2.0	36.0	1.0	222.532	4.22E-05	6.00E-05	0.006	2.96E-03	10.0787	2.48E-03	Grading
2.0	1.0	1.5	135.7	0.10	0.07	0.028	16	1.25	93.7	2.0	36.0	1.0	385.437	7.16E-05	1.40E-04	0.014	6.92E-03	10.0787	5.78E-03	Grading
3.0	1.0	2.5	135.7	0.17	0.11	0.047	16	1.25	90.9	2.0	36.0	1.0	497.597	9.07E-05	1.60E-04	0.016	7.90E-03	10.0787	6.61E-03	Grading
4.0	1.0	3.5	135.7	0.24	0.16	0.066	16	1.25	88.4	2.0	36.0	1.0	588.765	1.05E-04	1.70E-04	0.017	8.40E-03	10.0787	7.02E-03	Grading
5.0	1.0	4.5	129.6	0.30	0.20	0.085	16	1.25	86.1	1.9	40.4	1.0	691.825	1.12E-04	1.50E-04	0.015	6.46E-03	10.0787	5.40E-03	Grading
6.0	1.0	5.5	129.6	0.37	0.25	0.103	16	1.25	84.0	1.7	37.3	1.0	742.175	1.25E-04	1.50E-04	0.015	7.10E-03	10.0787	5.94E-03	0.00
7.0	1.0	6.5	110.6	0.43	0.29	0.119	16	1.25	82.3	1.6	35.1	1.0	784.276	1.35E-04	1.50E-04	0.015	7.64E-03	10.0787	6.39E-03	0.00
8.0	1.0	7.5	110.6	0.48	0.32	0.135	16	1.25	80.7	1.5	33.4	1.0	820.032	1.43E-04	1.50E-04	0.015	8.10E-03	10.0787	6.77E-03	0.00
9.0	1.0	8.5	110.6	0.54	0.36	0.150	16	1.25	79.2	1.4	32.0	1.0	853.434	1.50E-04	1.50E-04	0.015	8.52E-03	10.0787	7.12E-03	0.00
10.0	1.0	9.5	110.6	0.59	0.40	0.165	16	1.25	77.9	1.3	30.9	1.0	884.865	1.57E-04	1.50E-04	0.015	8.92E-03	10.0787	7.46E-03	0.00
11.0	1.0	10.5	110.6	0.65	0.44	0.180	16	1.25	77.9	1.3	29.8	1.0	914.615	1.63E-04	1.50E-04	0.015	9.29E-03	10.0787	7.77E-03	0.00
12.0	1.0	11.5	110.6	0.71	0.47	0.195	16	1.25	77.9	1.2	28.9	0.9	942.913	1.68E-04	1.50E-04	0.015	9.64E-03	10.0787	8.06E-03	0.00
13.0	1.0	12.5	129.2	0.77	0.51	0.211	13	1.25	64.4	1.2	25.4	0.9	940.435	1.80E-04	1.60E-04	0.016	1.20E-02	10.0787	1.01E-02	0.00
14.0	1.0	13.5	129.2	0.83	0.56	0.228	13	1.25	64.4	1.1	24.6	0.9	969.843	1.86E-04	1.60E-04	0.016	1.25E-02	10.0787	1.04E-02	0.00
15.0	1.0	14.5	129.2	0.89	0.60	0.245	13	1.25	64.4	1.1	24.0	0.9	997.962	1.91E-04	1.60E-04	0.016	1.29E-02	10.0787	1.08E-02	0.00
16.0	1.0	15.5	129.2	0.96	0.64	0.262	13	1.25	64.4	1.0	23.4	0.9	1024.940	1.96E-04	1.60E-04	0.016	1.32E-02	10.0787	1.11E-02	0.00
17.0	1.0	16.5	129.2	1.02	0.69	0.278	13	1.25	64.4	1.0	22.9	0.9	1050.899	2.01E-04	3.70E-04	0.037	3.15E-02	10.0787	2.63E-02	0.01
18.0	1.0	17.5	122.4	1.09	0.73	0.295	11	1.25	55.0	1.0	14.5	0.9	929.430	2.37E-04	3.70E-04	0.037	5.45E-02	10.0787	4.56E-02	0.01
19.0	1.0	18.5	122.4	1.15	0.77	0.310	11	1.25	55.0	1.0	14.1	0.9	946.571	2.41E-04	3.70E-04	0.037	5.64E-02	10.0787	4.71E-02	0.01
20.0	1.0	19.5	122.4	1.21	0.81	0.325	11	1.25	55.0	0.9	13.7	0.9	963.113	2.46E-04	3.70E-04	0.037	5.81E-02	10.0787	4.86E-02	0.01
21.0	1.0	20.5	122.4	1.27	0.85	0.341	11	1.25	55.0	0.9	13.4	0.9	979.105	2.50E-04	3.70E-04	0.037	5.99E-02	10.0787	5.01E-02	0.00
22.0	1.0	21.5	122.4	1.33	0.89	0.356	11	1.25	55.0	0.9	13.1	0.9	994.591	2.53E-04	3.70E-04	0.037	6.16E-02	10.0787	5.15E-02	0.00
23.0	1.0	22.5	122.4	1.39	0.93	0.370	11	1.25	55.0	0.9	12.8	0.9	1009.610	2.57E-04	3.70E-04	0.037	6.33E-02	10.0787	5.29E-02	0.00
24.0	1.0	23.5	122.4	1.45	0.97	0.385	11	1.25	55.0	0.8	12.5	0.9	1024.194	2.60E-04	3.70E-04	0.037	6.49E-02	10.0787	5.43E-02	0.00
25.0	1.0	24.5	122.3	1.51	1.01	0.399	15	1.25	62.2	0.8	23.4	0.9	1288.013	2.12E-04	3.00E-04	0.030	2.49E-02	10.0787	2.08E-02	0.00
26.0	1.0	25.5	122.3	1.58	1.06	0.414	15	1.25	62.2	0.8	23.0	0.9	1307.168	2.14E-04	3.00E-04	0.030	2.53E-02	10.0787	2.12E-02	0.00
27.0	1.0	26.5	137.1	1.64	1.10	0.429	22	1.25	72.6	0.8	26.8	0.9	1403.193	2.04E-04	3.00E-04	0.030	2.11E-02	10.0787	1.76E-02	0.00
28.0	1.0	27.5	137.1	1.71	1.15	0.444	22	1.25	72.6	0.8	26.4	0.9	1424.793	2.06E-04	3.00E-04	0.030	2.15E-02	10.0787	1.80E-02	0.00
29.0	1.0	28.5	137.1	1.78	1.19	0.460	22	1.25	72.6	0.8	26.1	0.9	1447.915	2.08E-04	3.00E-04	0.030	2.18E-02	10.0787	1.82E-02	0.00
30.0	1.0	29.5	137.1	1.85	1.24	0.475	22	1.25	72.6	0.8	25.9	0.9	1470.431	2.09E-04	3.00E-04	0.030	2.20E-02	10.0787	1.84E-02	0.00
31.0	1.0	30.5	137.1	1.92	1.28	0.490	22	1.25	72.6	0.8	25.6	0.9	1492.377	2.11E-04	3.00E-04	0.030	2.23E-02	10.0787	1.86E-02	0.00
32.0	1.0	31.5	137.1	1.98	1.33	0.504	22	1.25	72.6	0.8	25.3	0.9	1513.786	2.12E-04	3.00E-04	0.030	2.26E-02	10.0787	1.89E-02	0.00
33.0	1.0	32.5	134.0	2.05	1.37	0.519	45	1.25	100.3	0.7	50.3	0.9	1934.518	1.69E-04	1.30E-04	0.013	4.30E-03	10.0787	3.59E-03	0.00
34.0	1.0	33.5	134.0	2.12	1.42	0.532	45	1.25	100.3	0.7	49.8	0.8	1959.680	1.70E-04	1.30E-04	0.013	4.35E-03	10.0787	3.63E-03	0.00
35.0	1.0	34.5	134.0	2.19	1.46	0.546	45	1.25	100.3	0.7	49.4	0.8	1984.292	1.70E-04	1.30E-04	0.013	4.40E-03	10.0787	3.68E-03	0.00
36.0	1.0	35.5	134.0	2.25	1.51	0.559	45	1.25	100.3	0.7	48.9	0.8	2008.382	1.71E-04	1.30E-04	0.013	4.44E-03	10.0787	3.72E-03	0.00
37.0	1.0	36.5	134.0	2.32	1.55	0.572	45	1.25	100.3	0.7	48.5	0.8	2031.975	1.71E-04	1.30E-04	0.013	4.49E-03	10.0787	3.76E-03	0.00
38.0	1.0	37.5	132.5	2.39	1.60	0.585	36	1.25	86.9	0.7	38.5	0.8	1907.688	1.85E-04	1.30E-04	0.013	5.93E-03	10.0787	4.96E-03	0.00
39.0	1.0	38.5	132.5	2.45	1.64	0.597	36	1.25	86.9	0.7	38.1	0.8	1928.553	1.85E-04	1.30E-04	0.013	5.99E-03	10.0787	5.01E-03	0.00
40.0	1.0	39.5	132.5	2.52	1.69	0.609	36	1.25	86.9	0.7	37.8	0.8	1949.026	1.86E-04	1.30E-04	0.013	6.05E-03	10.0787	5.06E-03	0.00
41.0	1.0	40.5	132.5	2.58	1.73	0.621	36	1.25	86.9	0.7	37.5	0.8	1969.123	1.86E-04	1.30E-04	0.013	6.11E-03	10.0787	5.11E-03	0.00
42.0	1.0	41.5	132.5	2.65	1.78	0.632	36	1.25	86.9	0.7	37.2	0.8	1988.862	1.86E-04	1.30E-04	0.013	6.17E-03	10.0787	5.16E-03	0.00
43.0	1.0	42.5	132.5	2.72	1.82	0.643	36	1.25	86.9	0.7	36.9	0.8	2008.256	1.86E-04	1.30E-04	0.013	6.23E-03	10.0787	5.21E-03	0.00
44.0	1.0	43.5	126.4	2.78	1.86	0.654	9	1.25	42.2	0.7	9.2	0.8	1276.926	2.96E-04	3.00E-04	0.030	7.66E-02	10.0787	6.40E-02	0.00
45.0	1.0	44.5	126.4	2.85	1.91	0.664	9	1.25	42.2	0.7	9.1	0.8	1288.335	2.96E-04	3.00E-04	0.030	7.72E-02	10.0787	6.46E-02	0.00
46.0	1.0	45.5	126.4	2.91	1.95	0.673	9	1.25	42.2	0.7	9.0	0.8	1299.568	2.95E-04	3.00E-04	0.030	7.79E-02	10.0787	6.51E-02	0.00
47.0	1.0	46.5	126.4	2.97	1.99	0.683	9	1.25	42.2	0.7	9.0	0.8	1310.631	2.95E-04	3.00E-04	0.030	7.85E-02	10.0787	6.56E-02	0.00
48.0	1.0	47.5	120.2	3.03	2.03	0.692	11	1.25	45.6	0.7	10.9	0.8	1412.741	2.76E-04	1.00E-02	1.000	2.07E+00	10.0787	1.73E+00	0.00
49.0	1.0	48.5	120.2	3.09	2.07	0.700	11	1.25	45.6	0.7	10.8	0.8	1423.815	2.75E-04	1.00E-02	1.000	2.09E+00	10.0787	1.75E+00	0.00
50.0	1.0	49.5	120.2	3.15	2.11	0.708	11	1.25	45.6	0.7	10.8	0.8	1434.740	2.75E-04	1.00E-02	1.000	2.10E+00	10.0787	1.76E+00	0.00

TOTAL SETTLEMENT = **0.06**

Figure 10

GEOCON

CLIENT: Red Oak Investments, LLC
FILE NO. A8970-06-01 Boring 2

TECHNICAL ENGINEERING AND DESIGN GUIDES AS ADAPTED FROM THE US ARMY CORPS OF ENGINEERS, NO. 9
EVALUATION OF EARTHQUAKE-INDUCED SETTLEMENTS IN DRY SANDY SOILS

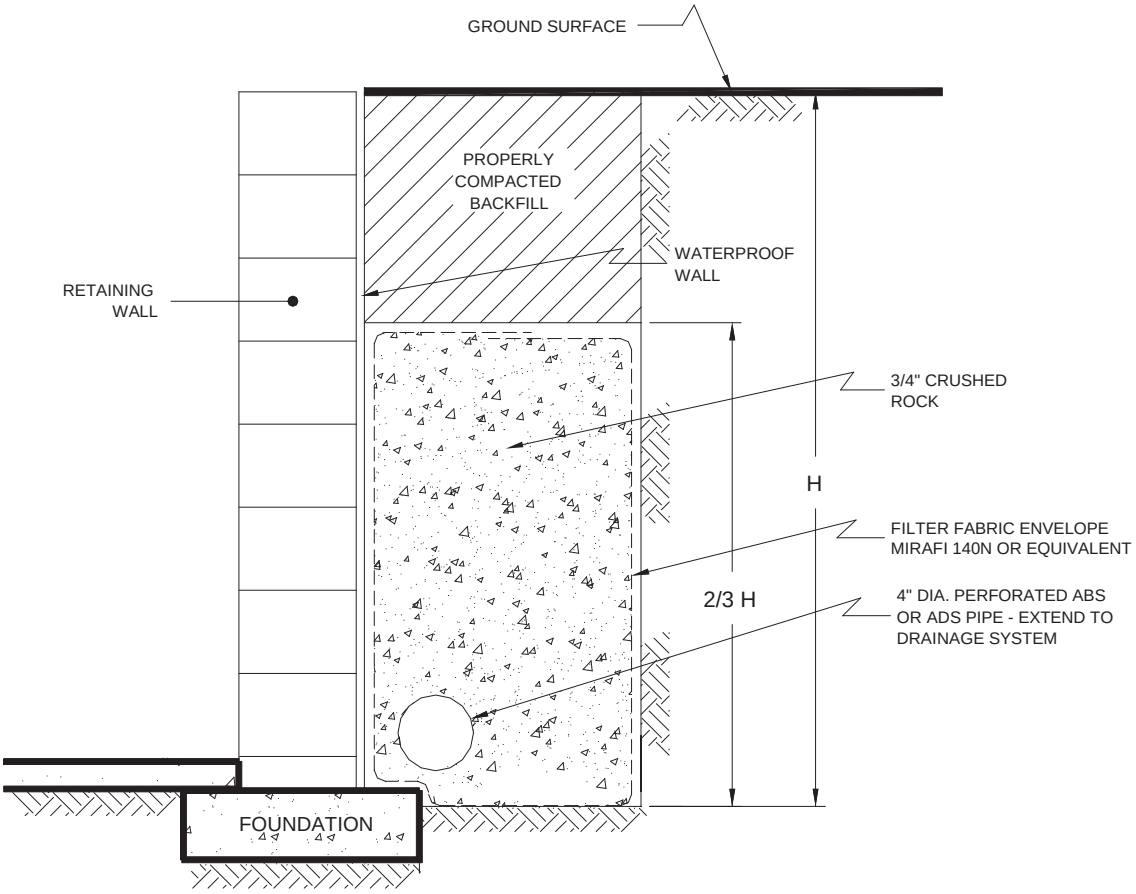
EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.9
Peak Horiz. Acceleration (g):	0.43

Depth of Base of Strata (ft)	Thickness of Layer (ft)	Depth of Mid-point of Layer (ft)	Soil Unit Weight (pcf)	Overburden Pressure at Mid-point (tsf)	Mean Effective Pressure at Mid-point (tsf)	Average Cyclic Shear Stress [Tav]	Field SPT [N]	Correction Factor [Cer]	Fig 4.1 Relative Density [Dr] (%)	Fig 4.2 Correction Factor [Cn]	Corrected [N1]60	rd Factor	Fig 4.4 Maximum Shear Mod. [Gmax] (tsf)	[yeff]*[Geff] [Gmax]	yeff Shear Strain	[yeff]*100%	Volumetric Strain M7.5 [E15] (%)	Number of Strain Cycles [Nc]	Corrected Vol. Strains [Ec]	Estimated Settlement [S] (inches)
1.0	1.0	0.5	124.7	0.03	0.02	0.009	5	1.25	54.1	2.0	18.3	1.0	170.055	5.07E-05	7.80E-05	0.008	8.71E-03	10.0787	7.28E-03	Grading
2.0	1.0	1.5	124.7	0.09	0.06	0.026	5	1.25	52.6	2.0	18.3	1.0	294.544	8.61E-05	1.60E-04	0.016	1.79E-02	10.0787	1.49E-02	Grading
3.0	1.0	2.5	124.7	0.16	0.10	0.044	5	1.25	51.1	2.0	18.3	1.0	380.254	1.09E-04	1.70E-04	0.017	1.90E-02	10.0787	1.59E-02	Grading
4.0	1.0	3.5	124.7	0.22	0.15	0.061	5	1.25	49.8	2.0	18.3	1.0	449.923	1.27E-04	1.70E-04	0.017	1.90E-02	10.0787	1.59E-02	Grading
5.0	1.0	4.5	124.7	0.28	0.19	0.078	17	1.25	89.6	1.9	43.9	1.0	683.553	1.05E-04	1.70E-04	0.017	6.62E-03	10.0787	5.53E-03	Grading
6.0	1.0	5.5	124.7	0.34	0.23	0.096	17	1.25	87.5	1.7	40.4	1.0	734.917	1.17E-04	1.50E-04	0.015	6.46E-03	10.0787	5.40E-03	0.00
7.0	1.0	6.5	124.7	0.41	0.27	0.113	17	1.25	85.5	1.6	37.7	1.0	780.894	1.28E-04	1.50E-04	0.015	7.01E-03	10.0787	5.86E-03	0.00
8.0	1.0	7.5	124.7	0.47	0.31	0.130	17	1.25	83.7	1.5	35.6	1.0	822.788	1.37E-04	1.50E-04	0.015	7.51E-03	10.0787	6.28E-03	0.00
9.0	1.0	8.5	124.7	0.53	0.35	0.147	17	1.25	81.9	1.4	33.8	1.0	861.460	1.46E-04	1.50E-04	0.015	7.98E-03	10.0787	6.67E-03	0.00
10.0	1.0	9.5	104.8	0.59	0.39	0.163	13	1.25	67.1	1.3	26.5	1.0	835.881	1.64E-04	1.50E-04	0.015	1.07E-02	10.0787	8.95E-03	0.00
11.0	1.0	10.5	104.8	0.64	0.43	0.177	13	1.25	67.1	1.3	25.7	1.0	863.345	1.70E-04	1.50E-04	0.015	1.11E-02	10.0787	9.29E-03	0.00
12.0	1.0	11.5	104.8	0.69	0.46	0.191	13	1.25	67.1	1.2	25.0	0.9	889.537	1.75E-04	1.50E-04	0.015	1.15E-02	10.0787	9.61E-03	0.00
13.0	1.0	12.5	104.8	0.74	0.50	0.205	13	1.25	67.1	1.2	24.3	0.9	914.610	1.80E-04	1.50E-04	0.015	1.19E-02	10.0787	9.92E-03	0.00
14.0	1.0	13.5	104.8	0.80	0.53	0.219	13	1.25	67.1	1.1	23.7	0.9	938.689	1.84E-04	1.60E-04	0.016	1.30E-02	10.0787	1.09E-02	0.00
15.0	1.0	14.5	98.9	0.85	0.57	0.232	9	1.25	52.2	1.1	12.8	0.9	788.377	2.29E-04	3.70E-04	0.037	6.31E-02	10.0787	5.28E-02	0.01
16.0	1.0	15.5	98.9	0.90	0.60	0.245	9	1.25	52.2	1.1	12.5	0.9	803.411	2.34E-04	3.70E-04	0.037	6.53E-02	10.0787	5.46E-02	0.01
17.0	1.0	16.5	98.9	0.95	0.63	0.258	9	1.25	52.2	1.1	12.1	0.9	817.901	2.38E-04	3.70E-04	0.037	6.74E-02	10.0787	5.64E-02	0.01
18.0	1.0	17.5	98.9	1.00	0.67	0.270	9	1.25	52.2	1.0	11.8	0.9	831.896	2.42E-04	3.70E-04	0.037	6.95E-02	10.0787	5.81E-02	0.01
19.0	1.0	18.5	98.9	1.05	0.70	0.283	9	1.25	52.2	1.0	11.5	0.9	845.435	2.46E-04	3.70E-04	0.037	7.16E-02	10.0787	5.98E-02	0.01
20.0	1.0	19.5	122.9	1.10	0.74	0.296	4	1.25	33.3	1.0	5.4	0.9	674.354	3.20E-04	7.10E-04	0.071	3.40E-01	10.0787	2.84E-01	0.00
21.0	1.0	20.5	122.9	1.16	0.78	0.312	4	1.25	33.3	0.9	5.3	0.9	686.672	3.26E-04	7.10E-04	0.071	3.51E-01	10.0787	2.94E-01	0.00
22.0	1.0	21.5	122.9	1.22	0.82	0.327	4	1.25	33.3	0.9	5.1	0.9	698.563	3.32E-04	7.10E-04	0.071	3.62E-01	10.0787	3.03E-01	0.00
23.0	1.0	22.5	122.9	1.29	0.86	0.342	4	1.25	33.3	0.9	5.0	0.9	710.062	3.37E-04	7.10E-04	0.071	3.73E-01	10.0787	3.12E-01	0.00
24.0	1.0	23.5	122.9	1.35	0.90	0.357	4	1.25	33.3	0.9	4.9	0.9	721.201	3.42E-04	7.10E-04	0.071	3.84E-01	10.0787	3.21E-01	0.00
25.0	1.0	24.5	122.9	1.41	0.94	0.371	4	1.25	33.3	0.9	4.8	0.9	732.005	3.47E-04	7.10E-04	0.071	3.94E-01	10.0787	3.30E-01	0.00
26.0	1.0	25.5	119.8	1.47	0.98	0.385	7	1.25	42.7	0.8	8.7	0.9	910.852	2.86E-04	3.70E-04	0.037	1.01E-01	10.0787	8.44E-02	0.00
27.0	1.0	26.5	119.8	1.53	1.02	0.399	7	1.25	42.7	0.8	8.5	0.9	923.070	2.89E-04	3.00E-04	0.030	8.38E-02	10.0787	7.01E-02	0.00
28.0	1.0	27.5	119.8	1.59	1.06	0.413	7	1.25	42.7	0.8	8.4	0.9	936.513	2.92E-04	3.00E-04	0.030	8.53E-02	10.0787	7.13E-02	0.00
29.0	1.0	28.5	119.8	1.65	1.10	0.426	7	1.25	42.7	0.8	8.3	0.9	951.136	2.93E-04	3.00E-04	0.030	8.62E-02	10.0787	7.21E-02	0.00
30.0	1.0	29.5	132.3	1.71	1.15	0.440	18	1.25	66.1	0.8	28.6	0.9	1463.557	1.95E-04	1.30E-04	0.013	8.47E-03	10.0787	7.08E-03	0.00
31.0	1.0	30.5	132.3	1.78	1.19	0.455	18	1.25	66.1	0.8	28.4	0.9	1487.613	1.96E-04	1.30E-04	0.013	8.55E-03	10.0787	7.15E-03	0.00
32.0	1.0	31.5	132.3	1.84	1.24	0.469	18	1.25	66.1	0.8	28.1	0.9	1511.109	1.97E-04	1.30E-04	0.013	8.63E-03	10.0787	7.22E-03	0.00
33.0	1.0	32.5	132.3	1.91	1.28	0.483	18	1.25	66.1	0.8	27.9	0.9	1534.080	1.98E-04	1.30E-04	0.013	8.71E-03	10.0787	7.28E-03	0.00
34.0	1.0	33.5	132.3	1.98	1.32	0.497	18	1.25	66.1	0.8	27.7	0.8	1556.553	1.99E-04	1.30E-04	0.013	8.79E-03	10.0787	7.35E-03	0.00
35.0	1.0	34.5	132.3	2.04	1.37	0.510	18	1.25	66.1	0.8	27.5	0.8	1578.556	2.00E-04	1.30E-04	0.013	8.87E-03	10.0787	7.41E-03	0.00
36.0	1.0	35.5	132.3	2.11	1.41	0.523	18	1.25	66.1	0.8	27.3	0.8	1600.114	2.01E-04	3.00E-04	0.030	2.06E-02	10.0787	1.73E-02	0.00
37.0	1.0	36.5	124.1	2.17	1.46	0.536	8	1.25	42.6	0.7	16.0	0.8	1357.570	2.40E-04	3.00E-04	0.030	3.94E-02	10.0787	3.29E-02	0.00
38.0	1.0	37.5	124.1	2.23	1.50	0.548	8	1.25	42.6	0.7	15.9	0.8	1374.726	2.40E-04	3.00E-04	0.030	3.96E-02	10.0787	3.31E-02	0.00
39.0	1.0	38.5	124.1	2.30	1.54	0.559	8	1.25	42.6	0.7	15.8	0.8	1391.604	2.40E-04	3.00E-04	0.030	3.98E-02	10.0787	3.33E-02	0.00
40.0	1.0	39.5	119.6	2.36	1.58	0.570	9	1.25	44.0	0.7	16.8	0.8	1439.806	2.35E-04	3.00E-04	0.030	3.69E-02	10.0787	3.08E-02	0.00
41.0	1.0	40.5	119.6	2.42	1.62	0.580	9	1.25	44.0	0.7	16.8	0.8	1455.912	2.35E-04	3.00E-04	0.030	3.71E-02	10.0787	3.10E-02	0.00
42.0	1.0	41.5	119.6	2.48	1.66	0.591	9	1.25	44.0	0.7	16.7	0.8	1471.783	2.35E-04	3.00E-04	0.030	3.73E-02	10.0787	3.12E-02	0.00
43.0	1.0	42.5	119.6	2.54	1.70	0.601	9	1.25	44.0	0.7	16.6	0.8	1487.428	2.35E-04	3.00E-04	0.030	3.74E-02	10.0787	3.13E-02	0.00
44.0	1.0	43.5	119.6	2.60	1.74	0.610	9	1.25	44.0	0.7	16.6	0.8	1502.856	2.35E-04	3.00E-04	0.030	3.76E-02	10.0787	3.15E-02	0.00
45.0	1.0	44.5	125.0	2.66	1.78	0.620	9	1.25	44.0	0.7	16.5	0.8	1518.364	2.34E-04	3.00E-04	0.030	3.78E-02	10.0787	3.16E-02	0.00
46.0	1.0	45.5	125.0	2.72	1.82	0.630	9	1.25	44.0	0.7	16.4	0.8	1533.949	2.34E-04	3.00E-04	0.030	3.80E-02	10.0787	3.18E-02	0.00
47.0	1.0	46.5	125.0	2.78	1.86	0.640	7	1.25	37.8	0.7	14.3	0.8	1480.686	2.45E-04	3.00E-04	0.030	4.50E-02	10.0787	3.76E-02	0.00
48.0	1.0	47.5	125.0	2.85	1.91	0.649	7	1.25	37.8	0.7	14.2	0.8	1495.407	2.44E-04	3.00E-04	0.030	4.52E-02	10.0787	3.78E-02	0.00
49.0	1.0	48.5	123.4	2.91	1.95	0.658	7	1.25	37.8	0.7	14.2	0.8	1509.863	2.44E-04	3.00E-04	0.030	4.54E-02	10.0787	3.79E-02	0.00
50.0	1.0	49.5	123.4	2.97	1.99	0.667	7	1.25	37.8	0.7	14.1	0.8	1524.063	2.44E-04	3.00E-04	0.030	4.55E-02	10.0787	3.81E-02	0.00

TOTAL SETTLEMENT = **0.09**

Figure 11



NO SCALE

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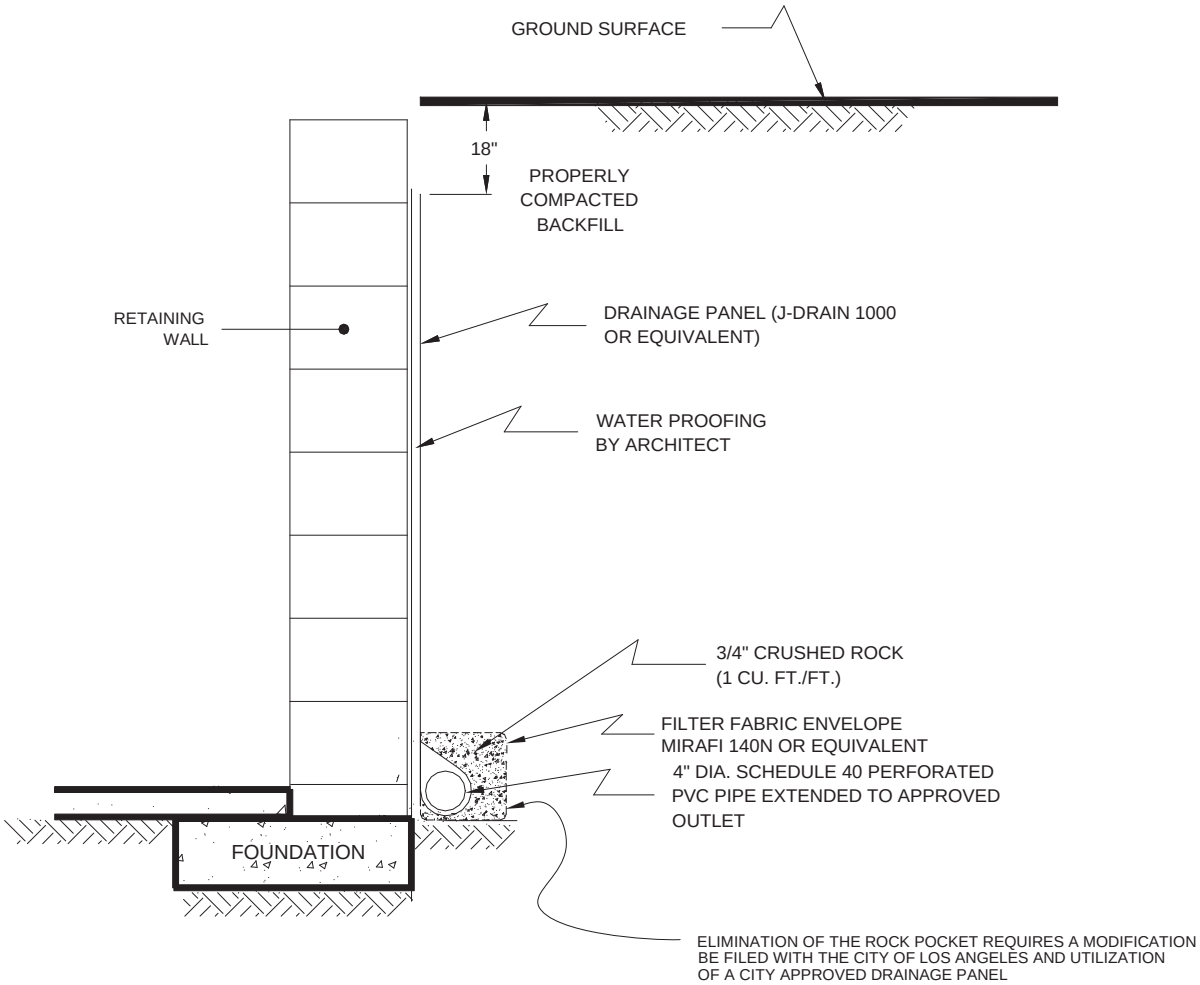
PHONE (818) 841-8388 - FAX (818) 841-1704

RETAINING WALL DRAIN DETAIL

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

RK		8000	OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 12



NO SCALE

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RETAINING WALL DRAIN DETAIL

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

NDB		8000

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. 13

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TABLE 1

FAULTS WITHIN 60 MILES OF THE SITE

DETERMINISTIC SITE PARAMETERS

ABBREVIATED FAULT NAME	APPROXIMATE DISTANCE mi	(km)	ESTIMATED MAX. EARTHQUAKE EVENT MAXIMUM EARTHQUAKE MAG.(Mw)	PEAK SITE ACCEL. g	EST. SITE INTENSITY MOD.MERC.
NEWPORT-INGLEWOOD (L.A.Basin)	5.4	(8.7)	6.9	0.505	X
NEWPORT-INGLEWOOD (Offshore)	6.4	(10.3)	6.9	0.463	X
COMPTON THRUST	10.2	(16.4)	6.8	0.432	X
ELYSIAN PARK THRUST	13.4	(21.5)	6.7	0.335	IX
WHITTIER	16.5	(26.6)	6.8	0.223	IX
PALOS VERDES	16.7	(26.8)	7.1	0.252	IX
ELSINORE-GLEN IVY	18.5	(29.7)	6.8	0.200	VIII
CHINO-CENTRAL AVE. (Elsinore)	18.6	(29.9)	6.7	0.245	IX
SAN JOSE	24.9	(40.1)	6.5	0.160	VIII
CORONADO BANK	28.5	(45.8)	7.4	0.179	VIII
ELSINORE-TEMECULA	30.6	(49.3)	6.8	0.115	VII
SIERRA MADRE	31.5	(50.7)	7.0	0.159	VIII
CUCAMONGA	32.1	(51.6)	7.0	0.155	VIII
RAYMOND	33.8	(54.4)	6.5	0.110	VII
VERDUGO	35.0	(56.4)	6.7	0.118	VII
CLAMSHELL-SAWPIT	35.2	(56.6)	6.5	0.104	VII
HOLLYWOOD	36.5	(58.8)	6.4	0.092	VII
SANTA MONICA	41.3	(66.4)	6.6	0.090	VII
SAN JACINTO-SAN BERNARDINO	42.3	(68.1)	6.7	0.072	VI
SAN JACINTO-SAN JACINTO VALLEY	43.7	(70.3)	6.9	0.078	VII
MALIBU COAST	44.8	(72.1)	6.7	0.086	VII
ROSE CANYON	46.0	(74.1)	6.9	0.073	VII
SAN ANDREAS - Southern	47.7	(76.8)	7.4	0.100	VII
SAN ANDREAS - San Bernardino	47.7	(76.8)	7.3	0.093	VII
SIERRA MADRE (San Fernando)	47.8	(76.9)	6.7	0.079	VII
SAN ANDREAS - Mojave	48.0	(77.3)	7.1	0.079	VII
SAN ANDREAS - 1857 Rupture	48.0	(77.3)	7.8	0.131	VIII
NORTHRIDGE (E. Oak Ridge)	49.3	(79.4)	6.9	0.086	VII
CLEGHORN	49.8	(80.1)	6.5	0.051	VI
SAN GABRIEL	49.8	(80.2)	7.0	0.070	VI
ANACAPA-DUME	51.4	(82.8)	7.3	0.108	VII
ELSINORE-JULIAN	54.0	(86.9)	7.1	0.068	VI
NORTH FRONTAL FAULT ZONE (West)	55.4	(89.1)	7.0	0.078	VII
SAN JACINTO-ANZA	55.4	(89.2)	7.2	0.071	VI
SANTA SUSANA	57.0	(91.7)	6.6	0.058	VI

35 FAULTS FOUND WITHIN THE SPECIFIED SEARCH RADIUS.
THE NEWPORT-INGLEWOOD (L.A.Basin)FAULT IS CLOSEST TO THE SITE.
IT IS ABOUT 5.4 MILES (8.7 km) AWAY.
LARGEST MAXIMUM-EARTHQUAKE SITE ACCELERATION: 0.5050 g

APPENDIX A

FIELD INVESTIGATION

The site was explored on September 27, 2012 by excavating three 8-inch diameter borings utilizing a truck-mounted hollow-stem auger drilling machine. The borings were advanced to depths between 24½ and 50½ feet below the existing ground surface. Representative and relatively undisturbed samples were obtained by driving a 3-inch, O. D., sampler into the "undisturbed" soil mass with blows from a 140-pound hammer falling 30 inches. The sampler was equipped with 1-inch by $2^{3}/_{8}$-inch brass sampler rings to facilitate removal and testing. Standard Penetration Tests (SPTs) were performed in selected borings and bulk samples were also obtained.

The soil conditions encountered in the excavations were visually examined, classified and logged in general accordance with Unified Soil Classification System. Logs of the borings are presented on Figures A1 through A3. The logs depict the soil and geologic conditions encountered and the depth at which samples were obtained. The approximate locations of the borings are indicated on the Site Plan (Figure 2).

PROJECT NO. A8970-06-01

BORING 1

ELEV. (MSL.) - - DATE COMPLETED 09/27/12

EQUIPMENT HOLLOW STEM AUGER BY: TL

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	BULK 0-5'				**ASPHALT: 5" BASE: 6"** **ALLUVIUM** Clay with Sand, stiff, slightly moist, dark yellowish brown, fine-grained			
2	B1@2.5'			CL		25	120.1	13.0
4								
6	B1@5'				Silt with Sand, stiff, slightly moist, yellowish brown to pale brown, fine-grained	41	112.1	15.6
8	B1@7.5'			ML	Sandy Silt, hard, slightly moist, pale brown, fine-grained	50	101.2	9.3
10	B1@10'					16	--	16.8
				CL	Clay, stiff, slightly moist, olive brown to pale brown, some calcium carbonate deposits			
12	B1@12.5'			ML	Silt with Sand, stiff, slightly moist, pale brown to dark yellowish brown, fine-grained	40	110.3	17.1
14								
16	B1@15'			SP/ML	Sand and Silt, poorly graded, medium dense to firm, slightly moist, light brown, fine-grained	13	--	12.4
18	B1@17.5'			CL	Clay, firm, slightly moist, yellowish brown, some calcium carbonate deposits	20	97.1	26.1
20	B1@20'			ML	Silt, firm, slightly moist, light brown, moderate plasticity	11	--	20.4
22	B1@22.5'			CL	Clay, stiff, slightly moist, olive brown to pale brown	31	97.8	25.0
24	B1@25'			SP-SC	Sand with Clay, medium dense, moist, yellowish brown to light olive brown, fine- to medium-grained	15	--	12.7
26								
28	B1@27.5'		▼	SP-SM	Sand with Silt, poorly graded, medium dense, wet, yellowish brown, fine- to medium-grained	46	123.1	11.4

A8970-06-01 BORING LOGS.GPJ

Figure A1,
Log of Boring 1, Page 1 of 2

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL ◧ ... STANDARD PENETRATION TEST ■ ... DRIVE SAMPLE (UNDISTURBED)

⊠ ... DISTURBED OR BAG SAMPLE ◪ ... CHUNK SAMPLE ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

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PROJECT NO. A8970-06-01

BORING 1

ELEV. (MSL.) - - DATE COMPLETED 09/27/12

EQUIPMENT HOLLOW STEM AUGER BY: TL

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	B1@30'				-Stiff, brown to dark yellowish brown	22	--	14.5
32					Sand, poorly graded, dense, wet, yellowish brown, fine- to medium-grained			
	B1@32.5'					69	115.3	16.2
34					-Dense, brown			
	B1@35'					45	--	18.9
36					-Light yellowish brown, fine- to medium-grained with trace coarse-grained			
38	B1@37.5'			SP		70	114.1	16.1
40	B1@40'				-Fine- to medium-grained	36	--	19.5
42					-Light brown, fine-grained			
	B1@42.5'					44	104.2	21.3
44					Clay, stiff, moist, olive brown with dark yellowish brown oxidation staining, moderate to high plasticity			
	B1@45'				-Firm	9	--	30.0
46				CH	-Stiff, olive brown to pale brown, some calcium carbonate deposits			
48	B1@47.5'					24	91.8	30.9
50	B1@50'					11	--	24.1

End at 50.5 feet.
No artificial fill encountered.
Seepage encountered at 27.5 feet.
Backfilled with bentonite grout.
Capped with asphalt patch.

*Penetration resistance for 140 pound hammer falling 30 inches by auto-hammer.

A8970-06-01 BORING LOGS.GPJ

Figure A1,
Log of Boring 1, Page 2 of 2

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

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PROJECT NO. A8970-06-01

BORING 2

ELEV. (MSL.) - - DATE COMPLETED 09/27/12

EQUIPMENT HOLLOW STEM AUGER BY: TL

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	BULK 0-5'				**ASPHALT: 5" BASE: 6"** **ALLUVIUM** Clay with Sand, soft, slightly moist, brown, fine-grained			
2	B2@2.5'			CL		5	--	15.7
4								
	B2@5'				Sandy Silt, stiff, slightly moist, pale brown to light brown, fine-grained	31	111.1	12.2
6	B2@7.5'			ML	-Brown	17	--	9.4
8					-Olive brown to yellowish brown			
10	B2@10'			SP	Sand and Silt, poorly graded, medium dense to stiff, slightly moist, light brown, fine-grained	34	100.1	4.3
12	B2@12.5'			ML	Silt, firm, slightly moist, pale brown to yellowish brown, trace fine-grained sand	13	--	20.6
14					Clay, stiff, slightly moist, pale brown to light brown, trace fine-grained sand			
16	B2@15'					28	93.7	5.5
18	B2@17.5'				-Firm	9	--	19.1
20	B2@20'			CL	-Olive brown to brown	21	96.9	26.8
22	B2@22.5'				-Soft, pale brown to light brown, trace coarse-gravel	4	--	20.1
24								
26	B2@25'				-Firm, olive brown	19	92.8	29.1
28	B2@27.5'		▼		-Soft, fine- to coarse-grained	7	--	24.3
					Sand and Silt, loose to soft, moist, pale brown, fine- to coarse-grained			

A8970-06-01 BORING LOGS.GPJ

Figure A2,
Log of Boring 2, Page 1 of 2

SAMPLE SYMBOLS

- ☐ ... SAMPLING UNSUCCESSFUL
- ◧ ... STANDARD PENETRATION TEST
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ⊠ ... DISTURBED OR BAG SAMPLE
- ◪ ... CHUNK SAMPLE
- ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. A8970-06-01

BORING 2

ELEV. (MSL.) - - DATE COMPLETED 09/27/12

EQUIPMENT HOLLOW STEM AUGER BY: TL

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	B2@30'			SP/ML	-Medium dense to firm, brown, fine-grained	11	109.9	20.4
32	B2@32.5'					18	--	26.0
34								
36	B2@35'					44	100.9	23.0
38	B2@37.5'			CH	Sandy Clay, soft, moist, brown, fine-grained	8	--	23.5
40	B2@40'				Clay, firm, moist, brown, moderate to high plasticity	19	94.2	27.0
42	B2@42.5'					9	--	--
44								
46	B2@45'					18	96.9	29.0
48	B2@47.5'				-Soft, olive brown	7	--	35.3
50	B2@50'					23	98.2	25.7

End at 50.5 feet.
No artificial fill encountered.
Seepage encountered at 27.5 feet.
Backfilled with bentonite grout.
Capped with asphlat patch.

*Penetration resistance for 140 pound hammer falling 30 inches by auto-hammer.

A8970-06-01 BORING LOGS.GPJ

Figure A2,
Log of Boring 2, Page 2 of 2

SAMPLE SYMBOLS

... SAMPLING UNSUCCESSFUL
... STANDARD PENETRATION TEST
... DRIVE SAMPLE (UNDISTURBED)
... DISTURBED OR BAG SAMPLE
... CHUNK SAMPLE
... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

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PROJECT NO. A8970-06-01

BORING 3

ELEV. (MSL.) - - DATE COMPLETED 09/27/12

EQUIPMENT HOLLOW STEM AUGER BY: TL

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	BULK 0-5'				**ASPHALT: 5" BASE" 6"**			
					ALLUVIUM			
2					Clay, stiff, slightly moist, dark brown			
4	B3@3'			CL		30	121.9	13.3
6	B3@6'				-Soft, brown	9	106.5	20.2
8					Silt, stiff, slightly moist, pale brown to light olive brown, low plasticity			
10	B3@9'			ML		32	101.4	14.2
12	B3@12'			SP-SM	Sand with Silt, medium dense, slightly moist, yellowish brown to light brown, fine-grained	35	104.7	13.2
14					Silt, stiff, slightly moist, light olive brown to light yellowish brown, low plasticity, trace rootlets			
16	B3@15'			ML		28	96.6	25.8
18	B3@18'					26	91.7	29.7
20					Clay, stiff, slightly moist, olive brown to light brown			
22	B3@21'			CL		22	99.3	24.8
24	B3@24'					19	96.1	27.6

End at 24.5 feet.
No artificial fill encountered.
No groundwater encountered.
Backfilled with soil cuttings and tamped.
Capped with asphalt patch.

*Penetration resistance for 140 pound hammer falling 30 inches by auto-hammer.

A8970-06-01 BORING LOGS.GPJ

Figure A3,
Log of Boring 3, Page 1 of 1

SAMPLE SYMBOLS

- ... SAMPLING UNSUCCESSFUL
- ... STANDARD PENETRATION TEST
- ... DRIVE SAMPLE (UNDISTURBED)
- ... DISTURBED OR BAG SAMPLE
- ... CHUNK SAMPLE
- ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

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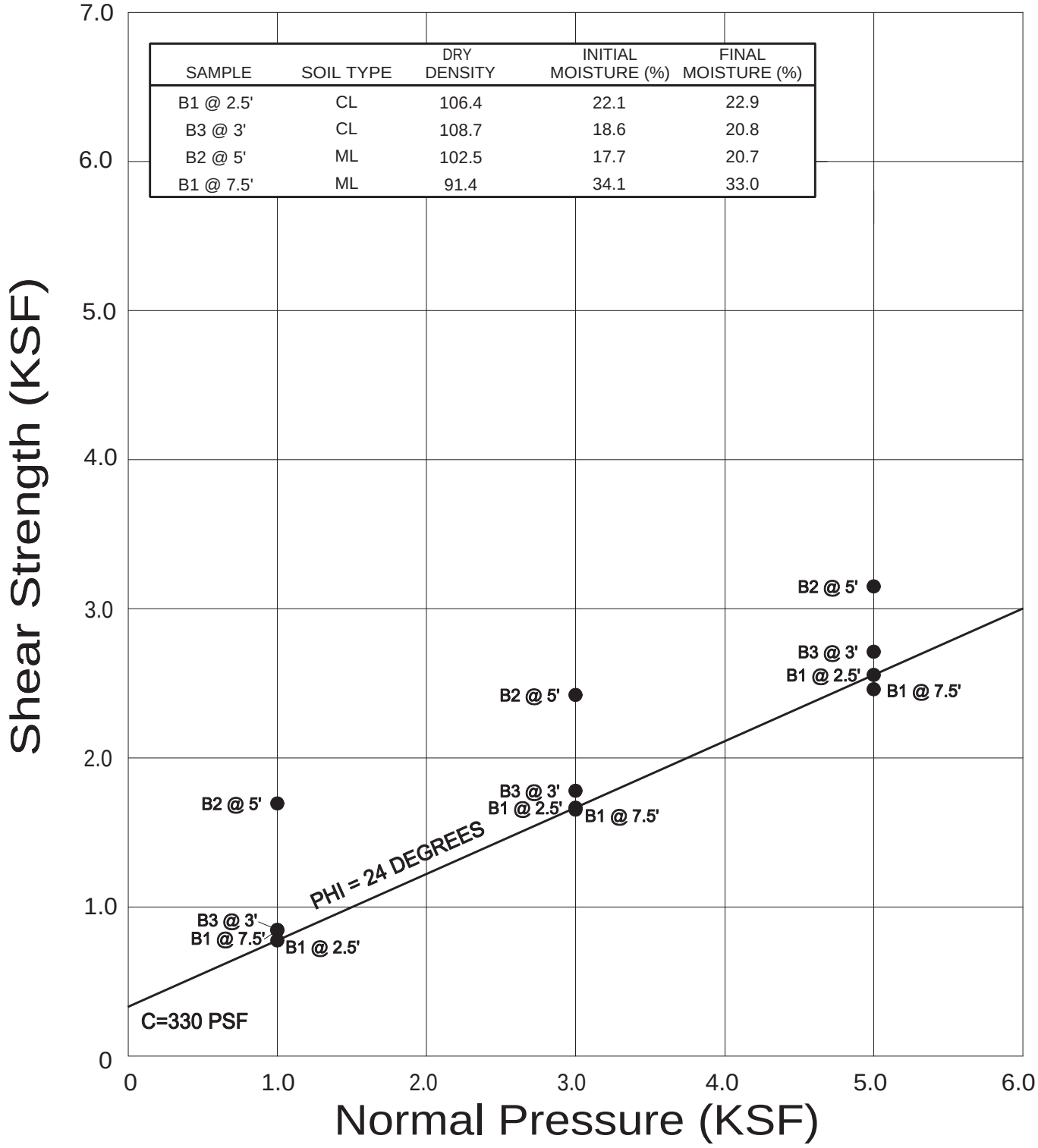
APPENDIX B

LABORATORY TESTING

Laboratory tests were performed in accordance with generally accepted test methods of the "American Society for Testing and Materials (ASTM)", or other suggested procedures. Selected samples were tested for direct shear strength, grain size, plasticity indices, consolidation and expansion characteristics, in-place dry density and moisture content. The results of the laboratory tests are summarized in Figures B1 through B10. The in-place dry density and moisture content of the samples tested are presented in the boring logs, Appendix A.



SAMPLE	SOIL TYPE	DRY DENSITY	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1 @ 2.5'	CL	106.4	22.1	22.9
B3 @ 3'	CL	108.7	18.6	20.8
B2 @ 5'	ML	102.5	17.7	20.7
B1 @ 7.5'	ML	91.4	34.1	33.0

● Direct Shear, Saturated

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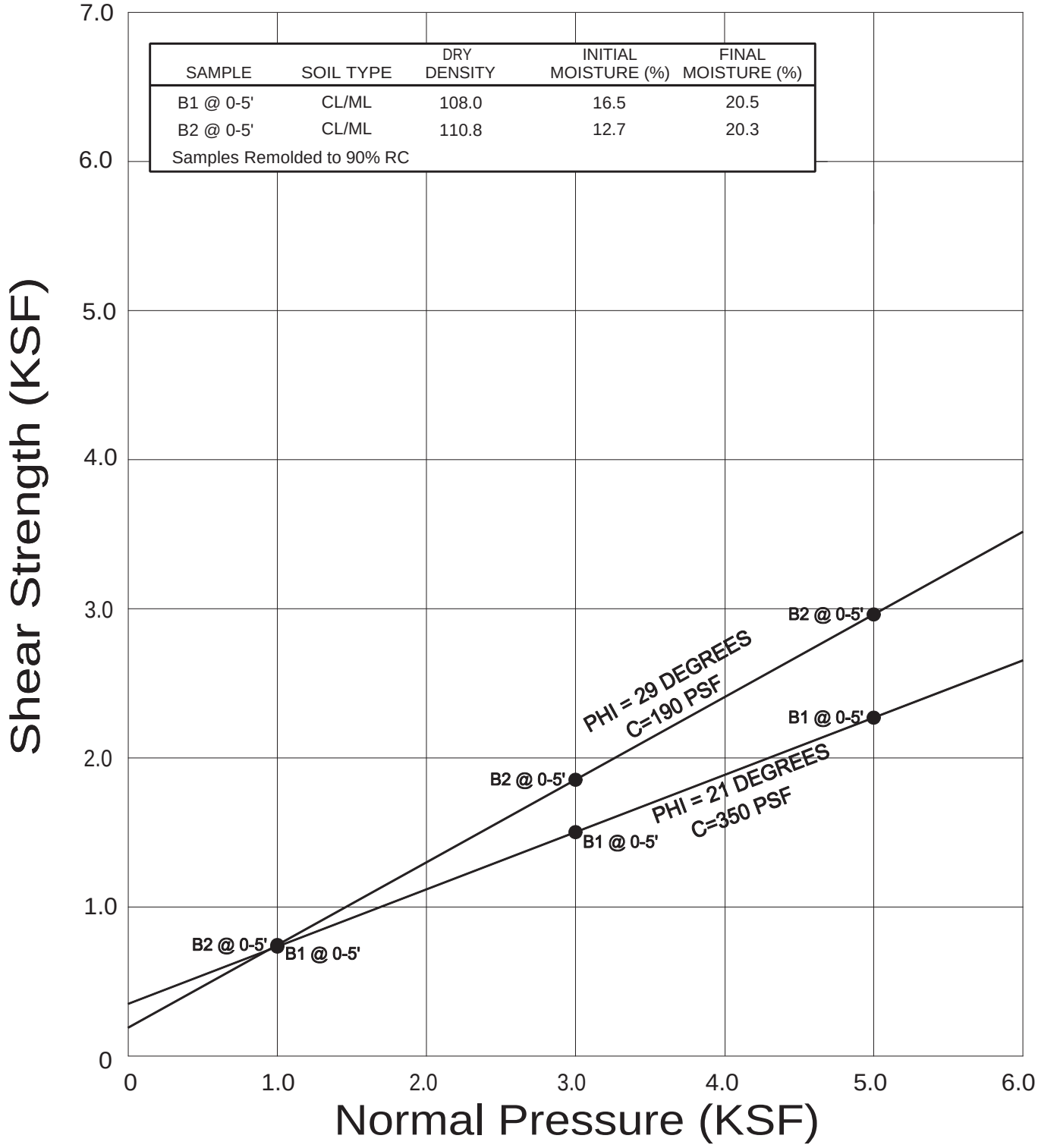
JMT		8000

DIRECT SHEAR TEST RESULTS

MONTEBELLO - WHITTIER & NATASHA
CITY VENTURES CONSTRUCTION, LP
140 EAST WHITTIER BOULEVARD
MONTEBELLO, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8902-06-01	FIG. B1



SAMPLE	SOIL TYPE	DRY DENSITY	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1 @ 0-5'	CL/ML	108.0	16.5	20.5
B2 @ 0-5'	CL/ML	110.8	12.7	20.3

Samples Remolded to 90% RC

● Direct Shear, Saturated

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DIRECT SHEAR TEST RESULTS

125 BAKER STREET E
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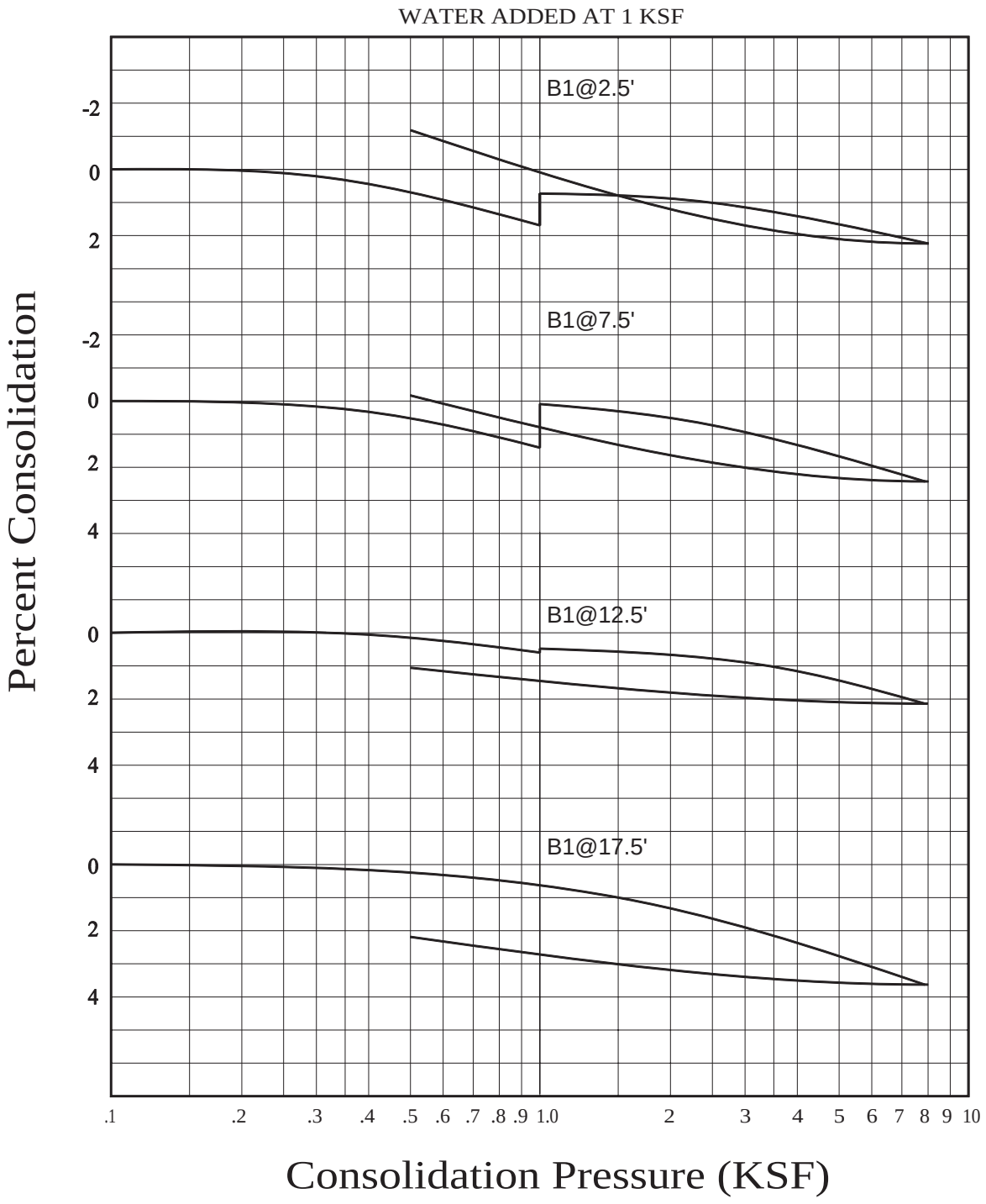
COSTA MESA, CALIFORNIA

JMT		8000	OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B2



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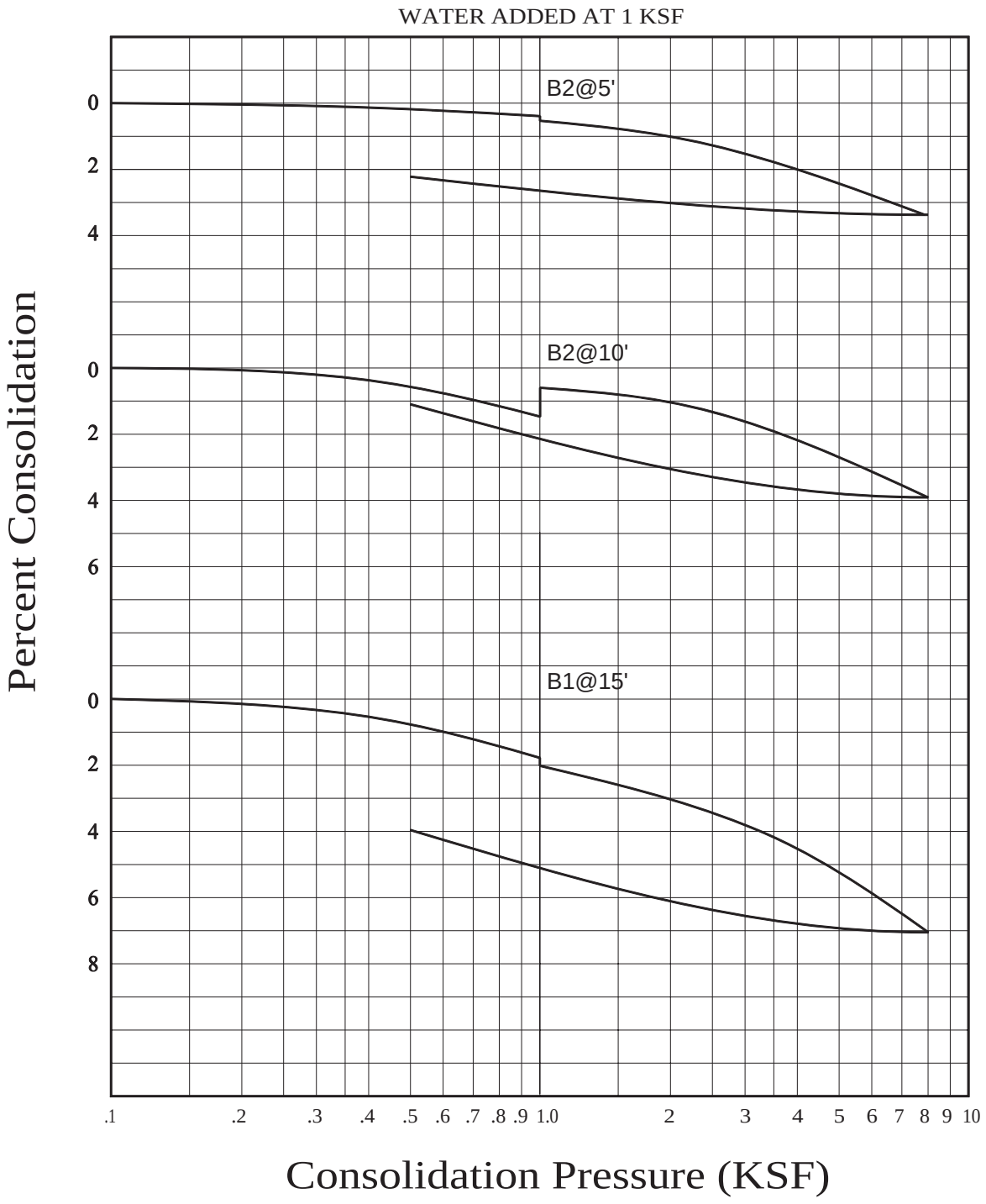
JMT		8000

CONSOLIDATION TEST RESULTS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B3



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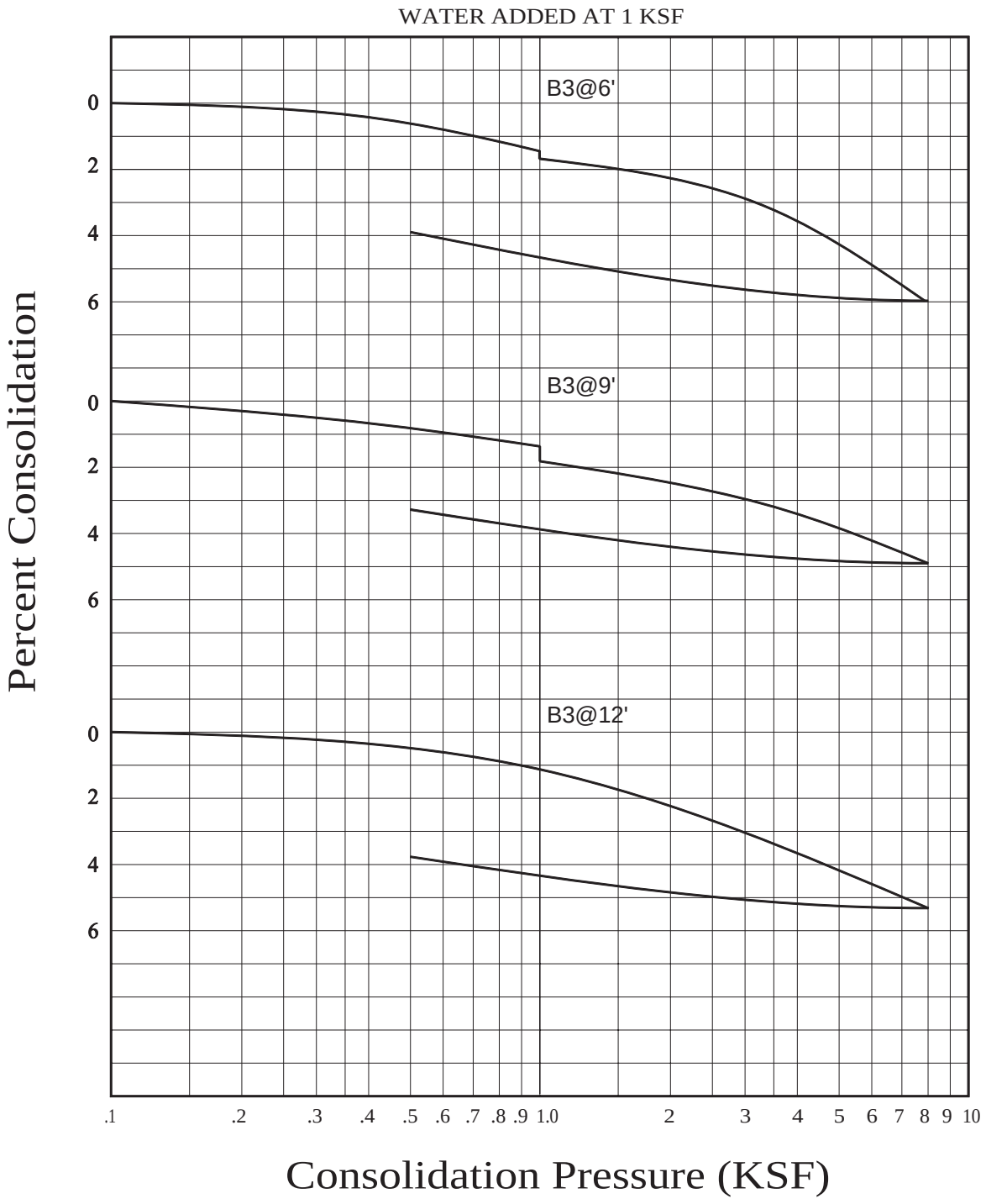
JMT		8000

CONSOLIDATION TEST RESULTS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B4



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JMT		8000

CONSOLIDATION TEST RESULTS

125 BAKER STREET E
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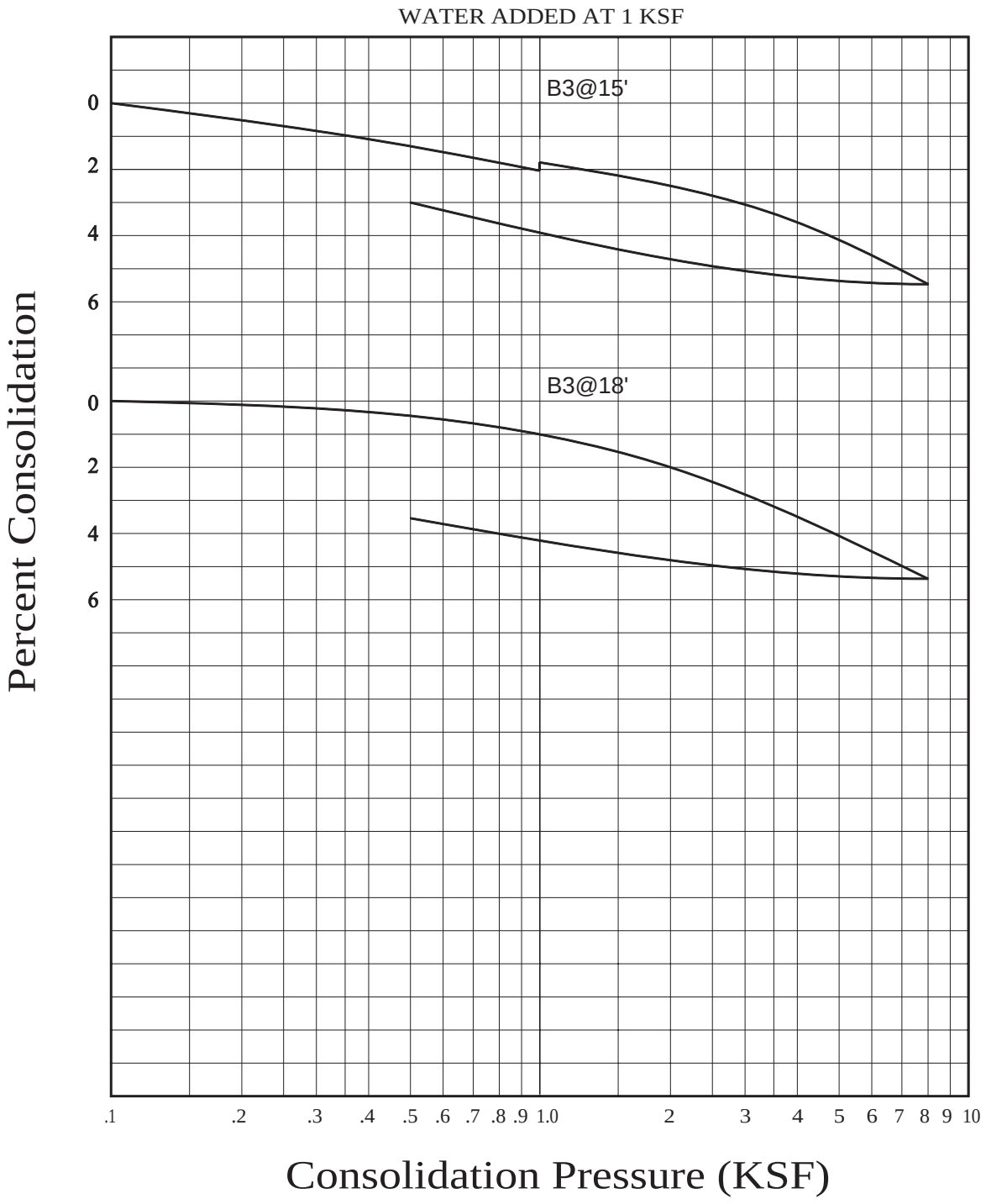
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B5



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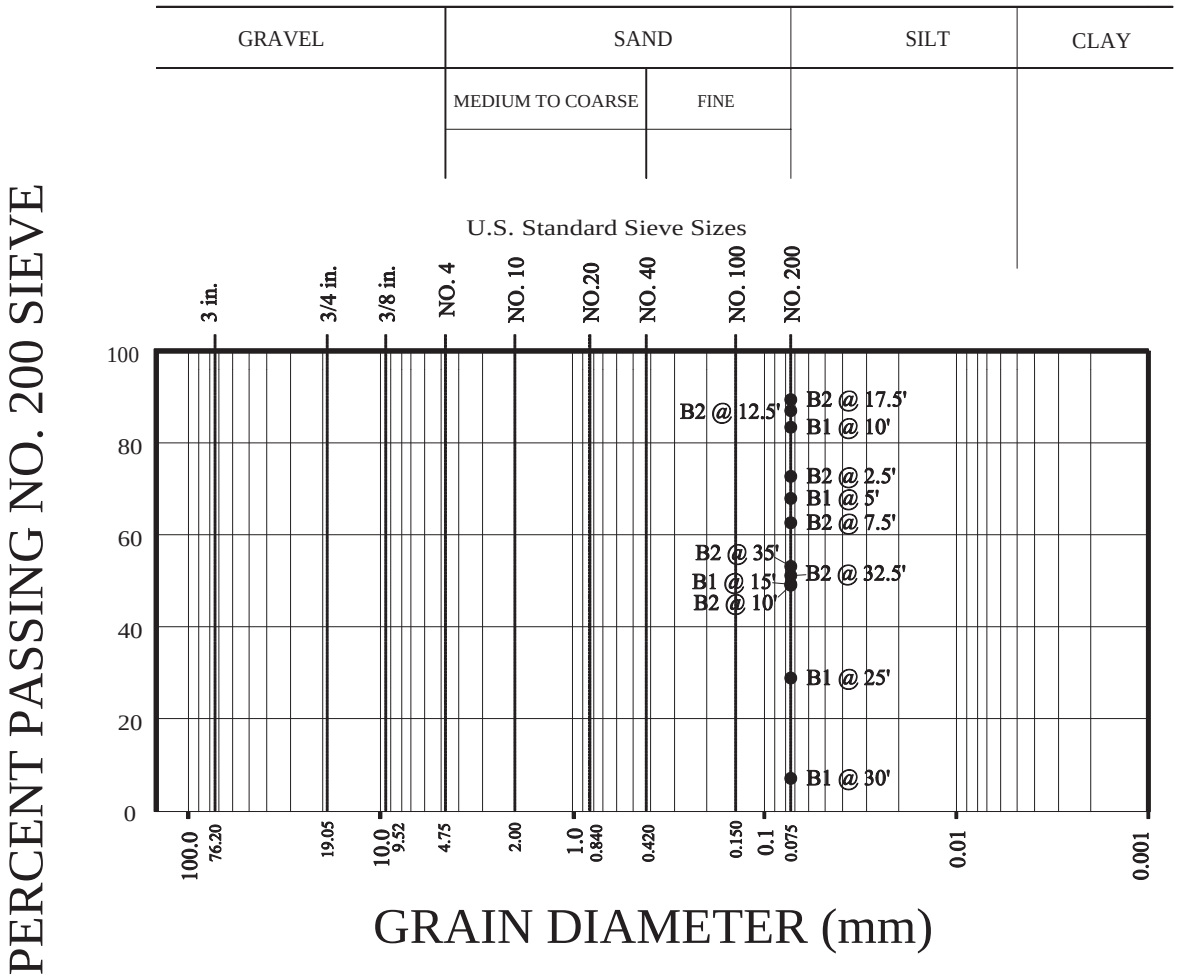
JMT		8000

CONSOLIDATION TEST RESULTS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B6



SAMPLE	PERCENT PASSING NO. 200 SIEVE
B1 @ 5'	67.9
B1 @ 10'	83.4
B1 @ 15'	49.2
B1 @ 25'	28.8
B1 @ 30'	7.2
B2 @ 2.5'	75.7
B2 @ 7.5'	62.6
B2 @ 10'	49.0
B2 @ 12.5'	87.0
B2 @ 17.5'	89.4
B2 @ 32.5'	51.1
B2 @ 35'	53.1

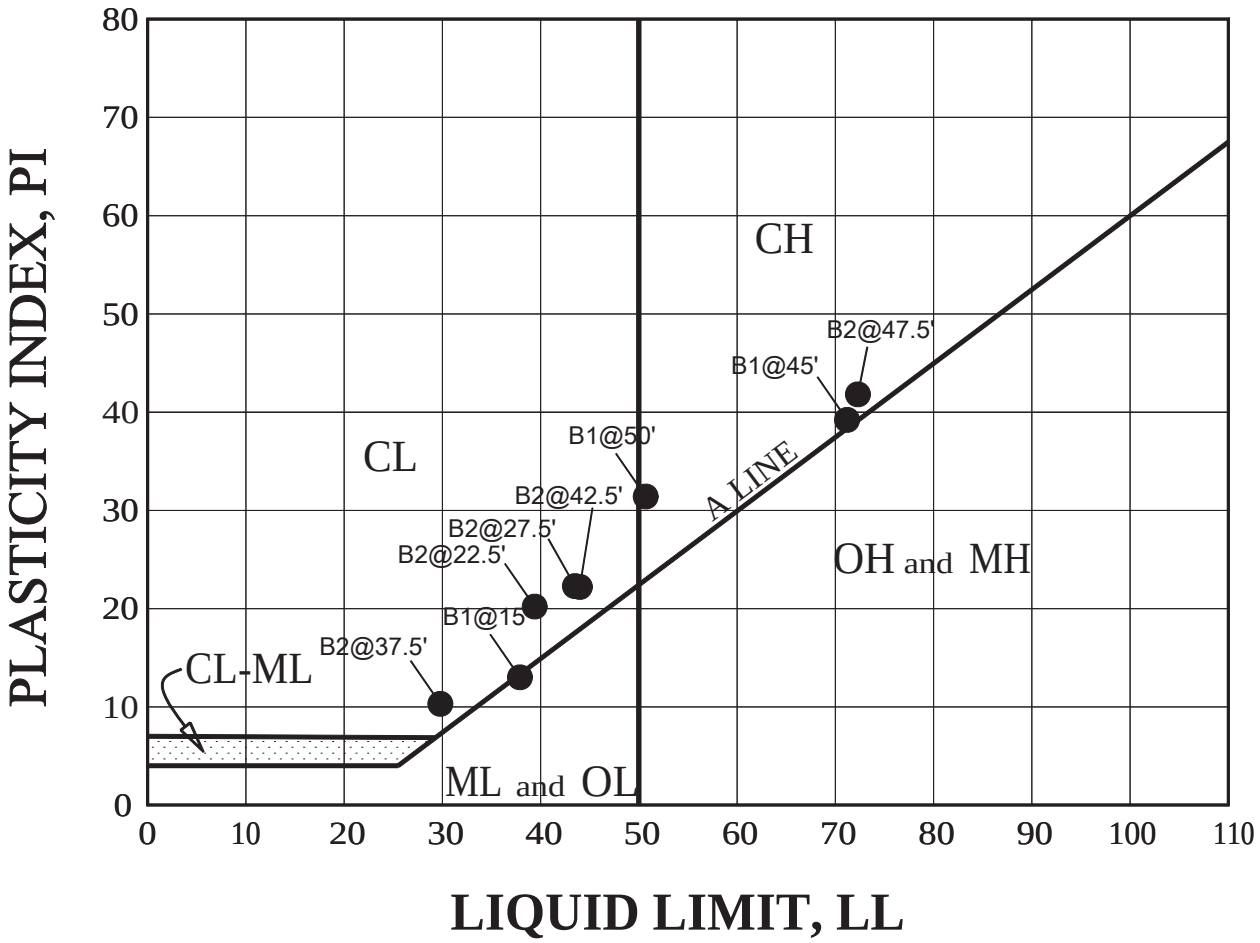
GEOCON
WEST, INC.
ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

JMT		8000

GRAIN SIZE ANALYSIS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B7



BORING NUMBER	DEPTH (FEET)	LL	PL	PI	SOIL BEHAVIOR
B1	15	37.9	24.9	13.0	ML
B1	45	71.2	32.0	39.2	CH
B1	50	50.7	19.3	31.4	CH
B2	22.5	39.4	19.2	20.2	CL
B2	27.5	43.8	21.6	22.2	CL
B2	37.5	29.8	19.5	10.3	CL
B2	42.5	44.0	21.8	22.2	CL
B2	47.5	72.3	30.5	41.8	CH

*N/P indicates Non-Plastic

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ATTERBERG LIMITS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B8

SUMMARY OF LABORATORY EXPANSION INDEX TEST RESULTS
ASTM D 4829-08A

Sample No.	Moisture Content (%)		Dry Density (pcf)	Expansion Index	*UBC Classification	**CBC Classification
	Before	After				
B1 @ 0-5'	10.3	24.4	112.5	139	Very High	Expansive
B2 @ 0-5'	9.9	23.2	102.9	43	Low	Expansive

* Reference: 1997 Uniform Building Code, Table 18-I-B.

** Reference: 2010 California Building Code, Section 1803.5.3

SUMMARY OF LABORATORY MAXIMUM DENSITY AND AND OPTIMUM MOISTURE CONTENT TEST RESULTS
ASTM D 1557-12

Sample No.	Soil Description	Maximum Dry Density (pcf)	Optimum Moisture (%)
B1 @ 0-5'	Yellowish Brown Clay with Sand	125.0	12.0
B2 @ 0-5'	Brown Clay	125.0	11.0

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PHONE (818) 841-8388 - FAX (818) 841-1704

LABORATORY TEST RESULTS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

JMT		8000	OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B9

SUMMARY OF LABORATORY POTENTIAL OF HYDROGEN (pH) AND RESISTIVITY TEST RESULTS CALIFORNIA TEST NO. 643

Sample No.	pH	Resistivity (ohm centimeters)
B1 @ 0-5'	8.32	480 (Extremely Corrosive)
B2 @ 0-5'	8.29	1400 (Highly Corrosive)

SUMMARY OF LABORATORY CHLORIDE CONTENT TEST RESULTS EPA NO. 325.3

Sample No.	Chloride Ion Content (%)
B1 @ 0-5'	0.010
B2 @ 0-5'	0.007

SUMMARY OF LABORATORY WATER SOLUBLE SULFATE TEST RESULTS CALIFORNIA TEST NO. 417

Sample No.	Water Soluble Sulfate (% SO_4)	Sulfate Exposure*
B1 @ 0-5'	0.336	Severe
B2 @ 0-5'	0.016	Negligible
B3 @ 0-5'	0.747	Severe

* Reference: 2010 California Building Code, Section 1904.3 and ACI 381 Section 4.3.

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JMT		8000

CORROSIVITY TEST RESULTS

125 BAKER STREET E
RED OAK INVESTMENTS, LLC
COSTA MESA, CALIFORNIA

OCT. 30, 2012	PROJECT NO. A8970-06-01	FIG. B10

Appendix D Phase I ESA Report

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

125 Baker Street East
Costa Mesa, California

PREPARED FOR

RED OAK INVESTMENTS, LLC

2101 BUSINESS CENTER DRIVE #230

IRVINE, CA 92612

PREPARED BY

GEOCON WEST, INC.

3303 N. SAN FERNANDO BLVD., SUITE 100

BURBANK, CALIFORNIA 91504

GEOCON

GEOCON PROJECT NO. A8970-77-02 **November 2012**

GEOCON
WEST, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. A8970-77-02
November 20, 2012

Joe Flanagan
Red Oak Investments, LLC
2101 Business Center Drive #230
Irvine, California 92612

Subject: PHASE I ENVIRONMENTAL SITE ASSESSMENT
125 BAKER STREET EAST
COSTA MESA, CALIFORNIA

Dear Mr. Flanagan:

In accordance with your request on behalf of Red Oak Investments, Limited Liability Company (the Client), we have performed a Phase I Environmental Site Assessment (ESA) of the property at 125 Baker Street East (the Site), in Costa Mesa, Orange County, California. You requested this Phase I ESA to provide information regarding the potential for existing hazardous substances or petroleum impacts at the Site prior to proposed redevelopment of the Site for multi-family residential use.

The accompanying report presents the details of the Phase I ESA and presents the findings relative to the potential for the existing presence of recognized environmental conditions as defined by the American Society of Testing and Materials Designation E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment* Process.

We appreciate the opportunity to provide services on this project. Please contact the undersigned if you have any questions.

Sincerely,

GEOCON WEST, INC.

Matthew Tidwell
Staff Geologist

Michael P. Conkle, PG
Senior Geologist

PROFESSIONAL GEOLOGIST
MICHAEL P. CONKLE
No. 7624
STATE OF CALIFORNIA

(3) Addressee

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E. Phase I ESA Interview Questionnaires

PHASE I ENVIRONMENTAL SITE ASSESSMENT

EXECUTIVE SUMMARY

Geocon West Inc. (Geocon) performed a Phase I Environmental Site Assessment (ESA) of the property at 125 Baker Street East (the Site) in Costa Mesa, Orange County, California. The Site is further identified as Orange County Assessor's Parcel Number (APN) 427-021-04. The 4.169-acre Site is developed with a 62,400 square-foot multi-tenant commercial office complex and is surrounded by similar commercial and industrial properties. Red Oak Investments, LLC (the Client) owns the Site and plans to redevelop it with multi-family residential housing.

The Site is nearly flat-lying at an approximate elevation of 43 feet above mean sea level and located in Los Angeles Basin within the Peninsular Ranges geomorphic province in Southern California. It is underlain by Quaternary non-marine terrace deposits. According to a geotechnical investigation performed for the Site in October 2012, surficial onsite soils are comprised of two to ten foot intervals of fine to medium sand, sandy silt, and clay. Geocon encountered onsite groundwater at 27.5 feet below ground surface during the October 2012 geotechnical investigation performed for the Site.

Joe Flanagan of Red Oak Investments, LLC indicated that he has no specialized knowledge regarding past or current uses of the Site that could have potentially impaired the environmental conditions of the Site. He also has no commonly known information or reasonably ascertainable information unique to the Site, and is not aware of any environmental conditions on the Site which may lead to a potential valuation reduction of the Site.

We reviewed publicly available federal, state, and local regulatory agency records for information that might indicate or suggest the existence of recognized environmental conditions (RECs) in connection with the Site and its adjacent properties. The Site is listed under the HAZNET database for the generation of various wastes but this does not represent an REC for the Site. Five facilities within 1/8 to 1/4-mile of the Site are listed mainly on the RCRA-SQG and FINDS databases. None of the listed facilities are anticipated to have impacted the Site.

We also reviewed historical aerial photographs, topographic maps, and city directories to assess the Site historical land use and potential for past land uses to have created RECs in connection with the Site. No evidence of RECs was observed on the Site or adjacent properties on the historical aerial photos or topographic maps. None of the listings in the applicable city directories for the Site and adjacent properties suggest the storage or use of hazardous substances or petroleum on their properties.

We performed a site reconnaissance on October 18, 2012 to observe current site conditions and to identify RECs on the Site. No RECs were observed during the site reconnaissance. In addition, Geocon interviewed Mr. Ross Beal of Parkstone Management Services (Parkstone), a representative of the current site owner, regarding his knowledge of current and past land use on the Site. We provided Mr. Beal with a site owner questionnaire regarding the past use, storage, or disposal of hazardous substances or petroleum on the Site. Mr. Beal stated that Parkstone has

managed the Site since 2005. According to Mr. Beal, the Site has been used as a commercial office complex since 1979. He is not aware of any current or previous tenants using, storing, or disposing of hazardous substances or petroleum on the Site. Mr. Beal is not aware of any environmental issues related to the Site or its adjacent properties.

The following table summarizes our findings from the Phase I ESA of the Site, including known or suspect RECs, historical RECs, and de minimis environmental conditions.

Assessment Category	REC	Recommended Actions	Report Section
Hazardous Substances/Petroleum Products	No	NFA	4, 5, and 6
Hazardous Wastes	No	NFA	4, 5, and 6
Aboveground/Underground Storage Tanks	No	NFA	4, 5, and 6
Unidentified Substance Containers	No	NFA	6
Equipment Potentially Containing PCBs	No	NFA	6
Wastewater Systems	No	NFA	6
Evidence of Releases	No	NFA	4 and 6
Pools of Liquid, Pits, Ponds, Lagoons	No	NFA	4, 5, and 6
Wells	No	NFA	4, 5, and 6
Nearby Properties	No	NFA	4, 5, and 6
Historical Land Use – Site	No	NFA	4 and 5
Historical Land Use – Nearby Properties	No	NFA	4 and 5

Recommended Action(s):

NFA = No further action recommended at this time

AA = Additional action recommended at this time

The Phase I ESA identified no evidence of RECs in relation to the Site or on adjoining properties. No further environmental investigation of the Site appears to be warranted at this time.

1. INTRODUCTION

This report presents the results of our Phase I ESA of the property at 125 Baker Street East in Costa Mesa, Orange County, California. We prepared this report in accordance with the request of the site owner, Red Oak Investment, LLC (the Client) to provide information regarding the potential for existing hazardous substances or petroleum impacts at the Site prior to proposed redevelopment of the Site for multi-family residential use. This section identifies the purpose, scope of work, and limitations/exceptions associated with the Phase I ESA.

1.1 Purpose

The purpose of the Phase I ESA was to identify potential "recognized environmental conditions" (RECs) as defined by the American Society for Testing and Materials (ASTM) Designation E 1527-05 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Section 1.1.1 of the ASTM Standard E 1527-05 defines the term "recognized environmental conditions" as *"the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property."* The term, as further defined by ASTM, *"is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."*

1.2 Detailed Scope of Services

Geocon's *Acknowledgement for Phase I Environmental Site Assessment*, dated July 31, 2012, outlines the scope of services proposed for the Phase I ESA. This Phase I ESA was conducted in general accordance with the American Society for Testing and Materials (ASTM) *Standard Practice E 1527-05* and the requirements of 40 Code of Federal Regulations (CFR) Part 312 titled *Standards and Practices for All Appropriate Inquiries*, as required under Sections 101(35) (B) (ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The main components of this report, as specified by the ASTM Standards, include the following:

- **Site Reconnaissance:** The objective of the site reconnaissance was to obtain information indicating the likelihood of identifying RECs in connection with the Site. The site reconnaissance was for the Site only and did not include moving onsite debris, vehicles, or other objects to allow for observation of the underlying ground surface. Offsite properties and features were viewed from the Site and a drive-by reconnaissance of the surrounding area.
- **Physical Setting:** The objective of reviewing physical setting references was to obtain information concerning the topographic, geologic, and hydrogeologic characteristics of the Site and vicinity. Such information may be indicative of the direction and/or extent that a contaminant could migrate in the event of a spill or release.
- **Site History:** The objective of consulting historical references was to develop a history of the previous uses of the Site and surrounding area in order to help identify the likelihood of past uses having led to RECs in connection with the Site. Historical sources reviewed included aerial photographs, previous reports, site ownership and/or use information (as made available by the Client), and topographic maps. In addition, Geocon conducted interviews with persons who were reasonably expected to be knowledgeable about historical and/or current conditions at and uses of the Site.

- **Records Review:** The objective of the records review was to obtain information that will help identify RECs at or potentially affecting the Site. Geocon reviewed Client-provided and publicly available federal, state, and local regulatory agency records pertaining to the Site.

1.3 Significant Assumptions

The conclusions presented in this report are based upon reasonable visual observations made at the Site and research of available materials within the scope and budget of the contract. The information presented is relevant to the dates of our site visit and should not be relied upon to represent conditions at later dates. The opinions expressed herein are based on our experience with similar studies and information obtained during our effort. If additional information becomes available, we request the opportunity to review the information and modify our opinions, if necessary.

This report was compiled based partially on information supplied to us from outside sources, other information that is in the public domain, and visual observations made at the property. The conclusions and recommendations herein are based solely on the information we obtained in compiling the report. We make no warranty as to the accuracy of statements made by others which may be contained in the report, nor are any other warranties or guarantees, express or implied, included or intended by the report except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services.

1.4 Limitations and Exceptions

The visual observations we made were limited to accessible portions of the Site and the contiguous areas. Subsurface exploration, soil and groundwater sampling, and analytical laboratory testing were not within the scope of this study. The Client did not request that we obtain and/or review a 50-year-chain-of-title report. Based on our review of other historical information sources, we do not feel that a significant data gap is caused by not reviewing a chain-of-title report.

Our services have been conducted using the degree of care and skill ordinarily exercised, under similar circumstances, by environmental sciences consultants practicing in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented in this report. We are not responsible for the conclusions, opinions, or recommendations made by others based on this information. This report was compiled based partially on information supplied to us from outside sources, other information that is in the public domain, and visual observations made at the property. The conclusions and recommendations herein are based solely on the information we obtained in compiling the report. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from the records examined.

This evaluation does not address the presence of the following conditions unless specifically stated otherwise:

- Radon, electromagnetic fields, asbestos, lead-containing paint, mold, burn ash, lead in drinking water, methane gas, and wetlands;
- Chemical compounds which naturally occur in the environment;
- Commonly used household cleaning products, building materials, and consumables that may be hazardous; and
- Contaminants or contaminant concentrations that are not currently a concern but may be under future regulatory standards.

1.5 User Reliance

We conducted the Phase I ESA of the Site expressly and solely for Red Oak Investments, LLC. Any reliance upon the information, conclusions, or recommendations contained in this report for purposes other than the transfer of the Site shall be at the sole liability of the party undertaking such use.

2. SITE LOCATION AND DESCRIPTION

2.1 Location and Legal Description

The Site is located at 125 Baker Street East in Costa Mesa, Orange County, California (Figure 1). The Site is a 4.169-acre, roughly triangular parcel, which is further described as Orange County Assessor's Parcel Number (APN) 427-021-04. The Site is adjacent to the southeastern side of the northbound off-ramp for the Baker Street exit from the Costa Mesa Freeway (State Route [SR] 55).

2.2 Site and Vicinity General Characteristics

The Site is developed as a multi-tenant commercial office complex. Properties in the site vicinity are developed with similar commercial and industrial land use. Figure 2 is a Site Plan depicting the site features and boundaries.

2.2.1 Topography

The topography of the Site is nearly flat-lying at an approximate elevation of 43 feet above mean sea level based the USGS Newport Beach topographic map (USGS, 1981).

2.2.2 Geologic Conditions

Information concerning the geologic conditions at and in proximity to the Site was obtained from *California Geology* (Harden, 2003) and the *Geologic Map of the Santa Ana Quadrangle* (California Division of Mines and Geology, 1973). The Site is located in Los Angeles Basin within the Peninsular Ranges geomorphic province in Southern California. The Los Angeles Basin is filled with a thick sequence Miocene to recent age sedimentary deposits both continental and marine in origin (Harden, 2003). The referenced geologic map indicates that the Site is underlain by Quaternary non-marine terrace deposits.

2.2.3 Soils Conditions

Geocon performed a geotechnical investigation on the Site in October 2012. According to this investigation, surficial onsite soils are comprised of two to ten foot intervals of fine to medium sand, sandy silt, and clay.

2.2.4 Regional Groundwater Quality and Occurrence

In an effort to assess local groundwater conditions, we searched the California State Water Resources Control Board (SWRCB) GeoTracker website (http://geotracker.waterboards.ca.gov) for groundwater information at the nearest facility with a groundwater monitoring array such as leaking underground storage tank (LUST) facilities. The nearest such facility is the Former Fire Station #33, John Wayne Airport at 366 Paularino Avenue, approximately 1,900 feet east-northeast of the Site. The depth to groundwater measured in twelve groundwater monitoring wells at Former Fire Station #33 ranged from 25 to 30 feet, and groundwater was reported to flowed to the northwest in September 2011 (CH2M Hill, 2011).

Geocon encountered onsite groundwater at a depth of 27.5 feet during the October 2012 geotechnical investigation for the Site.

2.3 Current and Planned Uses of the Property

The property is currently developed as a multi-tenant commercial office complex occupied by several companies or organizations. The Client, Red Oak Investments, LLC, plans to redevelop the Site into multi-family residential housing.

2.4 Descriptions of Structures, Roads, and Other Site Improvements

The Site is developed with a 62,400 square-foot two-story commercial office complex comprised of four separate buildings, connected by second-floor covered walkways. Surrounding the site buildings is paved parking and the perimeter of the Site and some areas within the parking lot are landscaped with lawn and trees.

Electric power is supplied to the Site by the Southern California Edison Company, gas by the Southern California Gas Company, potable water by Mesa Consolidated Water District, and sewer service by the Costa Mesa Sanitary District. The Site is vehicle accessible from Baker Street East which is adjacent to the northeast and from Pullman Street which is adjacent to the southeast. Further description of site improvements is presented in Section 6.0.

2.5 Current Uses of the Adjoining Properties

Baker Street East is adjacent to the northeast of the Site. Beyond Baker Street East to the northeast of the Site are commercial/light industrial warehouse buildings. Pullman Street is adjacent to the southeast and south of the Site. Beyond Pullman Street are commercial/light industrial and office buildings. Adjacent to the west and northwest of the Site is a stormwater drain and the off-ramp from northbound SR 55.

3. USER PROVIDED INFORMATION

This section describes site information provided by the Client and others familiar with the Site.

3.1 Title Records

The Client did not provide title, chain of title, appraisal and/or sale agreement records for the Site.

3.2 Environmental Liens or Activity and Use Limitations

The Client indicated that they are not aware of environmental liens on, or use limitations for, the Site.

3.3 Specialized Knowledge

The Client indicated that they have no specialized knowledge for the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

The Client did not provide any commonly known information or reasonably ascertainable information unique to the Site.

3.5 Valuation Reduction for Environmental Issues

The Client, the current owner of the Site, stated that they paid fair market value for the Site and did not receive a valuation reduction due to environmental conditions on the Site.

3.6 Owner, Property Manager, and Occupant Information

We interviewed Mr. Ross Beal of Parkstone Management Services, the representative of the current site owner, to obtain his knowledge of the Site and surrounding properties. Interview information is summarized in Section 7.0.

3.7 Reason for Performing Phase I

A Phase I ESA was requested by the Client to obtain information regarding the potential for existing hazardous substances or petroleum impacts prior to obtaining financing to redevelop the Site.

4. RECORDS REVIEW

Regulatory agency records pertaining to the Site and relevant nearby properties were searched for this Phase I ESA. The sources for this information included Environmental Data Resources Inc. (EDR), a regulatory database search firm, and local government agencies. A summary of information obtained from the sources contacted is presented below.

4.1 Standard Environmental Record Sources

EDR searched federal, state and local databases for information regarding the Site and surrounding properties/facilities. A copy of *The EDR Radius Map Report with GeoCheck, 125 Baker Street East, Costa Mesa, CA 92626*, dated October 10, 2012 is in Appendix A. The table below lists the databases that were identified as having at least one listing.

Database Name	Search Radius (Mile)	Number of Listings
FEDERAL DATABASES		
CERCLIS (Sites proposed or on the National Priority list and Sites being screened or in assessment phase for inclusion on the Notional Priority List)	0.5	1
CERCLIS-NFRAP (No Further Remedial Action Planned)	0.5	1
RCRIS-TSD (RCRA Permitted Treatment, Storage, Disposal Facilities)	0.5	1
RCRA-LQS (RCRA Large Quantity Generator of Hazardous Waste-facilities that generate transport, treat and/or dispose of over 1, 000 kg per month)	0.25	1
RCRA-SQG (RCRA Small Quantity Generators of Hazardous of Hazardous Waste-facilities that generate, transport, treat/or dispose of between 100 kg and 1,000 kg per month)	0.25	13
RCRA-NonGen (RCRA & HSWA database sites which generate, transport, store, treat and/or dispose of hazardous waste and not currently generating hazardous waste)	0.25	1
ENVIROSTOR (DTSC's Site Mitigation Database)	1	10
Hist Cal-Sites (Potential/Confirmed Hazardous Substance Release Sites)	1	1
UST (Underground Storage Tanks)	0.25	3
HIST UST (Historical Underground Storage Tanks)	0.25	1
LUST (Leaking Underground Storage Tanks)	0.5	18
CA SLIC (Spills, Leaks, Investigation and Cleanup Cost Recovery)	0.5	3
Notify 65 (Proposition 65)	1	3
HIST CORTESE (Historic Hazardous Waste and Substances Sites List)	0.5	12
CORTESE	0.5	1

4.1.1 Site

The Site is listed under HAZNET with four cases pertaining to the generation and offsite disposal of hazardous materials by three separate businesses as follows:

- Orange Coast Dental X-ray Lab – this facility is listed for generation and offsite disposal of "hydrocarbon solvents" from 2003 through 2006 and 2009 through 2011.

- ABBA Products – this facility is listed for generation and offsite disposal of "unspecified solvent mixture" and "tank bottom waste" in 1998.
- Gooing Chiropractic Clinic - this facility is listed for generation and offsite disposal of "photochemicals/photoprocessing waste" in 1997, unspecified waste in 1993, and "metal sludge" in 1993.

No incidents or violations are listed. Inclusion on this database does not constitute an REC in connection with the Site.

4.1.2 Nearby Properties

Five properties/facilities within a 1/8-mile radius of the Site are listed in various databases. Information for these five properties/facilities is described herein.

Listing A5

Disc Instruments at 102 Baker Street East (listed as being 73 feet north of on the Site) is listed under the RCRA-SQG and FINDS databases. The facility is listed as a small- and large-quantity generator. The facility is listed under FINDS as a facility that generates, transports, and treats, stores, or disposes of hazardous waste. However, no violations have been reported for the Site. No other information is listed relative to this site. Based on the information provided, this facility is not considered an REC for the Site.

Listings B6 and B7

Creel Printing of California at 150 East Baker (listed as being 213 feet east/southeast (upgradient) of the Site) is listed under the NPDES, HAZNET, and ENVIROSTOR databases from 2009 to 2010, and in RCRA-SQG, FINDS, MANIFEST, HAZNET and EMI databases for 1993, 1995, and 1996 through 2007. This facility is listed as having generated asbestos containing waste, unspecified solvent mixture, off-specification, aged or surplus organics. No violations have been reported for this facility. No other information is listed for this facility. Based on the information provided, this facility is not considered an REC for the Site

Listing 8

3M Costa Mesa Surgical Prod at 225 Baker Street (listed as being 481 feet south/southeast of the Site) is listed under the RCRA-SQG and FINDS databases. No violations have been reported for this facility. Based on the information provided, this facility is not considered an REC for the Site.

Listings C9 and C10

Environmental Communications Incorporated at 3150 Pullman Street (listed as being 514 feet south of the Site) is listed under the RCRA-SQG and FINDS databases. This facility is listed as a small-and large-quantity generator of unspecified waste. No violations have been reported for this facility. Based on the information provided, this facility is not considered an REC for the Site.

Betatron, Incorporated at 3150 Pullman Street(listed as being 514 feet south of the Site) is listed under the RCRA-SQG, FINDS, HAZNET, and EMI databases. This facility is listed as a small quantity generator of waste liquids with cyanides. No violations have been reported for this facility. Based on the information provided, this facility is not considered an REC for the Site.

4.1.3 Orphan Summary

The Orphan Summary identifies properties that have incomplete address information and could be specifically plotted. The Orphan Summary lists six facilities which appear to be greater than one mile from the Site. Based on the distances of these properties from the Site, the potential for the properties to have impacted the Site is low.

4.2 Additional Environmental Record Sources

4.2.1 California Department of Conservation Division of Oil, Gas, and Geothermal Resources

The State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) online mapping feature (http://maps.conservation.ca.gov/doms/index.html) shows one plugged well within 1/4-mile of the Site (DOGGR, 2012). Based on the distance of the well from the Site and its plugged condition, it is unlikely to have impacted the Site.

4.2.2 City of Costa Mesa Fire Prevention Department

We contacted the City of Costa Mesa Fire Prevention Department to inquire about files they might have pertaining to the Site. They indicated that they have no records on file for the Site from 2009 to 2012.

4.2.3 City of Costa Mesa Building Safety Division

We contacted the City of Costa Mesa Building Safety Division to inquire about building permits they might have pertaining to the Site. They provided one building permit that was issued in 1974 for the current site buildings.

5. HISTORICAL USE INFORMATION ON THE SITE AND ADJACENT PROPERTIES

Historical use of the Site and adjacent properties was evaluated through review of historical aerial photographs, topographic maps, and city directories provided by EDR, an environmental data search firm. EDR stated that Sanborn fire insurance maps were not available for the Site.

5.1 Aerial Photographs and Topographic Maps

The aerial photographs and topographic maps in Appendices B and C, respectively, were reviewed for indications of past land uses that had the potential to have impacted the Site through the use, storage or disposal of hazardous substances and/or petroleum. The aerial photographs date back to 1938 and the topographic maps to 1901. The following table summarizes information obtained from these sources.

	Observations		
	Site	**Adjacent and Nearby Properties**	**Source**
1901	The scale of this map is too large to discern details of development on the Site.	The scale of this map is too large to discern details of development in the site vicinity.	T
1902	The scale of this map is too large to discern details of development on the Site.	The scale of this map is too large to discern details of development in the site vicinity.	T
1935	No site features or land uses are depicted for the Site.	No features or land uses are depicted on the adjacent properties, with the exception of the Southern Pacific Railroad and Newport Boulevard depicted to the west of the Site.	T
1938	The Site was comprised of farmland and a rural residence.	Adjacent properties were similar farmland with a rural residence to the north of the Site.	A
1942	Similar to conditions depicted on the 1935 topographic map.	Similar to conditions depicted on the 1935 topographic map.	T
1947	Conditions were similar to those observed on the 1938 aerial photograph.	Conditions were similar to those observed on the 1938 aerial photograph.	A
1951	Similar to conditions depicted on the 1942 topographic map.	Similar to conditions depicted on the 1942 topographic map.	T
1952	Conditions were similar to those observed on the 1947 aerial photograph	Conditions were similar to those observed on the 1947 aerial photograph.	A
1965	Similar to conditions depicted on the 1952 topographic map.	Similar to conditions depicted on the 1952 topographic map, with the exception of SR 55 depicted to the west of the Site and two commercial structures to the northwest of the Site, across the intersection of Baker Avenue/SR 55.	T
1968	Conditions were similar to those observed on the 1952 aerial photograph.	Commercial structures were present to the southeast of the Site. Baker Street was present to the north of the Site. SR 55 was present to the west of the Site. Pullman Street was present to the east and south of the Site.	A
1972	Similar to conditions depicted on the 1965 topographic map.	Commercial structures are depicted to the east, south, and north of the Site.	T
1977	The site buildings and parking lot were present on the Site.	Several commercial structures were present to the south, north, and of the Site. SR 55 was present to the west of the Site.	A
1981	Similar to conditions depicted on the 1972 topographic map.	Similar to conditions depicted on the 1972 topographic map.	T
1989	Conditions were similar to those observed on the 1977.aerial photograph.	Conditions were similar to those observed on the 1977.aerial photograph.	A
1994, 1995	Conditions were similar to those observed on the 1989.aerial photograph.	Conditions were similar to those observed on the 1989.aerial photograph.	A

Abbreviations/Sources:

A = Aerial photograph

T = Topographic map

We observed no evidence of RECs on the Site or the adjacent properties in the aerial photographs. The topographic maps do not depict land uses that would suggest the presence of RECs on the Site or adjacent properties.

5.2 City Directories

We reviewed an abstract of city directories (Appendix D) including city, cross-reference, and telephone directories provided by EDR. The directories provided were for approximate five-year intervals (as available) from 1920 to 2012. The Site is listed as having been owned/occupied by a variety of commercial businesses from 1980 to 2002. The adjacent properties listed are a variety of residential and commercial developments. None of the listed commercial developments for the Site and adjacent properties suggest the storage or use of hazardous substances or petroleum on their properties.

6. SITE RECONNAISSANCE

This section summarizes observations of the Site and surrounding properties made during the site reconnaissance**.**

6.1 Methodology and Limiting Conditions

Mr. Mike Akoto of Geocon West Inc. performed the site reconnaissance on October 18, 2012. He was accompanied by Jose Valadez, the custodian for the site buildings. He performed the site reconnaissance by walking throughout the interior and exterior portions of the Site and along the site perimeter to observe site features and conditions. Mr. Valadez provided access to empty office suites within the site buildings. Mr. Valadez was not authorized to provide access to occupied suites. Based on the names of the businesses in the occupied suites the storage or use of hazardous substances or petroleum in their office suites appears unlikely. The offsite survey was performed by making observations of adjacent properties from the Site and public streets.

Weather on the day of the site reconnaissance was partly cloudy with temperatures in the low 70s°F. There were no limiting conditions to our ability to observe the Site or surrounding properties. Photos of various site features and offsite properties are appended.

6.2 General Site Setting

The Site is in an area of commercial development consisting primarily of multi-tenant commercial office buildings.

6.3 Onsite Survey

The Site is developed with a 62,400 square-foot office complex comprised of four two-story buildings in the central portion of the Site with parking lots and landscaping surrounding the office complex.

6.3.1 Exterior Areas

The exterior of the Site is comprised mainly of paved parking and landscaping (turf and trees) around the site buildings and along the site perimeter (Photo 1). A dumpster enclosure (Photo 2) is in the southwestern portion of the Site. A pad-mounted transformer (Photo 3) is the northwestern portion of the Site. We observed no labels indicating polychlorinated biphenyl (PCB) content on the transformer. However, no evidence of cooling oil leakage was observed on the ground around the transformer.

No evidence of RECs was observed in exterior areas of the Site.

6.3.2 Interior Areas

The interior of the site buildings are comprised of finished office suites (Photo 4) with textured painted walls, carpet, and a kitchen (Photo 5). We observed covered walkways on the second floor that connected the four site buildings. An open-air courtyard (Photo 6) is in the central portion of the Site.

No evidence of RECs was observed in interior areas of the Site.

6.4 Offsite Survey

This section provides brief descriptions and photos of adjacent properties to the Site.

North – Across Baxter Street to the northeast of the Site is the Vineyard Christian Fellowship church and a commercial warehouse (Photo 7).

South – Across Pullman Street to the southeast of the Site are commercial properties (Photo 8).

East – Across Pullman Street to the east of the Site are commercial properties (Photo 9).

West – Adjacent to the west of the Site is the off-ramp from northbound SR 55 to Baxter Street (Photo 10).

No evidence of RECs was observed on the adjacent or vicinity properties of the Site.

7. INTERVIEWS

7.1 Interview with Owner

We contacted Mr. Ross Beal of Parkstone Management Services (Parkstone), the representative of the current site owner, for information regarding past and present use of the Site and the potential for impacts to the Site related to the past use, storage, or disposal of hazardous substances or petroleum on the Site. We provided Mr. Beal with a site owner questionnaire regarding the past use, storage, or disposal of hazardous substances or petroleum on the Site. A copy of his site owner questionnaire is in Appendix E.

Mr. Beal stated that Parkstone has managed the Site since 2005. According to Mr. Beal, the Site has been used as a commercial office complex since 1979. He stated that there are currently 25 tenants in the office complex. Mr. Beal is not aware of any tenants currently or previously storing, using, or disposing of hazardous substances or petroleum on the Site. Mr. Beal is not aware of any environmental issues related to the Site or adjacent properties.

7.2 Interview with Site Manager

The site manager was not available for an interview.

7.3 Interview with Occupants

The site building's occupants were not interviewed as we did not have access to occupied suites.

7.4 Interviews with Local Government Officials

Based on information obtained through written requests to local government agencies, it was judged that interviews of regulatory officials would not provide any additional or meaningful information to this Phase I ESA.

7.5 Interview with Others

No other interviews were conducted.

8. CONCLUSIONS

We performed a Phase I ESA of the property located at 125 Baker Street East in Costa Mesa, Orange County, California. The Phase I ESA was conducted in general conformance with the scope and limitations of *ASTM Standard E 1527-05*. The assessment has revealed no evidence of RECs in connection with the Site.

Any exceptions to, or deletions from, this practice are described in Section 11 of this report. It is the Environmental Professional's opinion that all appropriate inquiry has been conducted, in general accordance with *ASTM Standard E 1527-05 and 40 CFR Part 312*, in the current/previous environmental condition of the Site, and that conditions indicative of significant releases or threatened releases of hazardous substances on, at, in or to the Site were not identified. No significant data gaps were identified that would affect the ability of the Environmental Professional to render this opinion.

9. DATA GAPS

A data gap is defined by ASTM *Designation E 1527-05* as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." Data gaps could include such things as insufficient historical information, the inability to interview persons with direct site knowledge (e.g., the owner(s), past owner(s), tenants, workers, etc.) or the lack of access to all parts of a site during the site reconnaissance. .

The Client did not request that we obtain and/or review a 50-year-chain-of-title report. Based on our review of additional historical information sources, we do not feel that a significant data gap is caused by not reviewing a chain-of-title report.

10. REFERENCES

ASTM International. (2005). *Standard Practice for Environmental Site Assessments, Phase I Environmental Site Assessment Process*, Designation E 1527-05.

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EDR Environmental Data Resources, Inc. (2012). The EDR-City Directory Abstract, 125 Baker Street East, Costa Mesa CA 92626.

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EDR Environmental Data Resources, Inc. (2012). EDR Historical Topographic Map Report, *125 Baker Street East, Costa Mesa CA 92626.*

Geocon West, Inc., *Geotechnical Investigations, Proposed Multi-Family Residential Development, 125 Baker Street, Costa Mesa, California*, Job Number: A8970-06-01, dated October 2012.

Harden, Deborah R. *California Geology: Second Edition*. Upper Saddle River: Prentice-Hall, 2003.

State of California Department of Conservation, Division of Oil, Gas & Geothermal Resources – DOGGR Home Page, http://maps.conservation.ca.gov/doms/index.html, October, 2012.

United States Geological Survey. (1981). Newport Beach, California 7.5' Quadrangle (Scale: 1:24,000).

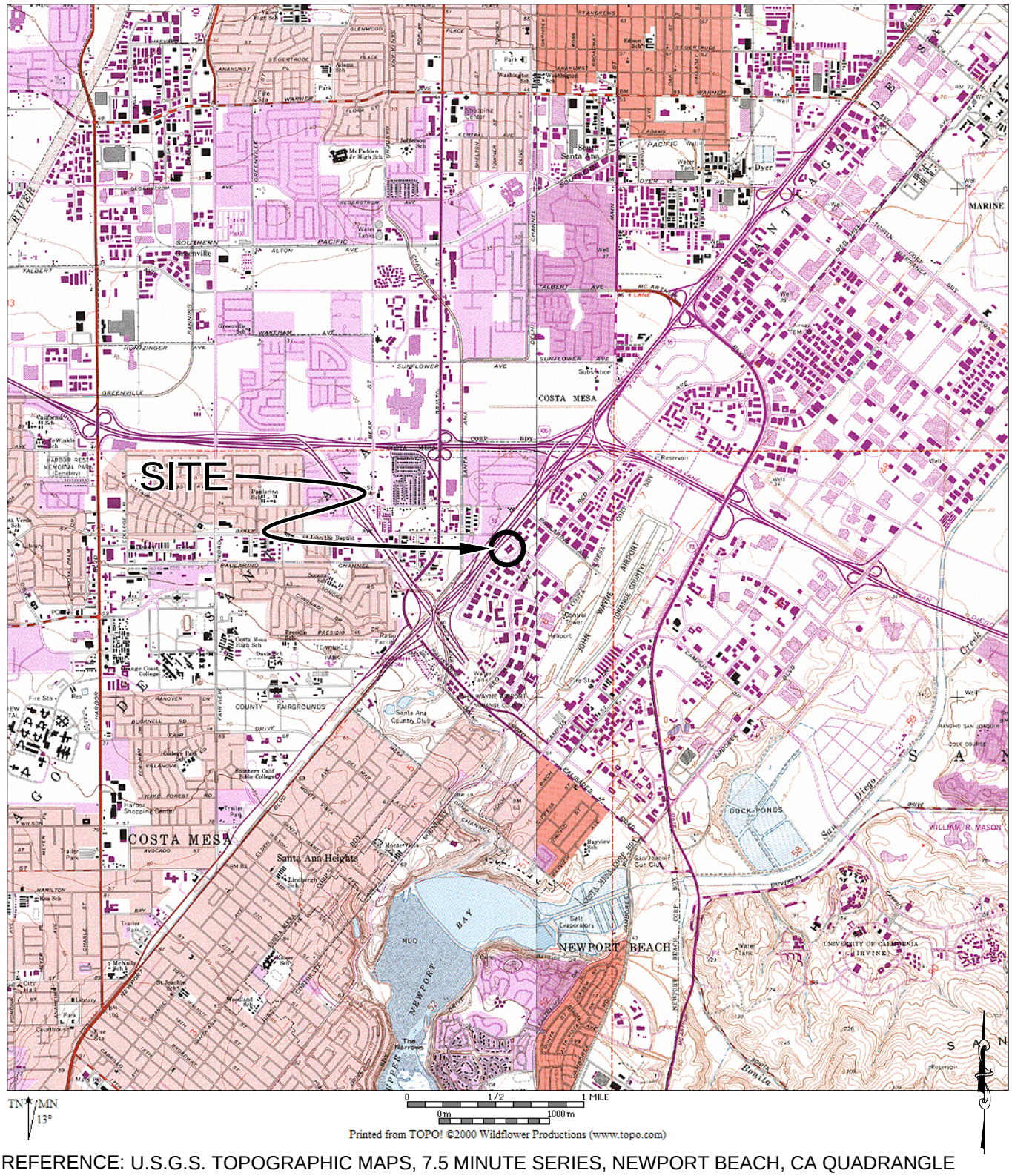
11. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Data presented in this report is factual to the best of our knowledge. Available sources of data were comprehensively researched to provide a complete Phase I ESA of the subject property. This Phase I ESA was conducted in general accordance with the American Society for Testing and Materials (ASTM) *Standard Practice E 1527-05* and the requirements of 40 Code of Federal Regulations (CFR) Part 312 titled *Standards and Practices for All Appropriate Inquiries*, as required under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Mike Conkle, PG
Senior Geologist

12. QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312. 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 all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



REFERENCE: U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE SERIES, NEWPORT BEACH, CA QUADRANGLE

GEOCON WEST, INC.

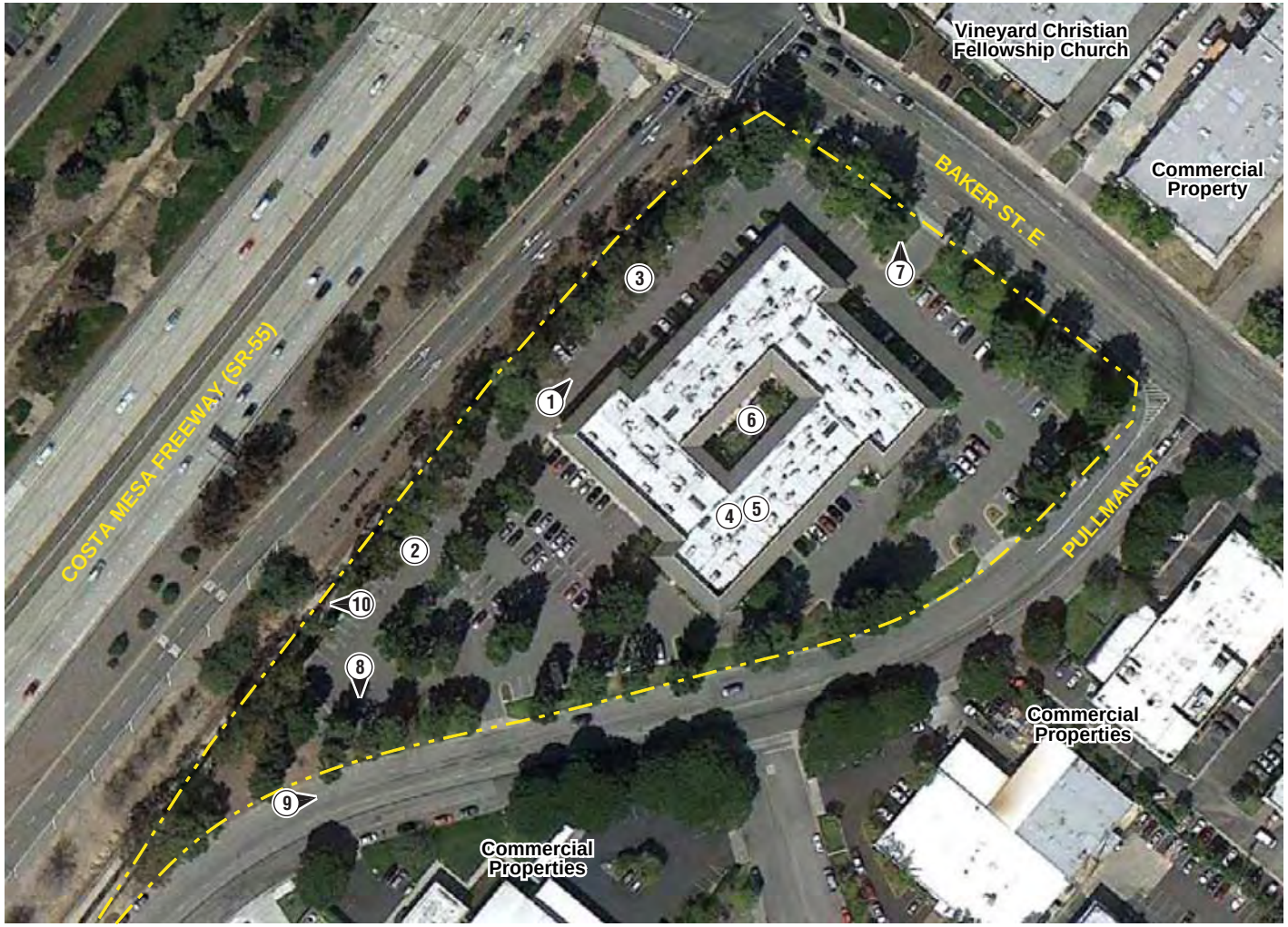
ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

JMT		8000

VICINITY MAP

125 BAKER STREET E
PHASE I ENVIRONMENTAL SITE ASSESSMENT
COSTA MESA, CALIFORNIA

November 2012	PROJECT NO. A8970-77-02	FIG. 1



LEGEND

1 Site Photograph Location & Orientation

N

0 80' 160'

APPROXIMATE SCALE

GEOCON WEST, INC.

ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

JMT		8000

SITE PLAN

125 BAKER STREET E PHASE I
ENVIRONMENTAL SITE ASSESSMENT
COSTA MESA, CALIFORNIA

November 2012	PROJECT NO. A8970-77-02	FIG. 2

Photo 1 – View to the north of the parking area west of the site building.

Photo 2 – Dumpster enclosure in the southwestern portion of the Site.

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3303 N. San Fernando Blvd., Suite 100, Burbank, CA 91504
PHONE (818) 841-8388 – FAX (818) 841-1704

SITE PHOTOS 1 & 2		
Phase I Environmental Site Assessment 125 Baker Street East Costa Mesa, California		
A8970-77-02		November 2012

Photo 3 – Pad-mounted transformer in the northwestern portion of the Site.

Photo 4 – Vacant office space on the second floor of the site building.

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PHONE (818) 841-8388 – FAX (818) 841-1704

SITE PHOTOS 3 & 4		
Phase I Environmental Site Assessment 125 Baker Street East Costa Mesa, California		
A8970-77-02		November 2012

Photo 5 – Kitchen on the first floor of the site building.

Photo 6 – Open courtyard between the site buildings.

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PHONE (818) 841-8388 – FAX (818) 841-1704

SITE PHOTOS 5 & 6		
Phase I Environmental Site Assessment 125 Baker Street East Costa Mesa, California		
A8970-77-02		November 2012

Photo 7 – View to the north, across Baxter Street East, of the Vineyard Christian Fellowship Church to the north of the Site.

Photo 8 – View to the south, across Pullman Street, of commercial properties to the south of the Site.

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SITE PHOTOS 7 & 8		
Phase I Environmental Site Assessment 125 Baker Street East Costa Mesa, California		
A8970-77-02		November 2012

Photo 9 – View to the east, across Pullman Street, of commercial properties to the east of the Site.

Photo 10 – View to the west of the off-ramp from northbound SR 55.

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PHONE (818) 841-8388 – FAX (818) 841-1704

SITE PHOTOS 9 & 10		
Phase I Environmental Site Assessment 125 Baker Street East Costa Mesa, California		
A8970-77-02		November 2012

APPENDIX A

125 Baker Street
125 Baker Street East
Costa Mesa, CA 92626

Inquiry Number: 3427558.1s
October 10, 2012

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
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 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

125 BAKER STREET EAST
COSTA MESA, CA 92626

COORDINATES

Latitude (North):	33.6796000 - 33˚ 40' 46.56''
Longitude (West):	117.8786000 - 117˚ 52' 42.96''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	418556.8
UTM Y (Meters):	3726784.5
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	33117-F8 NEWPORT BEACH (DIGITAL), CA
Most Recent Revision:	0
East Map:	33117-F7 TUSTIN, CA
Most Recent Revision:	1981

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	2009, 2010
Source:	USDA

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
ORANGE COAST DENTAL X-RAY LAB 125 BAKER STE 200 COSTA MESA, CA 92626	HAZNET	N/A
ABBA PRODUCTS 125 E BAKER ST COSTA MESA, CA 92696	HAZNET	N/A
ORANGE COAST DENTAL X-RAY LAB 125 BAKER ST E STE 200 COSTA MESA, CA 92626	HAZNET	N/A

EXECUTIVE SUMMARY

GOOING CHIROPRACTIC CLINIC
125 BAKER STE 100
COSTA MESA, CA 92626

HAZNET

N/A

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

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

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

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System
WDS..... Waste Discharge System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
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

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 Lists of Registered Storage Tanks

CA FID UST..... Facility Inventory Database
SWEEPS UST..... SWEEPS UST Listing

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
DEED..... Deed Restriction Listing

EXECUTIVE SUMMARY

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
Orange Co. Industrial Site	List of Industrial Site Cleanups

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
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
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
CA BOND EXP. PLAN	Bond Expenditure Plan
UIC	UIC Listing
NPDES	NPDES Permits Listing
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
PRP	Potentially Responsible Parties
2020 COR ACTION	2020 Corrective Action Program List
FINANCIAL ASSURANCE	Financial Assurance Information Listing
PCB TRANSFORMER	PCB Transformer Registration Database
PROC	Certified Processors Database
MWMP	Medical Waste Management Program Listing
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
HWT	Registered Hazardous Waste Transporter Database
HWP	EnviroStor Permitted Facilities Listing

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Historical Auto Stations.. EDR Proprietary Historic Gas Stations
EDR Historical Cleaners..... EDR Proprietary Historic Dry Cleaners

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 list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 12/27/2011 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN DIGITAL CORPORATION	***3128 REDHILL AVE***	***SE 1/8 - 1/4 (0.198 mi.)***	***F18***	***46***

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 12/28/2011 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
TRD USA INC.	***335 E BAKER ST***	***SE 1/4 - 1/2 (0.256 mi.)***	***28***	***71***

EXECUTIVE SUMMARY

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 03/15/2012 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CERADYNE INC	***3169 REDHILL AVENUE***	***E 1/8 - 1/4 (0.202 mi.)***	***G20***	***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 03/15/2012 has revealed that there are 13 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DISC INSTRUMENTS#	***102 E BAKER***	***N 0 - 1/8 (0.014 mi.)***	***A5***	***12***
CREEL PRINTING CO OF CALIFORNI	***150 EAST BAKER STREET***	***ESE 0 - 1/8 (0.040 mi.)***	***B7***	***17***
3M COSTA MESA SURGICAL PROD	***225 BAKER ST***	***SSE 0 - 1/8 (0.091 mi.)***	***8***	***27***
ENVIRONMENTAL COMMUNICATIONS I	***3150 PULLMAN ST***	***S 0 - 1/8 (0.097 mi.)***	***C9***	***29***
BETATRON, INC	***3150 PULLMAN STREET***	***S 0 - 1/8 (0.097 mi.)***	***C10***	***30***
INTESYS TECHNOLOGIES CA INC	***265 BRIGGS AVE***	***S 1/8 - 1/4 (0.127 mi.)***	***D12***	***34***
CIMCO	250 BRIGGS AVE	S 1/8 - 1/4 (0.138 mi.)	D13	38
CIMCO MEDICAL MOLDING CORP	***200 BRIGGS AVE***	***SSE 1/8 - 1/4 (0.176 mi.)***	***14***	***39***
WESTERN DIGITAL CORPORATION	***3128 REDHILL AVE***	***SE 1/8 - 1/4 (0.198 mi.)***	***F18***	***46***
UROHEALTH INC	***3050 REDHILL AVE***	***SSE 1/8 - 1/4 (0.221 mi.)***	***23***	***63***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BULLET PERFORMANCE ENG INC	***3017 ENTERPRISE STE A***	***WNW 1/8 - 1/4 (0.229 mi.)***	***24***	***64***
COAST MERCEDES SVC	***3042 ENTERPRISE #B***	***WNW 1/8 - 1/4 (0.241 mi.)***	***H26***	***68***
ENGINE SUPPLY & EXCHANGE	***3042 ENTERPRISE UNIT E***	***WNW 1/8 - 1/4 (0.241 mi.)***	***H27***	***69***

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 08/06/2012 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
CREEL PRINTING OF CALIFORNIA Status: Inactive - Needs Evaluation	***150 E BAKER***	***ESE 0 - 1/8 (0.040 mi.)***	***B6***	***14***
CERADYNE INC Status: Inactive - Needs Evaluation	***3169 REDHILL AVE***	***E 1/8 - 1/4 (0.202 mi.)***	***G21***	***61***
SEMICOA Status: Inactive - Needs Evaluation	***333 MCCORMICK***	***ENE 1/4 - 1/2 (0.399 mi.)***	***33***	***88***
PRIME TECHNOLOGIES, INC. Status: Inactive - Needs Evaluation	3183 REDHILL AVENUE	ENE 1/4 - 1/2 (0.417 mi.)	37	104
SIGMA CIRCUITS INC Status: Refer: Other Agency	***2970 AIRWAY AVE***	***S 1/2 - 1 (0.698 mi.)***	***55***	***146***
ALLIED SIGNAL SUBSTRATE TECH & Status: Refer: Other Agency	***2955 AIRWAY AVENUE***	***S 1/2 - 1 (0.724 mi.)***	***56***	***154***
COSTA MESA AIR NATIONAL GUARD Status: Active	***S OF PRESIDIO DR & WEST***	***SW 1/2 - 1 (0.839 mi.)***	***57***	***156***
AL & J'S CLEANERS Status: Refer: 1248 Local Agency	270 BRISTOL STREET, NO.	SSW 1/2 - 1 (0.881 mi.)	58	160

Lower Elevation	Address	Direction / Distance	Map ID	Page
EXOTIC MATERIAL INC Status: Refer: Other Agency	2930 BRISTOL ST	WSW 1/2 - 1 (0.526 mi.)	53	142
VALENTEC INTERNATIONAL CORP. Status: Inactive - Needs Evaluation	***3190 PULLMAN STREET***	***NE 1/2 - 1 (0.621 mi.)***	***54***	***143***

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 09/18/2012 has revealed that there are 18 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN DIGITAL Status: Completed - Case Closed	***3128***	***SE 1/8 - 1/4 (0.198 mi.)***	***F17***	***43***
THE ABBEY SCHERER COMPANY Status: Completed - Case Closed	***3130 AIRWAY***	***SE 1/4 - 1/2 (0.388 mi.)***	***30***	***76***
JOHN WAYNE AIRPORT FIRE STN #3 Status: Completed - Case Closed	366 PAULARINO ROAD	ESE 1/4 - 1/2 (0.397 mi.)	32	84
SANTA ANA TOWER FAA/AFSFO-8525	***18990 IKE JONES RD***	***SE 1/4 - 1/2 (0.467 mi.)***	***K44***	***123***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SANTA ANA TOWER FAA/AFSFO-8525	***18990 IKE JONES RD***	***SE 1/4 - 1/2 (0.467 mi.)***	***K45***	***125***
Status: Open - Site Assessment				
ORANGE COUNTY FIRE STATION #33	18992 IKE JONES RD	SE 1/4 - 1/2 (0.469 mi.)	K46	127
STATION #33	***18992 IKE JONES RD***	***SE 1/4 - 1/2 (0.469 mi.)***	***K47***	***128***
Status: Open - Site Assessment				
MILLION AIR	***19300 IKE JONES RD***	***SE 1/4 - 1/2 (0.481 mi.)***	***K49***	***134***
Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
JOHN C RAU	***3120 PULLMAN***	***SW 1/8 - 1/4 (0.185 mi.)***	***E15***	***40***
Status: Completed - Case Closed				
WADE FAMLY TRUST/ARCO #1257	***2990 BRISTOL***	***W 1/4 - 1/2 (0.407 mi.)***	***I34***	***93***
Status: Completed - Case Closed				
G & M OIL CO INC #21	***2995 BRISTOL***	***W 1/4 - 1/2 (0.409 mi.)***	***I36***	***96***
Status: Open - Remediation				
CHEVRON #9-1660	3048 BRISTOL STREET	WNW 1/4 - 1/2 (0.438 mi.)	J38	105
CHEVRON STATION NO 91660	***3048 BRISTOL ST***	***WNW 1/4 - 1/2 (0.438 mi.)***	***J39***	***106***
Status: Completed - Case Closed				
Status: Completed - Case Closed				
SHELL OIL	***3045 BRISTOL***	***WNW 1/4 - 1/2 (0.454 mi.)***	***J42***	***116***
Status: Completed - Case Closed				
UNOCAL S S #5297	***3067 BRISTOL***	***WNW 1/4 - 1/2 (0.462 mi.)***	***43***	***119***
Status: Completed - Case Closed				
ANTIMITE PEST CONTROL	***696 RANDOLPH***	***WSW 1/4 - 1/2 (0.479 mi.)***	***48***	***131***
Status: Completed - Case Closed				
PEP BOYS #660	2946 BRISTOL	WSW 1/4 - 1/2 (0.481 mi.)	L50	137
PEP BOYS #660	***2946 BRISTOL ST***	***WSW 1/4 - 1/2 (0.481 mi.)***	***L52***	***139***
Status: Completed - Case Closed				

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 09/18/2012 has revealed that there are 3 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTESYS TECHNOLOGIES	***265 BRIGGS AVENUE***	***S 1/8 - 1/4 (0.127 mi.)***	***D11***	***33***
INTESYS TECHNOLOGIES CA INC	***265 BRIGGS AVE***	***S 1/8 - 1/4 (0.127 mi.)***	***D12***	***34***
Facility Status: Completed - Case Closed				
JOHN WAYNE AIRPORT WEST AIRFIE	***3151 AIRWAY AVE***	***ESE 1/4 - 1/2 (0.394 mi.)***	***31***	***78***
Facility Status: Open - Site Assessment				

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 09/18/2012 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN DIGITAL CORP	3128 RED HILL AVE	SE 1/8 - 1/4 (0.198 mi.)	F19	51
TRICO	235 PAULARINO AVE	ENE 1/8 - 1/4 (0.220 mi.)	22	62

Lower Elevation	Address	Direction / Distance	Map ID	Page
BAYSHORE TILE	3120 PULLMAN ST	SW 1/8 - 1/4 (0.185 mi.)	E16	42

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
COSTA MESA AIR NATIONAL GUARD	***S OF PRESIDIO DR & WEST***	***SW 1/2 - 1 (0.839 mi.)***	***57***	***156***

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN DIGITAL CORPORATION	***3128 REDHILL AVE***	***SE 1/8 - 1/4 (0.198 mi.)***	***F18***	***46***

Other Ascertainable Records

RCRA-NonGen: 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 list, as provided by EDR, and dated 03/15/2012 has revealed that there is 1 RCRA-NonGen site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GENERAL MONITORS, INC	***3037 ENTERPRISE ST***	***WNW 1/8 - 1/4 (0.239 mi.)***	***H25***	***66***

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 04/02/2012 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN WAYNE AIRPORT WEST AIRFIE	***3151 AIRWAY AVE***	***ESE 1/4 - 1/2 (0.394 mi.)***	***31***	***78***

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 12 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN DIGITAL	***3128***	***SE 1/8 - 1/4 (0.198 mi.)***	***F17***	***43***
ORANGE COUNTY FIRE STATIO	18992	SE 1/4 - 1/2 (0.334 mi.)	29	76
THE ABBEY SCHERER COMPANY	***3130 AIRWAY***	***SE 1/4 - 1/2 (0.388 mi.)***	***30***	***76***
SANTA ANA TOWER FAA/AFSFO-8525	***18990 IKE JONES RD***	***SE 1/4 - 1/2 (0.467 mi.)***	***K44***	***123***
MILLION AIR	***19300 IKE JONES RD***	***SE 1/4 - 1/2 (0.481 mi.)***	***K49***	***134***

Lower Elevation	Address	Direction / Distance	Map ID	Page
JOHN C RAU	***3120 PULLMAN***	***SW 1/8 - 1/4 (0.185 mi.)***	***E15***	***40***
G & M OIL CO #21	***2995 BRISTOL ST***	***W 1/4 - 1/2 (0.409 mi.)***	***I35***	***96***
CHEVRON STATION NO 91660	***3048 BRISTOL ST***	***WNW 1/4 - 1/2 (0.438 mi.)***	***J39***	***106***
CHEVRON #9-1660	***3048 BRISTOL ST***	***WNW 1/4 - 1/2 (0.438 mi.)***	***J40***	***113***
SHELL (1818-1101)	***3045 BRISTOL***	***WNW 1/4 - 1/2 (0.453 mi.)***	***J41***	***113***
UNOCAL S S #5297	***3067 BRISTOL***	***WNW 1/4 - 1/2 (0.462 mi.)***	***43***	***119***
PEP BOYS	***2946 BRISTOL ST***	***WSW 1/4 - 1/2 (0.481 mi.)***	***L51***	***138***

Notify 65: 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.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there are 3 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN WAYNE AIRPORT FUELSTORAGE	***19801 AIRPORT WAY SOUTH***	***SE 1/2 - 1 (0.912 mi.)***	***59***	***161***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL SERVICE STATION #5909	1476 SOUTH EAST BRISTOL	SSW 1/2 - 1 (0.913 mi.)	60	162

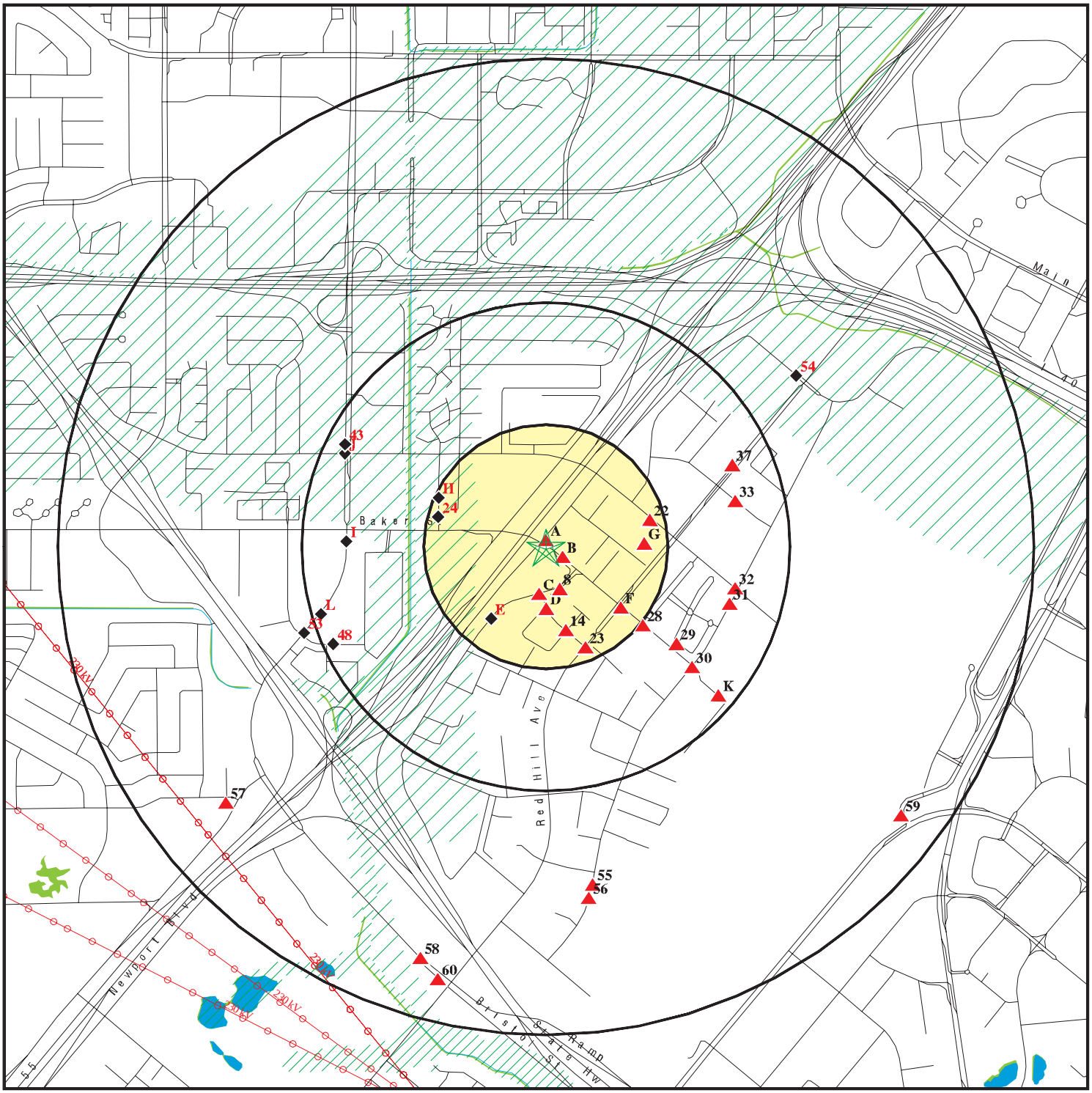
Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL OIL	***3045 BRISTOL***	***WNW 1/4 - 1/2 (0.454 mi.)***	***J42***	***116***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 6 records.

Site Name	Database(s)
GODDARD STREET	NPDES
WARD RANCH	HIST UST
CUSTOM MOTORS	HIST UST
EAST 19TH STREET	ERNS
ELLIS AVE AND GOLDEN WEST STREET	ERNS
MINNIE STREET AND EDINGER	ERNS

OVERVIEW MAP - 3427558.1s



- 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
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

0 1/4 1/2 1 Miles

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: 125 Baker Street	CLIENT: Geocon Geotechnical & Env
ADDRESS: 125 Baker Street East Costa Mesa CA 92626	CONTACT: Mike Akoto
LAT/LONG: 33.6796 / 117.8786	INQUIRY #: 3427558.1s
	DATE: October 10, 2012 10:13 am

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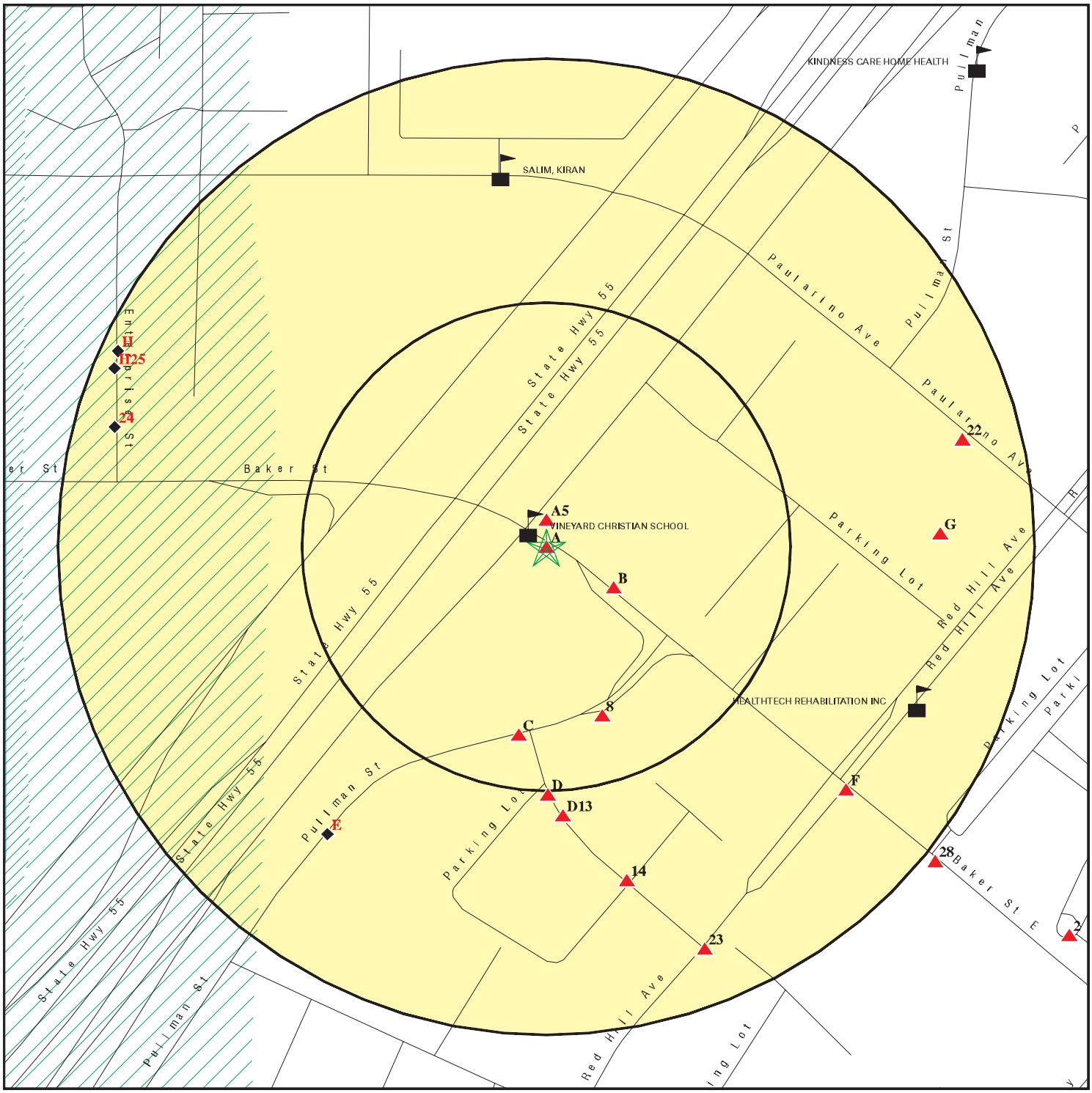
DETAIL MAP - 3427558.1s



- 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
- 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: 125 Baker Street	CLIENT: Geocon Geotechnical & Env
ADDRESS: 125 Baker Street East Costa Mesa CA 92626	CONTACT: Mike Akoto INQUIRY #: 3427558.1s
LAT/LONG: 33.6796 / 117.8786	DATE: October 10, 2012 10:14 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	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	1	0	NR	NR	1
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		5	8	NR	NR	NR	13
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		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	1	2	6	NR	10
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	2	16	NR	NR	18

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		0	2	1	NR	NR	3
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	3	NR	NR	NR	3
AST	0.250		0	0	NR	NR	NR	0
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								
VCP	0.500		0	0	0	NR	NR	0
INDIAN 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								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	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
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		0	0	NR	NR	NR	0
HIST UST	0.250		0	1	NR	NR	NR	1
SWEEPS UST	0.250		0	0	NR	NR	NR	0
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		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen	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
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		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	1	NR	NR	1
HIST CORTESE	0.500		0	2	10	NR	NR	12
Notify 65	1.000		0	0	1	2	NR	3
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	4	NR	NR	NR	NR	NR	4
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
FINANCIAL ASSURANCE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants	1.000		0	0	0	0	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
EDR Historical Auto Stations	0.250		0	0	NR	NR	NR	0
EDR Historical Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **ORANGE COAST DENTAL X-RAY LAB**
125 BAKER STE 200
COSTA MESA, CA 92626 | **HAZNET** | **S103980141**
N/A

Site 1 of 5 in cluster A

Actual: 43 ft.

HAZNET:

Year:	2006
Gepaid:	CAL000077326
Contact:	DAVID KALINA / OWNER
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 200
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT000613976
TSD County:	Orange
Waste Category:	Not reported
Disposal Method:	Not reported
Tons:	0.07
Facility County:	Orange

Year:	2005
Gepaid:	CAL000077326
Contact:	JAMES EVERTT
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 200
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT000613976
TSD County:	Orange
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Transfer Station
Tons:	0.35
Facility County:	Not reported

Year:	2004
Gepaid:	CAL000077326
Contact:	JAMES EVERTT
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 200
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT000613976
TSD County:	Orange
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Transfer Station
Tons:	0.35
Facility County:	Not reported

Year:	2003
Gepaid:	CAL000077326
Contact:	JAMES EVERTT
Telephone:	0
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 200
Mailing City,St,Zip:	COSTA MESA, CA 926260000

ORANGE COAST DENTAL X-RAY LAB (Continued) **S103980141**

Gen County: Orange
TSD EPA ID: CAT000613976
TSD County: Orange
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Transfer Station
Tons: 0.07
Facility County: Orange

Year: 2003
Gepaid: CAL000077326
Contact: JAMES EVERTT
Telephone: 0
Mailing Name: Not reported
Mailing Address: 125 BAKER ST E STE 200
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT000613976
TSD County: Orange
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Transfer Station
Tons: 0.21
Facility County: Orange

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

A2 **ABBA PRODUCTS** **HAZNET** **S103948448**
Target **125 E BAKER ST** **N/A**
Property **COSTA MESA, CA 92696**

Site 2 of 5 in cluster A

Actual:
43 ft.

HAZNET:
Year: 1998
Gepaid: CAC001398792
Contact: ABBA PRODUCTS
Telephone: 7148859292
Mailing Name: Not reported
Mailing Address: 125 E BAKER ST
Mailing City,St,Zip: COSTA MESA, CA 926960000
Gen County: Orange
TSD EPA ID: CAD000088252
TSD County: Los Angeles
Waste Category: Unspecified solvent mixture
Disposal Method: Transfer Station
Tons: .1000
Facility County: Orange

Year: 1998
Gepaid: CAC001398792
Contact: ABBA PRODUCTS
Telephone: 7148859292
Mailing Name: Not reported
Mailing Address: 125 E BAKER ST
Mailing City,St,Zip: COSTA MESA, CA 926960000
Gen County: Orange
TSD EPA ID: CAD000088252
TSD County: Los Angeles

ABBA PRODUCTS (Continued) **S103948448**

Waste Category: Tank bottom waste
Disposal Method: Transfer Station
Tons: 4.0000
Facility County: Orange

A3 Target Property **ORANGE COAST DENTAL X-RAY LAB** **HAZNET** **S109429675**
125 BAKER ST E STE 200 **N/A**
COSTA MESA, CA 92626

Site 3 of 5 in cluster A

Actual: 43 ft.

HAZNET:

Year: 2011
Gepaid: CAL000077326
Contact: DAVID KALINA
Telephone: 7145405573
Mailing Name: Not reported
Mailing Address: 125 BAKER ST E STE 200
Mailing City,St,Zip: COSTA MESA, CA 926264527
Gen County: Not reported
TSD EPA ID: CAT000613893
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.05004
Facility County: Orange

Year: 2011
Gepaid: CAL000077326
Contact: DAVID KALINA
Telephone: 7145405573
Mailing Name: Not reported
Mailing Address: 125 BAKER ST E STE 200
Mailing City,St,Zip: COSTA MESA, CA 926264527
Gen County: Not reported
TSD EPA ID: CAT000613976
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.05838
Facility County: Orange

Year: 2010
Gepaid: CAL000077326
Contact: DAVID KALINA
Telephone: 7145405573
Mailing Name: Not reported
Mailing Address: 125 BAKER ST E STE 200
Mailing City,St,Zip: COSTA MESA, CA 926264527
Gen County: Not reported
TSD EPA ID: CAT000613976
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Not reported
Tons: 0.06255
Facility County: Orange

ORANGE COAST DENTAL X-RAY LAB (Continued) **S109429675**

Year:	2010
Gepaid:	CAL000077326
Contact:	DAVID KALINA
Telephone:	7145405573
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 200
Mailing City,St,Zip:	COSTA MESA, CA 926264527
Gen County:	Not reported
TSD EPA ID:	CAT000613976
TSD County:	Not reported
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0417
Facility County:	Orange

Year:	2009
Gepaid:	CAL000077326
Contact:	DAVID KALINA
Telephone:	7145405573
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 200
Mailing City,St,Zip:	COSTA MESA, CA 926264527
Gen County:	Orange
TSD EPA ID:	CAT000613976
TSD County:	Orange
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.14595
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

A4
Target
Property

GOOING CHIROPRACTIC CLINIC **HAZNET** **S103626647**
125 BAKER STE 100 **N/A**
COSTA MESA, CA 92626

Site 4 of 5 in cluster A

Actual:
43 ft.

HAZNET:

Year:	1997
Gepaid:	CAL000120126
Contact:	MICHAEL GOOING
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 100
Mailing City,St,Zip:	COSTA MESA, CA 926264527
Gen County:	Orange
TSD EPA ID:	CAL000051063
TSD County:	Orange
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Not reported
Tons:	.0166
Facility County:	Orange

Year:	1993

GOOING CHIROPRACTIC CLINIC (Continued) **S103626647**

Gepaid:	CAL000120126
Contact:	MICHAEL GOOING
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 100
Mailing City,St,Zip:	COSTA MESA, CA 926264527
Gen County:	Orange
TSD EPA ID:	CAL000051063
TSD County:	Orange
Waste Category:	Not reported
Disposal Method:	Recycler
Tons:	.0000
Facility County:	Orange

Year:	1993
Gepaid:	CAL000120126
Contact:	MICHAEL GOOING
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	125 BAKER ST E STE 100
Mailing City,St,Zip:	COSTA MESA, CA 926264527
Gen County:	Orange
TSD EPA ID:	CAL000051063
TSD County:	Orange
Waste Category:	Metal sludge (Alkaline solution (pH >= 12.5) with metals)
Disposal Method:	Recycler
Tons:	.0150
Facility County:	Orange

A5 **DISC INSTRUMENTS#** **RCRA-SQG** **1000165803**
North **102 E BAKER** **FINDS** **CAD008479297**
< 1/8 **COSTA MESA, CA 92626**
0.014 mi.
73 ft. **Site 5 of 5 in cluster A**

Relative:
Higher

Actual:
43 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	DISC INSTRUMENTS#
Facility address:	102 E BAKER COSTA MESA, CA 92626
EPA ID:	CAD008479297
Contact:	ENVIRONMENTAL MANAGER
Contact address:	102 E BAKER COSTA MESA, CA 92626
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:	DISC INSTRUMENTS

DISC INSTRUMENTS# (Continued) **1000165803**

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

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: 08/19/1980
Facility name: DISC INSTRUMENTS#
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002144670

Environmental Interest/Information System
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

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

DISC INSTRUMENTS# (Continued) **1000165803**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

B6 **CREEL PRINTING OF CALIFORNIA** **NPDES** **S104582445**
ESE **150 E BAKER** **HAZNET** **N/A**
< 1/8 **COSTA MESA, CA 92626** **ENVIROSTOR**
0.040 mi.
213 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
44 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Terminated
Agency Id:	0
Region:	8
Regulatory Measure Id:	298819
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30I020162
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/29/2006
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/15/2010
Discharge Name:	Creel Printing Company of CA
Discharge Address:	150 E Baker St
Discharge City:	Costa Mesa
Discharge State:	California
Discharge Zip:	92626

HAZNET:

Year:	2010
Gepaid:	CAC002657074
Contact:	ED ROSENSON
Telephone:	3102757706
Mailing Name:	Not reported
Mailing Address:	9350 WILSHIRE BLVD STE 202
Mailing City,St,Zip:	BEVERLY HILLS, CA 90212
Gen County:	Not reported
TSD EPA ID:	CAD009007626
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.4
Facility County:	Orange

Year:	2009
Gepaid:	CAL000196922
Contact:	KELLY HATFIELD, PLANT MANAGER
Telephone:	7145407005
Mailing Name:	Not reported
Mailing Address:	150 E BAKER
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAD982444481

CREEL PRINTING OF CALIFORNIA (Continued) **S104582445**

TSD County: San Bernardino
Waste Category: Waste oil and mixed oil
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.209
Facility County: Orange

Year: 2009
Gepaid: CAL000196922
Contact: KELLY HATFIELD, PLANT MANAGER
Telephone: 7145407005
Mailing Name: Not reported
Mailing Address: 150 E BAKER
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: TXD077603371
TSD County: 99
Waste Category: Unspecified solvent mixture
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.125
Facility County: Orange

Year: 2009
Gepaid: CAL000196922
Contact: KELLY HATFIELD, PLANT MANAGER
Telephone: 7145407005
Mailing Name: Not reported
Mailing Address: 150 E BAKER
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD093459485
TSD County: Fresno
Waste Category: Unspecified solvent mixture
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.144
Facility County: Orange

Year: 2009
Gepaid: CAL000196922
Contact: KELLY HATFIELD, PLANT MANAGER
Telephone: 7145407005
Mailing Name: Not reported
Mailing Address: 150 E BAKER
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 4.63
Facility County: Orange

Click this hyperlink while viewing on your computer to access
46 additional CA_HAZNET: record(s) in the EDR Site Report.

CREEL PRINTING OF CALIFORNIA (Continued) **S104582445**

ENVIROSTOR:

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
Facility ID:	71002615
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	Not reported
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.67967
Longitude:	-117.8772
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD084456581
Alias Type:	EPA Identification Number
Alias Name:	71002615
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

B7	**CREEL PRINTING CO OF CALIFORNIA**	**RCRA-SQG**	**1000195125**
ESE	**150 EAST BAKER STREET**	**FINDS**	**CAD084456581**
< 1/8	**COSTA MESA, CA 92626**	**MANIFEST**	
0.040 mi.		**HAZNET**	
213 ft.	**Site 2 of 2 in cluster B**	**EMI**	

Relative:
Higher

Actual:
44 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	FRYE & SMITH AMERICAN STAND CO
Facility address:	150 E BAKER COSTA MESA, CA 92626
EPA ID:	CAD084456581
Mailing address:	PO BOX 5009 COSTA MESA, CA 92628
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
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:	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:	AMERICAN STANDARD 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

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

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

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: 01/29/1986
Facility name: FRYE & SMITH AMERICAN STAND CO
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/09/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110002661762

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.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

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

NY MANIFEST:
EPA ID: CAD084456581

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

Country:	USA
Mailing Name:	FRYE & SMITH PRINTERS
Mailing Contact:	MYLES NGUYEN
Mailing Address:	150 E BAKER ST
Mailing Address 2:	Not reported
Mailing City:	COSTA MESA
Mailing State:	CA
Mailing Zip:	92626
Mailing Zip4:	Not reported
Mailing Country:	USA
Mailing Phone:	714-540-7005

Document ID:	NYG1357425
Manifest Status:	Not reported
Trans1 State ID:	NYD980769947
Trans2 State ID:	Not reported
Generator Ship Date:	09/29/1998
Trans1 Recv Date:	09/29/1998
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	10/29/1998
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CAD084456581
Trans1 EPA ID:	NYD045604964
Trans2 EPA ID:	Not reported
TSDF ID:	Not reported
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	00135
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	011
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	01.00
Year:	98

Document ID:	NYG1358667
Manifest Status:	Not reported
Trans1 State ID:	NYD980769947
Trans2 State ID:	Not reported
Generator Ship Date:	10/07/1998
Trans1 Recv Date:	10/07/1998
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	10/29/1998
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CAD084456581
Trans1 EPA ID:	NYD045604964
Trans2 EPA ID:	Not reported
TSDF ID:	Not reported
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	00060
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	004
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

Specific Gravity:	01.00
Year:	98

Document ID:	NYG1358757
Manifest Status:	Not reported
Trans1 State ID:	NYD980769947
Trans2 State ID:	Not reported
Generator Ship Date:	12/08/1998
Trans1 Recv Date:	12/08/1998
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	01/06/1999
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CAD084456581
Trans1 EPA ID:	NYD045604964
Trans2 EPA ID:	Not reported
TSDF ID:	Not reported
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	00135
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	009
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00
Year:	98

Document ID:	NYG1359324
Manifest Status:	Not reported
Trans1 State ID:	NYD980769947
Trans2 State ID:	Not reported
Generator Ship Date:	11/03/1998
Trans1 Recv Date:	11/03/1998
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	11/23/1998
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CAD084456581
Trans1 EPA ID:	NYD045604964
Trans2 EPA ID:	Not reported
TSDF ID:	11282PNY
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	00150
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	010
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00
Year:	98

Document ID:	NYG1081476
Manifest Status:	Not reported
Trans1 State ID:	NYD980769947
Trans2 State ID:	Not reported
Generator Ship Date:	01/01/1999

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

Trans1 Recv Date:	01/01/1999
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	02/01/1999
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CAD084456581
Trans1 EPA ID:	NYD045604964
Trans2 EPA ID:	Not reported
TSDF ID:	Not reported
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	00090
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	006
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00
Year:	99

Document ID:	NYG1083591
Manifest Status:	Not reported
Trans1 State ID:	NYD980769947
Trans2 State ID:	Not reported
Generator Ship Date:	03/04/1999
Trans1 Recv Date:	03/04/1999
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	03/26/1999
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CAD084456581
Trans1 EPA ID:	NYD045604964
Trans2 EPA ID:	Not reported
TSDF ID:	Not reported
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Quantity:	00240
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	016
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00
Year:	99

HAZNET:

Year:	1999
Gepaid:	CAD084456581
Contact:	JERRY TOMINAZA/PRESIDENT
Telephone:	7145407005
Mailing Name:	Not reported
Mailing Address:	PO BOX 5009
Mailing City,St,Zip:	COSTA MESA, CA 926285009
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	3.336
Facility County:	Orange

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

Year:	1999
Gepaid:	CAD084456581
Contact:	JERRY TOMINAZA/PRESIDENT
Telephone:	7145407005
Mailing Name:	Not reported
Mailing Address:	PO BOX 5009
Mailing City,St,Zip:	COSTA MESA, CA 926285009
Gen County:	Orange
TSD EPA ID:	CAT000613976
TSD County:	Orange
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Transfer Station
Tons:	0.688
Facility County:	Orange

Year:	1999
Gepaid:	CAD084456581
Contact:	JERRY TOMINAZA/PRESIDENT
Telephone:	7145407005
Mailing Name:	Not reported
Mailing Address:	PO BOX 5009
Mailing City,St,Zip:	COSTA MESA, CA 926285009
Gen County:	Orange
TSD EPA ID:	OKD089761290
TSD County:	99
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Not reported
Tons:	7.0679
Facility County:	Orange

Year:	1998
Gepaid:	CAD084456581
Contact:	JERRY TOMINAZA/PRESIDENT
Telephone:	7145407005
Mailing Name:	Not reported
Mailing Address:	PO BOX 5009
Mailing City,St,Zip:	COSTA MESA, CA 926285009
Gen County:	Orange
TSD EPA ID:	OKD089761290
TSD County:	99
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Not reported
Tons:	.0000
Facility County:	Orange

Year:	1998
Gepaid:	CAD084456581
Contact:	JERRY TOMINAZA/PRESIDENT
Telephone:	7145407005
Mailing Name:	Not reported
Mailing Address:	PO BOX 5009
Mailing City,St,Zip:	COSTA MESA, CA 926285009
Gen County:	Orange
TSD EPA ID:	OHD000816629
TSD County:	99
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Not reported

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

Tons: 4.3576
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:	1990
County Code:	30
Air Basin:	SC
Facility ID:	3466
Air District Name:	SC
SIC Code:	2752
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:	6
Reactive Organic Gases Tons/Yr:	4
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:	1993
County Code:	30
Air Basin:	SC
Facility ID:	84268
Air District Name:	SC
SIC Code:	2752
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:	12
Reactive Organic Gases Tons/Yr:	8
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:	84268
Air District Name:	SC
SIC Code:	2752
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:	12
Reactive Organic Gases Tons/Yr:	8
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

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

Year:	1996
County Code:	30
Air Basin:	SC
Facility ID:	84268
Air District Name:	SC
SIC Code:	2752
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:	5
Reactive Organic Gases Tons/Yr:	3
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:	1997
County Code:	30
Air Basin:	SC
Facility ID:	84268
Air District Name:	SC
SIC Code:	2752
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
Reactive Organic Gases Tons/Yr:	4
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:	1998
County Code:	30
Air Basin:	SC
Facility ID:	84268
Air District Name:	SC
SIC Code:	2752
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
Reactive Organic Gases Tons/Yr:	4
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:	1999
County Code:	30
Air Basin:	SC
Facility ID:	84268
Air District Name:	SC
SIC Code:	2752

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

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
Reactive Organic Gases Tons/Yr:	4
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:	2000
County Code:	30
Air Basin:	SC
Facility ID:	84268
Air District Name:	SC
SIC Code:	2752
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
Reactive Organic Gases Tons/Yr:	4
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:	2002
County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2752
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:	5
Reactive Organic Gases Tons/Yr:	5
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:	2003
County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2752
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:	5
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	0

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

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:	2004
County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2752
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:	4.8587151
Reactive Organic Gases Tons/Yr:	4.79
Carbon Monoxide Emissions Tons/Yr:	0.158
NOX - Oxides of Nitrogen Tons/Yr:	0.586
SOX - Oxides of Sulphur Tons/Yr:	0.00374
Particulate Matter Tons/Yr:	0.0338
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.03

Year:	2005
County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2752
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:	7.48755
Reactive Organic Gases Tons/Yr:	5.21548227
Carbon Monoxide Emissions Tons/Yr:	.1748
NOX - Oxides of Nitrogen Tons/Yr:	.651
SOX - Oxides of Sulphur Tons/Yr:	.003
Particulate Matter Tons/Yr:	.0375
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.0375

Year:	2006
County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2752
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:	8.077459066893948253
Reactive Organic Gases Tons/Yr:	7.898
Carbon Monoxide Emissions Tons/Yr:	.235
NOX - Oxides of Nitrogen Tons/Yr:	.87
SOX - Oxides of Sulphur Tons/Yr:	.004
Particulate Matter Tons/Yr:	.051
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.051

Year:	2007

CREEL PRINTING CO OF CALIFORNIA (Continued) **1000195125**

County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2759
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:	3.821160532143646784
Reactive Organic Gases Tons/Yr:	3.017483754
Carbon Monoxide Emissions Tons/Yr:	.16
NOX - Oxides of Nitrogen Tons/Yr:	.63
SOX - Oxides of Sulphur Tons/Yr:	.0029433
Particulate Matter Tons/Yr:	.03
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.03

Year:	2007
County Code:	30
Air Basin:	SC
Facility ID:	118744
Air District Name:	SC
SIC Code:	2752
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:	8.077459066893948253
Reactive Organic Gases Tons/Yr:	7.898
Carbon Monoxide Emissions Tons/Yr:	.235
NOX - Oxides of Nitrogen Tons/Yr:	.87
SOX - Oxides of Sulphur Tons/Yr:	.004
Particulate Matter Tons/Yr:	.051
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.051

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8 **3M COSTA MESA SURGICAL PROD** **RCRA-SQG** **1000180485**
SSE **225 BAKER ST** **FINDS** **CAD040503039**
< 1/8 **COSTA MESA, CA 92627**
0.091 mi.
481 ft.

Relative:
Higher

Actual:
44 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	3M COSTA MESA SURGICAL PROD
Facility address:	225 BAKER ST COSTA MESA, CA 92627
EPA ID:	CAD040503039
Mailing address:	BAKER ST COSTA MESA, CA 92627
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
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

3M COSTA MESA SURGICAL PROD (Continued) **1000180485**

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
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

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: 110002643925

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.

C9 South < 1/8 0.097 mi. 514 ft. | **ENVIRONMENTAL COMMUNICATIONS INC**
3150 PULLMAN ST
COSTA MESA, CA 92626 | **RCRA-SQG FINDS** | **1000261663 CAD053847075**

Site 1 of 2 in cluster C

Relative: Higher

Actual: 43 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	ENVIRONMENTAL COMMUNICATIONS INC
Facility address:	3150 PULLMAN ST COSTA MESA, CA 92626
EPA ID:	CAD053847075
Mailing address:	3150 PULLMAN STREET COSTA MESA, CA 92626
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
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:	ALLEN J SHAFRAN
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

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

ENVIRONMENTAL COMMUNICATIONS INC (Continued) **1000261663**

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: 10/13/1981
Facility name: ENVIRONMENTAL COMMUNICATIONS INC
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002649368

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.

C10
South
< 1/8
0.097 mi.
514 ft.

BETATRON, INC
3150 PULLMAN STREET
COSTA MESA, CA 92626

RCRA-SQG **1000159680**
FINDS **CAD981379134**
HAZNET
EMI

Site 2 of 2 in cluster C

Relative:
Higher

Actual:
43 ft.

RCRA-SQG:
Date form received by agency: 01/31/1986
Facility name: BETATRON, INC
Facility address: 3150 PULLMAN STREET
COSTA MESA, CA 92626
EPA ID: CAD981379134
Mailing address: 3150 BULLMAN STREET
CAOSTA MESA, CA 92626
Contact: ENVIRONMENTAL MANAGER
Contact address: 3150 PULLMAN STREET
COSTA MESA, CA 92626
Contact country: US
Contact telephone: (714) 557-9933
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:

BETATRON, INC (Continued) **1000159680**

Owner/operator name: ALLEN SHAFRAN
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

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: 110009534879

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.

HAZNET:
Year: 1994
Gepaid: CAD981379134
Contact: Not reported
Telephone: 0000000000

BETATRON, INC (Continued) **1000159680**

Mailing Name:	Not reported
Mailing Address:	3150 PULLMAN STREET
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT000612150
TSD County:	Orange
Waste Category:	Aqueous solution with metals (< restricted levels and (Alkaline solution (pH >= 12.5) with metals))
Disposal Method:	Recycler
Tons:	.0834
Facility County:	Orange

Year:	1994
Gepaid:	CAD981379134
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3150 PULLMAN STREET
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT000612150
TSD County:	Orange
Waste Category:	Liquids with cyanides >= 1,000 Mg./L
Disposal Method:	Recycler
Tons:	.6695
Facility County:	Orange

Year:	1993
Gepaid:	CAD981379134
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3150 PULLMAN STREET
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT000612150
TSD County:	Orange
Waste Category:	Liquids with cyanides >= 1,000 Mg./L
Disposal Method:	Recycler
Tons:	.1876
Facility County:	Orange

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	11995
Air District Name:	SC
SIC Code:	3679
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:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

BETATRON, INC (Continued) **1000159680**

Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	11995
Air District Name:	SC
SIC Code:	3
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
Reactive Organic Gases Tons/Yr:	0
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

D11 **INTESYS TECHNOLOGIES** **SLIC** **S100932555**
South **265 BRIGGS AVENUE** **WDS** **N/A**
1/8-1/4 **COSTA MESA, CA 92626**
0.127 mi.
670 ft. **Site 1 of 3 in cluster D**

Relative:
Higher

Actual:
44 ft.

SLIC REG 8:

Type:	Soil and Groundwater
Facility Status:	Closed
Region:	8
Staff:	WDM
Substance:	WDM
Lead Agency:	WDM
Location Code:	WDM
Thomas Bros Code:	WDM

CA WDS:

Facility ID:	Santa Ana River 30I013380
Facility Type:	Not reported
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:	INTESYS TECHNOLOGIES
Agency Address:	Not reported
Agency City,St,Zip:	0
Agency Contact:	Not reported
Agency Telephone:	Not reported
Agency Type:	Not reported
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported

INTESYS TECHNOLOGIES (Continued) **S100932555**

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.

D12
South
1/8-1/4
0.127 mi.
670 ft.

INTESYS TECHNOLOGIES CA INC
265 BRIGGS AVE
COSTA MESA, CA 92626

Site 2 of 3 in cluster D

RCRA-SQG **1000174688**
FINDS **CAD981160245**
SLIC
HAZNET

Relative:
Higher

Actual:
44 ft.

RCRA-SQG:
Date form received by agency: 02/01/1999
Facility name: INTESYS TECHNOLOGIES CA INC
Facility address: 265 BRIGGS AVE
COSTA MESA, CA 92626
EPA ID: CAD981160245
Contact: RUSS ROMEYN
Contact address: 265 BRIGGS AVE
COSTA MESA, CA 92626
Contact country: US
Contact telephone: (714) 546-4460
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: INTESYS TECHNOLOGIES CA INC
Owner/operator address: 1300 N FIESTA BLVD
GILBERT, AZ 85234
Owner/operator country: Not reported
Owner/operator telephone: (602) 497-1401
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

INTESYS TECHNOLOGIES CA INC (Continued) **1000174688**

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

Hazardous Waste Summary:
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.

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

FINDS:

Registry ID: 110009533941

Environmental Interest/Information System
The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

INTESYS TECHNOLOGIES CA INC (Continued) **1000174688**

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

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	01/09/2000
Global Id:	SLT8R0603944
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	33.677229197458
Longitude:	-117.877593040466
Case Type:	Cleanup Program Site
Case Worker:	WDM
Local Agency:	Not reported
RB Case Number:	SLT8R060
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	1,1,1-Trichloroethane (TCA), Other Solvent or Non-Petroleum Hydrocarbon, Trichloroethylene (TCE), Other Petroleum, Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HAZNET:

Year:	2011
Gepaid:	CAL000324367
Contact:	CYNTHIA OLIVER, CONTROLLER
Telephone:	9496607080
Mailing Name:	Not reported
Mailing Address:	265 BRIGGS AVE
Mailing City,St,Zip:	COSTA MESA, CA 926264511
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	2.3154
Facility County:	Orange

Year:	2011
Gepaid:	CAL000324367
Contact:	CYNTHIA OLIVER, CONTROLLER
Telephone:	9496607080
Mailing Name:	Not reported
Mailing Address:	265 BRIGGS AVE
Mailing City,St,Zip:	COSTA MESA, CA 926264511

INTESYS TECHNOLOGIES CA INC (Continued) **1000174688**

Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Not reported
Tons: 0.442
Facility County: Orange

Year: 2011
Gepaid: CAL000324367
Contact: CYNTHIA OLIVER, CONTROLLER
Telephone: 9496607080
Mailing Name: Not reported
Mailing Address: 265 BRIGGS AVE
Mailing City,St,Zip: COSTA MESA, CA 926264511
Gen County: Not reported
TSD EPA ID: CAD044429835
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.756
Facility County: Orange

Year: 2011
Gepaid: CAL000324367
Contact: CYNTHIA OLIVER, CONTROLLER
Telephone: 9496607080
Mailing Name: Not reported
Mailing Address: 265 BRIGGS AVE
Mailing City,St,Zip: COSTA MESA, CA 926264511
Gen County: Not reported
TSD EPA ID: ARD981057870
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 2.108
Facility County: Orange

Year: 2011
Gepaid: CAL000324367
Contact: CYNTHIA OLIVER, CONTROLLER
Telephone: 9496607080
Mailing Name: Not reported
Mailing Address: 265 BRIGGS AVE
Mailing City,St,Zip: COSTA MESA, CA 926264511
Gen County: Not reported
TSD EPA ID: ARD981057870
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.28
Facility County: Orange

Click this hyperlink while viewing on your computer to access
55 additional CA_HAZNET: record(s) in the EDR Site Report.

D13 South 1/8-1/4 0.138 mi. 727 ft. | **CIMCO**
250 BRIGGS AVE
COSTA MESA, CA 92626

RCRA-SQG | **1000708816**
CAD983609132

Site 3 of 3 in cluster D

Relative: Higher

Actual: 44 ft.

RCRA-SQG:

Date form received by agency:	10/10/1991
Facility name:	CIMCO
Facility address:	250 BRIGGS AVE COSTA MESA, CA 92626
EPA ID:	CAD983609132
Mailing address:	BRIGGS AVE COSTA MESA, CA 92626
Contact:	ROD HENDERSON
Contact address:	250 BRIGGS AVE COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 546-4460
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:	CIMCO
Owner/operator address:	265 BRIGGS AVE COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 546-4460
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

14 SSE 1/8-1/4 0.176 mi. 927 ft.	**CIMCO MEDICAL MOLDING CORP 200 BRIGGS AVE COSTA MESA, CA 92626**	**RCRA-SQG FINDS**	**1000246747 CAD982353831**

Relative: Higher

Actual: 45 ft.

RCRA-SQG:

Date form received by agency:	09/03/1992
Facility name:	CIMCO MEDICAL MOLDING CORP
Facility address:	200 BRIGGS AVE COSTA MESA, CA 92626
EPA ID:	CAD982353831
Mailing address:	BRIGGS AVE COSTA MESA, CA 92626
Contact:	D PATRICK
Contact address:	200 BRIGGS AVE COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 546-4460
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:	CIMCO MEDICAL MOLDING CORP
Owner/operator address:	200 BRIGGS AVE COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 546-4460
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

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

CIMCO MEDICAL MOLDING CORP (Continued) **1000246747**

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: 110002863401

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.

E15
SW
1/8-1/4
0.185 mi.
976 ft.

JOHN C RAU
3120 PULLMAN
COSTA MESA, CA 92626

HIST CORTESE **S102431945**
LUST **N/A**

Site 1 of 2 in cluster E

Relative:
Lower

Actual:
41 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000135T

LUST:
Region: STATE
Global Id: T0605900101
Latitude: 33.677001
Longitude: -117.880216
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/11/1997
Lead Agency: ORANGE COUNTY LOP
Case Worker: DB
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083000135T
LOC Case Number: 89UT172
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:

LUST:
Global Id: T0605900101
Contact Type: Local Agency Caseworker

JOHN C RAU (Continued) **S102431945**

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: T0605900101
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

LUST:
Global Id: T0605900101
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900101
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 89UT172
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 03/11/1997
Case Type: Other Ground Water
Record ID: RO0000878

Region: ORANGE
Facility Id: 89UT172
Current Status: Not reported
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 03/11/1997
Case Type: Not reported
Record ID: RO0000878

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000135T
Local Case Num: 89UT172
Case Type: Other ground water affected
Substance: 12034,800661
Qty Leaked: 0
Abate Method: Not reported

JOHN C RAU (Continued) **S102431945**

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:	T0605900101
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	9/21/1989
Enforcement Date:	Not reported
Close Date:	3/11/1997
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	33.6772977
Longitude:	-117.880622
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:	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

E16 **BAYSHORE TILE** **UST** **U003778782**
SW **3120 PULLMAN ST** **N/A**
1/8-1/4 **COSTA MESA, CA 92626**
0.185 mi.
976 ft. **Site 2 of 2 in cluster E**

Relative:
Lower

Actual:
41 ft.

UST:

Facility ID:	10751
Latitude:	33.67752
Longitude:	-117.88046

F17 SE 1/8-1/4 0.198 mi. 1043 ft. | **WESTERN DIGITAL 3128 COSTA MESA, CA 92626** | **HIST CORTESE LUST EMI** | **S101299473 N/A**

Site 1 of 3 in cluster F

Relative: Higher

Actual: 47 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000442T

LUST:

Region:	STATE
Global Id:	T0605900354
Latitude:	33.6776107
Longitude:	-117.8761739
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/25/2006
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	CAB
Local Agency:	ORANGE COUNTY
RB Case Number:	083000442T
LOC Case Number:	92UT023
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Other Solvent or Non-Petroleum Hydrocarbon, * Chlorinated Hydrocarbons, Toluene, Acetone, Xylene
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605900354
Contact Type:	Local Agency Caseworker
Contact Name:	LUIS A. LODRIGUEZA
Organization Name:	ORANGE COUNTY
Address:	2009 E. EDINGER AVE.
City:	SANTA ANA
Email:	llodrigueza@hca.co.orange.ca.us
Phone Number:	Not reported

Global Id:	T0605900354
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

LUST:

Global Id:	T0605900354
Action Type:	ENFORCEMENT
Date:	04/25/2006
Action:	Closure/No Further Action Letter

Global Id:	T0605900354

WESTERN DIGITAL (Continued) **S101299473**

Action Type: RESPONSE
Date: 04/16/2006
Action: Other Report / Document

Global Id: T0605900354
Action Type: RESPONSE
Date: 02/14/2006
Action: Monitoring Report - Quarterly

Global Id: T0605900354
Action Type: RESPONSE
Date: 04/13/2006
Action: Unknown

Global Id: T0605900354
Action Type: ENFORCEMENT
Date: 01/12/2006
Action: Meeting

Global Id: T0605900354
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900354
Action Type: ENFORCEMENT
Date: 03/15/2006
Action: Notification - Fee Title Owners Notice

Global Id: T0605900354
Action Type: ENFORCEMENT
Date: 03/28/2006
Action: Staff Letter

Global Id: T0605900354
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605900354
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000442T
Local Case Num: 92UT023
Case Type: Other ground water affected
Substance: 81595
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: KALMUS

WESTERN DIGITAL (Continued) **S101299473**

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:	T0605900354
How Stopped Date:	Not reported
Enter Date:	6/11/1987
Review Date:	4/1/1992
Prelim Assess:	Not reported
Discover Date:	4/22/1992
Enforcement Date:	Not reported
Close Date:	5/21/1993
Workplan:	Not reported
Pollution Char:	5/1/1992
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	6/11/1987
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6776107
Longitude:	-117.8761739
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:	LAL
Lead Agency:	Regional Board
Local Agency:	30000
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	PREVIOUSLY ACETIC ACID CONTAMINATED SOIL,CASE CLOSED 9/17/86CASE REOPENED 4/22/92, TCE AND 1,1-DCE FOUND IN GROUNDWATER SAMPLES COLLECTED FROM GROUNDWATER MONITORING WELL.

EMI:

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	16727
Air District Name:	SC
SIC Code:	3674
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported

WESTERN DIGITAL (Continued) **S101299473**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	0
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

F18 **WESTERN DIGITAL CORPORATION** **CERCLIS** **1000403002**
SE **3128 REDHILL AVE** **RCRA-SQG** **CAD051983567**
1/8-1/4 **COSTA MESA, CA 92626** **FINDS**
0.198 mi. **HIST UST**
1043 ft. **Site 2 of 3 in cluster F** **HAZNET**

Relative:
Higher

Actual:
47 ft.

CERCLIS:

Site ID:	0904275
EPA ID:	CAD051983567
Facility County:	ORANGE
Short Name:	WESTERN DIGITAL CORPORATI
Congressional District:	40
IFMS ID:	094D
SMSA Number:	0360
USGC Hydro Unit:	18070203
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	HRS Start Needed
Non NPL Status Date:	20040217
Site Fips Code:	06059
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	9271184.00000
Contact Name:	Karen Jurist
Contact Tel:	(415) 972-3219
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13003854.00000
Contact Name:	Leslie Ramirez

WESTERN DIGITAL CORPORATION (Continued) **1000403002**

Contact Tel: (415) 972-3978
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13003858.00000
Contact Name: Sharon Murray
Contact Tel: (415) 972-4250
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13004003.00000
Contact Name: Carl Brickner
Contact Tel: Not reported
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: Regionwide GW contamination; PRP contends that multiple sources are involved

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 01/13/1992
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/15/1992
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: 04/16/1992
Date Completed: 05/18/1993
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

WESTERN DIGITAL CORPORATION (Continued) **1000403002**

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	WESTERN DIGITAL CORPORATION
Facility address:	3128 REDHILL AVE COSTA MESA, CA 92626
EPA ID:	CAD051983567
Mailing address:	3128 RED HILL AVE BOX 2180 NEWPORT BEACH, CA 92663
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
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:	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
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	WESTERN DIGITAL CORPORATION
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

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

WESTERN DIGITAL CORPORATION (Continued) **1000403002**

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: 09/01/1996
Facility name: WESTERN DIGITAL CORPORATION
Classification: Small Quantity Generator

Date form received by agency: 02/28/1992
Facility name: WESTERN DIGITAL CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980
Facility name: WESTERN DIGITAL CORPORATION
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/28/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110002144732

Environmental Interest/Information System

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

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.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

HIST UST:
Region: STATE
Facility ID: 00000014495
Facility Type: Other

WESTERN DIGITAL CORPORATION (Continued) **1000403002**

Other Type: SEMICONDUCTOR MFGR.
Total Tanks: 0001
Contact Name: RICK ERNST FACILITIES MGR.
Telephone: 7148630102
Owner Name: WESTERN DIGITAL CORPORATION
Owner Address: 2445 MCCABE WAY
Owner City,St,Zip: IRVINE, CA 92714

Tank Num: 001
Container Num: #1
Year Installed: 1970
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

HAZNET:
Year: 2001
Gepaid: CAL000055294
Contact: VIC SWYGART/PRESIDENT
Telephone: 7149793373
Mailing Name: Not reported
Mailing Address: 3333 BRISTOL ST STE 2801
Mailing City,St,Zip: COSTA MESA, CA 926261821
Gen County: Orange
TSD EPA ID: Not reported
TSD County: Santa Clara
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: 0.93
Facility County: Not reported

Year: 2000
Gepaid: CAL000055294
Contact: VIC SWYGART
Telephone: 7149314753
Mailing Name: Not reported
Mailing Address: 3333 BRISTOL ST STE 2801
Mailing City,St,Zip: COSTA MESA, CA 926261821
Gen County: Orange
TSD EPA ID: CAD003963592
TSD County: Santa Clara
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: 2.3766
Facility County: Orange

Year: 1999
Gepaid: CAL000055294
Contact: VIC SWYGART
Telephone: 7149314753
Mailing Name: Not reported
Mailing Address: 3333 BRISTOL ST STE 2801
Mailing City,St,Zip: COSTA MESA, CA 926261821
Gen County: Orange
TSD EPA ID: CAD003963592

WESTERN DIGITAL CORPORATION (Continued) **1000403002**

TSD County:	Santa Clara
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Recycler
Tons:	2.1889
Facility County:	Orange

Year:	1998
Gepaid:	CAL000055294
Contact:	VIC SWYGART
Telephone:	7149314753
Mailing Name:	Not reported
Mailing Address:	3333 BRISTOL ST STE 2801
Mailing City,St,Zip:	COSTA MESA, CA 926261821
Gen County:	Orange
TSD EPA ID:	CAD003963592
TSD County:	Santa Clara
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Recycler
Tons:	2.1889
Facility County:	Orange

Year:	1997
Gepaid:	CAL000055294
Contact:	VIC SWYGART
Telephone:	7149314753
Mailing Name:	Not reported
Mailing Address:	3333 BRISTOL ST STE 2801
Mailing City,St,Zip:	COSTA MESA, CA 926261821
Gen County:	Orange
TSD EPA ID:	CAD003963592
TSD County:	Santa Clara
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Recycler
Tons:	2.4183
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
13 additional CA_HAZNET: record(s) in the EDR Site Report.

F19 **WESTERN DIGITAL CORP** **UST** **U003803788**
SE **3128 RED HILL AVE** **N/A**
1/8-1/4 **COSTA MESA, CA 92626**
0.198 mi.
1043 ft. **Site 3 of 3 in cluster F**

Relative:
Higher

Actual:
47 ft.

UST:

Facility ID:	4439
Latitude:	33.67772
Longitude:	-117.87608

G20 East 1/8-1/4 0.202 mi. 1066 ft.	**CERADYNE INC 3169 REDHILL AVENUE COSTA MESA, CA 92626**	**RCRA-LQG FINDS HAZNET EMI**	**1000145800 CAD981424229**

Site 1 of 2 in cluster G

Relative: Higher

Actual: 47 ft.

RCRA-LQG:

Date form received by agency:	08/30/2010
Facility name:	CERADYNE, INC
Facility address:	3169 REDHILL AVE COSTA MESA, CA 92626
EPA ID:	CAD981424229
Mailing address:	REDHILL AVE COSTA MESA, CA 92626
Contact:	FERNANDO HERNANDEZ
Contact address:	REDHILL AVE COSTA MESA, CA 92626
Contact country:	Not reported
Contact telephone:	(714) 549-0421
Contact email:	FHERNANDEZ@CERADYNE.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:	TRICO REALTY
Owner/operator address:	A PULLMAN STREET COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 751-4420
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1960
Owner/Op end date:	Not reported
Owner/operator name:	CERADYNE, INC
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:	01/01/1979
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED

CERADYNE INC (Continued) **1000145800**

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

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: CERADYNE, INC
Site name: CERADYNE INC
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: CERADYNE, INC
Site name: CERADYNE INC
Classification: Small Quantity Generator

Date form received by agency: 05/15/1990
Facility name: CERADYNE, INC
Site name: CERADYNE INC
Classification: Large Quantity Generator

Date form received by agency: 07/02/1986
Facility name: CERADYNE, INC
Site name: CERADYNE INC
Classification: Large Quantity Generator

Date form received by agency: 07/02/1986
Facility name: CERADYNE, INC
Site name: CERADYNE INC
Classification: Large Quantity Generator

Hazardous Waste Summary:
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

CERADYNE INC (Continued) **1000145800**

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.

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

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.

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.

Biennial Reports:

Last Biennial Reporting Year: 2011

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): 4856

Waste code: D008
Waste name: LEAD
Amount (Lbs): 59016

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 138

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

CERADYNE INC (Continued) **1000145800**

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): 4039

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): 2150

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 12/18/1990
Date achieved compliance: 08/30/1994
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: 05/10/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/04/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/24/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/21/2009

CERADYNE INC (Continued) **1000145800**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/07/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 08/30/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 12/18/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/30/1994
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110002701176

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

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.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

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

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This

CERADYNE INC (Continued) **1000145800**

information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

HAZNET:

Year:	2005
Gepaid:	CAD981424229
Contact:	FERNANDO HERNANDEZ SFTY/ENVMTL
Telephone:	7145490421
Mailing Name:	Not reported
Mailing Address:	3169 RED HILL AVE
Mailing City,St,Zip:	COSTA MESA, CA 926263419
Gen County:	Orange
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Transfer Station
Tons:	0.22
Facility County:	Not reported

Year:	2004
Gepaid:	CAD981424229
Contact:	FERNANDO HERNANDEZ SFTY/ENVMTL
Telephone:	7145490421
Mailing Name:	Not reported
Mailing Address:	3169 RED HILL AVE
Mailing City,St,Zip:	COSTA MESA, CA 926263419
Gen County:	Orange
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Transfer Station
Tons:	0.22
Facility County:	Not reported

Year:	2003
Gepaid:	CAD981424229
Contact:	FERNANDO HERNANDEZ SFTY/ENVMTL
Telephone:	7145490421
Mailing Name:	Not reported
Mailing Address:	3169 RED HILL AVE
Mailing City,St,Zip:	COSTA MESA, CA 926263419
Gen County:	Orange
TSD EPA ID:	CAD982444481
TSD County:	Orange
Waste Category:	Waste oil and mixed oil
Disposal Method:	Transfer Station
Tons:	9.23
Facility County:	Orange

Year:	2003
Gepaid:	CAD981424229

CERADYNE INC (Continued) **1000145800**

Contact: FERNANDO HERNANDEZ SFTY/ENVMTL
Telephone: 7145490421
Mailing Name: Not reported
Mailing Address: 3169 RED HILL AVE
Mailing City,St,Zip: COSTA MESA, CA 926263419
Gen County: Orange
TSD EPA ID: NVT330010000
TSD County: Orange
Waste Category: Other inorganic solid waste
Disposal Method: Not reported
Tons: 0.25
Facility County: Orange

Year: 2003
Gepaid: CAD981424229
Contact: FERNANDO HERNANDEZ SFTY/ENVMTL
Telephone: 7145490421
Mailing Name: Not reported
Mailing Address: 3169 RED HILL AVE
Mailing City,St,Zip: COSTA MESA, CA 926263419
Gen County: Orange
TSD EPA ID: IND000646943
TSD County: Orange
Waste Category: Other organic solids
Disposal Method: Not reported
Tons: 0.3
Facility County: Orange

Click this hyperlink while viewing on your computer to access
126 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:
Year: 1990
County Code: 30
Air Basin: SC
Facility ID: 56112
Air District Name: SC
SIC Code: 3269
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: 11
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: 1993
County Code: 30
Air Basin: SC
Facility ID: 56112
Air District Name: SC
SIC Code: 3269
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported

CERADYNE INC (Continued) **1000145800**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	6
Reactive Organic Gases Tons/Yr:	3
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:	1995
County Code:	30
Air Basin:	SC
Facility ID:	56112
Air District Name:	SC
SIC Code:	3269
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:	6
Reactive Organic Gases Tons/Yr:	3
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:	1997
County Code:	30
Air Basin:	SC
Facility ID:	56112
Air District Name:	SC
SIC Code:	3269
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:	10
Reactive Organic Gases Tons/Yr:	10
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:	1998
County Code:	30
Air Basin:	SC
Facility ID:	56112
Air District Name:	SC
SIC Code:	3269
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:	10
Reactive Organic Gases Tons/Yr:	10
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

CERADYNE INC (Continued) **1000145800**

Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	30
Air Basin:	SC
Facility ID:	56112
Air District Name:	SC
SIC Code:	3269
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:	10
Reactive Organic Gases Tons/Yr:	10
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:	2000
County Code:	30
Air Basin:	SC
Facility ID:	56112
Air District Name:	SC
SIC Code:	3269
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:	10
Reactive Organic Gases Tons/Yr:	10
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:	2001
County Code:	30
Air Basin:	SC
Facility ID:	56112
Air District Name:	SC
SIC Code:	3269
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:	10
Reactive Organic Gases Tons/Yr:	10
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

G21 East 1/8-1/4 0.202 mi. 1066 ft. | **CERADYNE INC**
3169 REDHILL AVE
COSTA MESA, CA 92626

ENVIROSTOR WDS | **1005775296 N/A**

Site 2 of 2 in cluster G

Relative: Higher

Actual: 47 ft.

ENVIROSTOR:

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
Facility ID:	71002835
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	Not reported
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.64113
Longitude:	-117.9186
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD981424229
Alias Type:	EPA Identification Number
Alias Name:	71002835
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

CA WDS:

Facility ID:	Santa Ana River 30I012045
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or

CERADYNE INC (Continued) **1005775296**

	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:	7145490421
Facility Contact:	FERNANDO HERNANDEZ
Agency Name:	CERADYNE INC
Agency Address:	3169 REDHILL AVE
Agency City,St,Zip:	COSTA MESA 92626
Agency Contact:	FERNANDO HERNANDEZ
Agency Telephone:	7145490421
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	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.

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22 **TRICO** **UST** **U003778704**
ENE **235 PAULARINO AVE** **N/A**
1/8-1/4 **COSTA MESA, CA 92626**
0.220 mi.
1162 ft.

Relative:
Higher

Actual:
47 ft.

UST:

Facility ID:	10457
Latitude:	33.68049
Longitude:	-117.87494

23	**UROHEALTH INC**	**RCRA-SQG**	**1000274093**
SSE	**3050 REDHILL AVE**	**FINDS**	**CAD981451578**
1/8-1/4	**COSTA MESA, CA 92626**		
0.221 mi.			
1168 ft.			

Relative:
Higher

Actual:
46 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	UROHEALTH INC
Facility address:	3050 REDHILL AVE COSTA MESA, CA 92626
EPA ID:	CAD981451578
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
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:	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

Owner/operator name:	UROHEALTH INC
Owner/operator address:	3950 REDHILL AVE COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 708-7748
Legal status:	Other
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

UROHEALTH INC (Continued) **1000274093**

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: 08/29/1996
Facility name: UROHEALTH INC
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002711762

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.

24
WNW
1/8-1/4
0.229 mi.
1210 ft.

Relative:
Lower

Actual:
37 ft.

BULLET PERFORMANCE ENG INC **RCRA-SQG** **1001967489**
3017 ENTERPRISE STE A **FINDS** **CAR000069682**
COSTA MESA, CA 92626 **HAZNET**

RCRA-SQG:
Date form received by agency: 04/06/2000
Facility name: BULLET PERFORMANCE ENG INC
Facility address: 3017 ENTERPRISE STE A
COSTA MESA, CA 92626
EPA ID: CAR000069682
Contact: CHRISTOPHER WELCH
Contact address: 3017 ENTERPRISE STE A
COSTA MESA, CA 92626
Contact country: US
Contact telephone: (714) 556-4269
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: CHRIS WELCH AND MICKEY MILLER
Owner/operator address: 3017 ENTERPRISE STE A
COSTA MESA, CA 92626
Owner/operator country: Not reported

BULLET PERFORMANCE ENG INC (Continued) **1001967489**

Owner/operator telephone: (714) 556-4269
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

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

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.

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

FINDS:

Registry ID: 110002934754

Environmental Interest/Information System
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.

BULLET PERFORMANCE ENG INC (Continued) **1001967489**

HAZNET:

Year:	2002
Gepaid:	CAL000188533
Contact:	CHRIS WELCH\\ OWNER
Telephone:	7145564269
Mailing Name:	Not reported
Mailing Address:	3017 ENTERPRISE UNIT A
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	Not reported
TSD County:	Los Angeles
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Tons:	0.20
Facility County:	Not reported

Year:	2002
Gepaid:	CAL000188533
Contact:	CHRIS WELCH\\ OWNER
Telephone:	7145564269
Mailing Name:	Not reported
Mailing Address:	3017 ENTERPRISE UNIT A
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	Not reported
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	1.01
Facility County:	Not reported

Year:	2000
Gepaid:	CAL000188533
Contact:	CHRIS WELCH
Telephone:	7145564269
Mailing Name:	Not reported
Mailing Address:	3017 ENTERPRISE UNIT A
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAD099452708
TSD County:	Los Angeles
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Recycler
Tons:	.4378
Facility County:	Orange

H25 **GENERAL MONITORS, INC** **RCRA-NonGen** **1000213952**
WNW **3037 ENTERPRISE ST** **FINDS** **CAD981386949**
1/8-1/4 **COSTA MESA, CA 92626**
0.239 mi.
1263 ft. **Site 1 of 3 in cluster H**

Relative:
Lower

Actual:
37 ft.

RCRA-NonGen:

Date form received by agency:	02/11/1986
Facility name:	GENERAL MONITORS, INC
Facility address:	3037 ENTERPRISE ST COSTA MESA, CA 92626

GENERAL MONITORS, INC (Continued) **1000213952**

EPA ID:	CAD981386949
Mailing address:	ENTERPRISE ST COSTA MESA, CA 92626
Contact:	ENVIRONMENTAL MANAGER
Contact address:	3037 ENTERPRISE ST COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 540-4895
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

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
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	F LINVILLE
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

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: 110002689680

GENERAL MONITORS, INC (Continued) **1000213952**

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.

H26 WNW 1/8-1/4 0.241 mi. 1273 ft. | **COAST MERCEDES SVC**
3042 ENTERPRISE #B
COSTA MESA, CA 92626 | **RCRA-SQG FINDS** | **1000387313 CAD981651680**

Site 2 of 3 in cluster H

Relative: Lower

Actual: 37 ft.

RCRA-SQG:

Date form received by agency:	03/05/1987
Facility name:	COAST MERCEDES SVC
Facility address:	3042 ENTERPRISE #B COSTA MESA, CA 92626
EPA ID:	CAD981651680
Contact:	ENVIRONMENTAL MANAGER
Contact address:	3042 ENTERPRISE #B COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 957-1507
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:	LARRY KABAIAN
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

COAST MERCEDES SVC (Continued) **1000387313**

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: 110002737824

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.

H27 **ENGINE SUPPLY & EXCHANGE** **RCRA-SQG** **1000256344**
WNW **3042 ENTERPRISE UNIT E** **FINDS** **CAD981665268**
1/8-1/4 **COSTA MESA, CA 92626** **HAZNET**
0.241 mi.
1273 ft. **Site 3 of 3 in cluster H**

Relative:
Lower

Actual:
37 ft.

RCRA-SQG:

Date form received by agency:	11/14/1986
Facility name:	ENGINE SUPPLY & EXCHANGE
Facility address:	3042 ENTERPRISE UNIT E COSTA MESA, CA 92626
EPA ID:	CAD981665268
Mailing address:	PO BOX 27 DANA POINT, CA 92629
Contact:	ENVIRONMENTAL MANAGER
Contact address:	3042 ENTERPRISE UNIT E COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	(714) 556-0310
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

ENGINE SUPPLY & EXCHANGE (Continued) **1000256344**

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	RIMPAU CO 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

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: 110002742391

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.

HAZNET:

ENGINE SUPPLY & EXCHANGE (Continued) **1000256344**

Year:	1994
Gepaid:	CAD981665268
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	PO BOX 27
Mailing City,St,Zip:	DANA POINT, CA 926290000
Gen County:	Orange
TSD EPA ID:	CAD000088252
TSD County:	Los Angeles
Waste Category:	Other inorganic solid waste
Disposal Method:	Transfer Station
Tons:	.1425
Facility County:	Orange

Year:	1993
Gepaid:	CAD981665268
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	PO BOX 27
Mailing City,St,Zip:	DANA POINT, CA 926290000
Gen County:	Orange
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Waste oil and mixed oil
Disposal Method:	Disposal, Land Fill
Tons:	.4719
Facility County:	Orange

28
SE
1/4-1/2
0.256 mi.
1352 ft.

TRD USA INC.
335 E BAKER ST
COSTA MESA, CA 92626

CERC-NFRAP **1000110116**
RCRA-SQG **CAD053853644**
FINDS

Relative:
Higher

Actual:
49 ft.

CERC-NFRAP:

Site ID:	0900312
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID:	13054096.00000
Person ID:	9271184.00000
Contact Sequence ID:	13287040.00000
Person ID:	13003854.00000
Contact Sequence ID:	13292635.00000
Person ID:	13003858.00000
Contact Sequence ID:	13298493.00000
Person ID:	13004003.00000

CERCLIS-NFRAP Site Alias Name(s):

Alias Name:	SYMBOL TECHNOLOGIES, INC.

TRD USA INC. (Continued) **1000110116**

Alias Address: Not reported
CA

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	01/01/1991
Priority Level:	Not reported
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	03/31/1992
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	03/31/1992
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

RCRA-SQG:

Date form received by agency:	03/11/2002
Facility name:	TOYOTA RACING DEVELOPMENT USA INC
Facility address:	335 E BAKER ST COSTA MESA, CA 92626
EPA ID:	CAD053853644
Mailing address:	E BAKER ST COSTA MESA, CA 92626
Contact:	FRANK LOPEZ
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(714) 444-1188
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:	MSI DATA CORPORATION
Owner/operator address:	340 FISCHER AVE CITY NOT REPORTED, CA 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 549-6000
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	TRD USA INC
Owner/operator address:	335 E BAKER COSTA MESA, CA 92626

TRD USA INC. (Continued) **1000110116**

Owner/operator country: Not reported
Owner/operator telephone: (714) 444-1188
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: 03/11/2002
Facility name: TOYOTA RACING DEVELOPMENT USA INC
Classification: Large Quantity Generator

Date form received by agency: 04/03/1995
Facility name: TOYOTA RACING DEVELOPMENT USA INC
Site name: TRD USA INC
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 03/22/1989
Date achieved compliance: 08/21/1989
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: FR - 264.110-120.G
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 03/22/1989
Date achieved compliance: 08/21/1989
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported

TRD USA INC. (Continued) **1000110116**

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: FR - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 09/29/1987
Date achieved compliance: 10/22/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/14/1987
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: F - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 04/28/1987
Date achieved compliance: 03/22/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/05/1987
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: F - 262.50-60
Area of violation: Generators - General
Date violation determined: 04/28/1987
Date achieved compliance: 03/22/1989
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/05/1987
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: 04/07/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: Local

Evaluation date: 02/22/2005

TRD USA INC. (Continued) **1000110116**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 03/22/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 08/21/1989
Evaluation lead agency: State

Evaluation date: 03/22/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/21/1989
Evaluation lead agency: State

Evaluation date: 03/14/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/29/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 10/22/1987
Evaluation lead agency: State

Evaluation date: 04/28/1987
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 03/22/1989
Evaluation lead agency: State

Evaluation date: 04/28/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/22/1989
Evaluation lead agency: State

FINDS:

Registry ID: 110002649395

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal

TRD USA INC. (Continued) **1000110116**

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.

HAZARDOUS WASTE BIENNIAL REPORTER

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

29
SE
1/4-1/2
0.334 mi.
1761 ft.

ORANGE COUNTY FIRE STATIO
18992
SANTA ANA, CA 92707

HIST CORTESE **S103065508**
N/A

Relative:
Higher

Actual:
50 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000548T

30
SE
1/4-1/2
0.388 mi.
2050 ft.

THE ABBEY SCHERER COMPANY
3130 AIRWAY
COSTA MESA, CA 92626

HIST CORTESE **S101299417**
LUST **N/A**

Relative:
Higher

Actual:
52 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001610T

LUST:

Region:	STATE
Global Id:	T0605901220
Latitude:	33.675135
Longitude:	-117.873125
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/30/1997
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001610T
LOC Case Number:	90UT174
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

THE ABBEY SCHERER COMPANY (Continued) **S101299417**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605901220
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:	T0605901220
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

LUST:

Global Id:	T0605901220
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605901220
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	90UT174
Current Status:	Certification (Case Closed)
Released Substance:	Waste oil/Used oil
Date Closed:	05/30/1997
Case Type:	Soil Only
Record ID:	RO0001052

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083001610T
Local Case Num:	90UT174
Case Type:	Soil only
Substance:	Waste Oil
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported

THE ABBEY SCHERER COMPANY (Continued) **S101299417**

Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901220
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	7/6/1990
Enforcement Date:	Not reported
Close Date:	5/30/1997
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	33.6758398
Longitude:	-117.8734138
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

31
ESE
1/4-1/2
0.394 mi.
2082 ft.

Relative:
Higher

Actual:
51 ft.

JOHN WAYNE AIRPORT WEST AIRFIE **Cortese** **S101631297**
3151 AIRWAY AVE **CA FID UST** **N/A**
COSTA MESA, CA 92627 **SLIC**
SWEEPS UST
Orange Co. Industrial Site
ENF
WDS

CORTESE:

Region:	CORTESE
Envirostor Id:	Not reported
Site/Facility Type:	Not reported
Cleanup Status:	Not reported

JOHN WAYNE AIRPORT WEST AIRFIE (Continued) **S101631297**

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:	CORTESE
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	8
WID Id:	8 302562N01
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported

CA FID UST:

Facility ID:	30017621
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	3151 AIRWAY BLDG M3 ATTN:
Mailing Address 2:	Not reported
Mailing City,St,Zip:	COSTA MESA 92627
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:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	02/03/2009
Global Id:	SL208013856
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	33.6664788951059
Longitude:	-117.872722148895
Case Type:	Cleanup Program Site
Case Worker:	RS
Local Agency:	Not reported
RB Case Number:	SL208013856
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Trichloroethylene (TCE), Aviation, Diesel, MTBE / TBA / Other Fuel Oxygenates, Gasoline, Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Large petrochemical storage for fueling airplanes and vehicles at the facility. Several releases and discharges.

JOHN WAYNE AIRPORT WEST AIRFIE (Continued) **S101631297**

Click here to access the California GeoTracker records for this facility:

SWEEPS UST:

Status:	A
Comp Number:	9158
Number:	9
Board Of Equalization:	Not reported
Ref Date:	09-30-92
Act Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-009158-000001
Actv Date:	Not reported
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	2

Status:	A
Comp Number:	9158
Number:	9
Board Of Equalization:	Not reported
Ref Date:	09-30-92
Act Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-009158-000002
Actv Date:	Not reported
Capacity:	1000
Tank Use:	PETROLEUM
Stg:	P
Content:	Not reported
Number Of Tanks:	2

Orange Co. Industrial Site:

Case ID:	89IC049
Region:	ORANGE
Record ID:	RO0000226
Current Status:	CLOSED 3/16/1990
Closure Type:	Closed pre 1994, file review required to determine closure type
Released Chemical:	TRICHLOROETHYLENE

ENF:

Region:	8
Facility Id:	233949
Agency Name:	John Wayne Airport
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Other
# Of Agencies:	1
Place Latitude:	Not reported

JOHN WAYNE AIRPORT WEST AIRFIE (Continued) **S101631297**

Place Longitude:	Not reported
SIC Code 1:	4581
SIC Desc 1:	Airports, Flying Fields, and Airport Terminal Services
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:	UNREGS
# Of Programs:	1
WDID:	8 302562N01
Reg Measure Id:	158760
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:	Active
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):	225060
Region:	8
Order / Resolution Number:	88-123
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	09/09/1988

JOHN WAYNE AIRPORT WEST AIRFIE (Continued) **S101631297**

Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	CAO 88-123 for John Wayne Airport
Description:	GROUND WATER CLEAN UP
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

Region:	8
Facility Id:	259061
Agency Name:	John Wayne Airport
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Other
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4581
SIC Desc 1:	Airports, Flying Fields, and Airport Terminal Services
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:	1
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Nonhazardous stormwater runoff
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDES
# Of Programs:	1
WDID:	8 302654001
Reg Measure Id:	205955
Reg Measure Type:	Enrollee
Region:	8

JOHN WAYNE AIRPORT WEST AIRFIE (Continued) **S101631297**

Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/08/1990
Effective Date:	06/08/1990
Expiration/Review Date:	Not reported
Termination Date:	07/01/2008
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:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	222981
Region:	8
Order / Resolution Number:	96-078
Enforcement Action Type:	Admin Civil Liability
Effective Date:	09/06/1996
Adoption/Issuance Date:	Not reported
Achieve Date:	11/15/1996
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 302654001
Description:	13385 - FAILURE TO SUBMIT NPDES RENEWAL APPLICATION. SUSPENSION OF $1000 CONTINGENT UPON SUBMISSION OF THE APPLICATIONWITHIN 30 DAYS.
Program:	NPDES
Latest Milestone Completion Date:	11/15/1996
# Of Programs1:	1
Total Assessment Amount:	4000
Initial Assessed Amount:	0
Liability $ Amount:	4000
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

CA WDS:

Facility ID:	Santa Ana River 30I005741
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

JOHN WAYNE AIRPORT WEST AIRFIE (Continued) **S101631297**

	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:	9492525269
Facility Contact:	CHRIS CALIENDO
Agency Name:	ORANGE CO. DEPT. OF AIRPORTS
Agency Address:	3151 AIRWAY AVENUE
Agency City,St,Zip:	COSTA MESA 92626
Agency Contact:	ALAN L. MURPHY
Agency Telephone:	Not reported
Agency Type:	County
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	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.

32
ESE
1/4-1/2
0.397 mi.
2096 ft.

JOHN WAYNE AIRPORT FIRE STN #33 **LUST** **S106387332**
366 PAULARINO ROAD **N/A**
SANTA ANA, CA 92626

Relative:
Higher

Actual:
50 ft.

LUST:

Region:	STATE
Global Id:	T0605901723
Latitude:	33.6787257
Longitude:	-117.8725798
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/22/2010
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	RS
Local Agency:	Not reported
RB Case Number:	083002411T
LOC Case Number:	93UT093
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

JOHN WAYNE AIRPORT FIRE STN #33 (Continued) **S106387332**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605901723
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

LUST:

Global Id:	T0605901723
Action Type:	RESPONSE
Date:	05/30/2004
Action:	Soil and Water Investigation Report
Global Id:	T0605901723
Action Type:	ENFORCEMENT
Date:	07/28/2009
Action:	Staff Letter
Global Id:	T0605901723
Action Type:	RESPONSE
Date:	05/30/2004
Action:	Soil and Water Investigation Workplan
Global Id:	T0605901723
Action Type:	ENFORCEMENT
Date:	08/21/2002
Action:	* Verbal Communication
Global Id:	T0605901723
Action Type:	ENFORCEMENT
Date:	05/12/2008
Action:	Site Visit / Inspection / Sampling
Global Id:	T0605901723
Action Type:	RESPONSE
Date:	07/17/2003
Action:	Soil and Water Investigation Report
Global Id:	T0605901723
Action Type:	ENFORCEMENT
Date:	03/16/2010
Action:	Closure/No Further Action Letter
Global Id:	T0605901723
Action Type:	ENFORCEMENT
Date:	03/03/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0605901723
Action Type:	ENFORCEMENT
Date:	08/01/2003

JOHN WAYNE AIRPORT FIRE STN #33 (Continued) **S106387332**

Action: Staff Letter

Global Id: T0605901723
Action Type: ENFORCEMENT
Date: 10/07/2005
Action: * No Action

Global Id: T0605901723
Action Type: RESPONSE
Date: 09/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0605901723
Action Type: ENFORCEMENT
Date: 04/10/2003
Action: Staff Letter

Global Id: T0605901723
Action Type: ENFORCEMENT
Date: 05/12/2008
Action: Verbal Enforcement

Global Id: T0605901723
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605901723
Action Type: RESPONSE
Date: 10/30/2002
Action: Other Workplan

Global Id: T0605901723
Action Type: RESPONSE
Date: 02/28/2003
Action: Other Report / Document

Global Id: T0605901723
Action Type: ENFORCEMENT
Date: 02/03/2009
Action: File review

Global Id: T0605901723
Action Type: ENFORCEMENT
Date: 01/10/2003
Action: Staff Letter

Global Id: T0605901723
Action Type: RESPONSE
Date: 03/14/2003
Action: Soil and Water Investigation Workplan

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region

JOHN WAYNE AIRPORT FIRE STN #33 (Continued) **S106387332**

Facility Status:	Pollution Characterization
Case Number:	083002411T
Local Case Num:	93UT093
Case Type:	Aquifer affected
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0605901723
How Stopped Date:	Not reported
Enter Date:	4/12/1994
Review Date:	8/21/2002
Prelim Assess:	1/2/2003
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	3/8/1994
Workplan:	9/30/2002
Pollution Char:	5/17/2004
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	4/12/1994
GW Qualifies:	<
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.6787257
Longitude:	-117.8725798
MTBE Date:	12/1/2000
Max MTBE GW:	100
MTBE Concentration:	3
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	C
Staff:	RS
Staff Initials:	AR
Lead Agency:	Regional Board
Local Agency:	30000L
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	AGR, PROC, IND, MUN
Priority:	A3
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	3/29/00 Case Transferred to new RB staff

33 ENE 1/4-1/2 0.399 mi. 2109 ft. | **SEMICOA 333 MCCORMICK COSTA MESA, CA 92626** | **RCRA-SQG FINDS HAZNET ENVIROSTOR WDS** | **1000247282 CAD047429824**

Relative: Higher

Actual: 46 ft.

RCRA-SQG:

Date form received by agency:	09/30/2009
Facility name:	SEMICOA CORPORATION
Facility address:	333 MCCORMICK AVE COSTA MESA, CA 92626
EPA ID:	CAD047429824
Contact:	SCOTT BEATTIE
Contact address:	333 MCCORMICK AVE COSTA MESA, CA 92626
Contact country:	US
Contact telephone:	714-949-1900
Contact email:	GPAPADAPOULOS@MICROSEMI.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:	SEMICOA CORP
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:	09/15/2009
Owner/Op end date:	Not reported

Owner/operator name:	JGSM LLC
Owner/operator address:	3198 A 2 AIRPORT LOOP DR COSTA MESA, CA 92926
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1990
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

SEMICOA (Continued) **1000247282**

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: 02/24/2009
Facility name: SEMICOA CORPORATION
Site name: SEMICOA ACQUISITION CORP
Classification: Small Quantity Generator

Date form received by agency: 09/04/1986
Facility name: SEMICOA CORPORATION
Site name: SEMICOA
Classification: Small Quantity Generator

Hazardous Waste Summary:
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.

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.

Waste code: D011
Waste name: SILVER

Waste code: D035
Waste name: METHYL ETHYL KETONE

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.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

SEMICOA (Continued) **1000247282**

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.

Violation Status: No violations found

FINDS:

Registry ID: 110002646904

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

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.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

HAZNET:

Year:	2005
Gepaid:	CAD047429824
Contact:	MARK SCHAFER/FACILITY MGR
Telephone:	7149791900
Mailing Name:	Not reported
Mailing Address:	333 MCCORMICK AVE
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAD980884183
TSD County:	Sacramento
Waste Category:	Unspecified solvent mixture
Disposal Method:	Transfer Station
Tons:	0.91
Facility County:	Not reported

Year:	2004
Gepaid:	CAD047429824
Contact:	MARK SCHAFER/FACILITY MGR
Telephone:	7149791900
Mailing Name:	Not reported
Mailing Address:	333 MCCORMICK AVE
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange

SEMICOA (Continued) **1000247282**

TSD EPA ID: CAD980884183
TSD County: Sacramento
Waste Category: Unspecified solvent mixture
Disposal Method: Transfer Station
Tons: 0.91
Facility County: Not reported

Year: 2003
Gepaid: CAD047429824
Contact: MARK SCHAFER/FACILITY MGR
Telephone: 7149791900
Mailing Name: Not reported
Mailing Address: 333 MCCORMICK AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT080033681
TSD County: Orange
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.22
Facility County: Orange

Year: 2003
Gepaid: CAD047429824
Contact: MARK SCHAFER/FACILITY MGR
Telephone: 7149791900
Mailing Name: Not reported
Mailing Address: 333 MCCORMICK AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: IND000646943
TSD County: Orange
Waste Category: Unspecified solvent mixture
Disposal Method: Recycler
Tons: 0.45
Facility County: Orange

Year: 2003
Gepaid: CAD047429824
Contact: MARK SCHAFER/FACILITY MGR
Telephone: 7149791900
Mailing Name: Not reported
Mailing Address: 333 MCCORMICK AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT080033681
TSD County: Orange
Waste Category: Liquids with pH <= 2
Disposal Method: Recycler
Tons: 0.01
Facility County: Orange

Click this hyperlink while viewing on your computer to access
40 additional CA_HAZNET: record(s) in the EDR Site Report.

ENVIROSTOR:
Site Type: Tiered Permit

SEMICOA (Continued) **1000247282**

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
Facility ID: 71002417
Site Code: Not reported
Assembly: 74
Senate: 37
Special Program: Not reported
Status: Inactive - Needs Evaluation
Status Date: Not reported
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 33.68043
Longitude: -117.8720
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD047429824
Alias Type: EPA Identification Number
Alias Name: 71002417
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

CA WDS:
Facility ID: Santa Ana River 30I017777
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.

SEMICOA (Continued) **1000247282**

NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	7149791900
Facility Contact:	GERRI GIBB
Agency Name:	SEMICOA
Agency Address:	333 MCCORMICK
Agency City,St,Zip:	COSTA MESA 92626
Agency Contact:	GERRI GIBB
Agency Telephone:	7149791900
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	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.

I34 **WADE FAMLY TRUST/ARCO #1257** **LUST** **S106447686**
West **2990 BRISTOL** **Orange Co. Industrial Site** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.407 mi.
2149 ft. **Site 1 of 3 in cluster I**

Relative:
Lower

Actual:
41 ft.

LUST:

Region:	STATE
Global Id:	T0605900663
Latitude:	33.679674
Longitude:	-117.885325
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/23/1997
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000842T
LOC Case Number:	88UT072
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

WADE FAMLY TRUST/ARCO #1257 (Continued) **S106447686**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605900663
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:	T0605900663
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

LUST:

Global Id:	T0605900663
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation

Global Id:	T0605900663
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605900663
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	88UT072
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	12/23/1997
Case Type:	Other Ground Water
Record ID:	RO0002593

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000842T
Local Case Num:	88UT072
Case Type:	Other ground water affected

WADE FAMLY TRUST/ARCO #1257 (Continued) **S106447686**

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:	T0605900663
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	2/5/1988
Enforcement Date:	Not reported
Close Date:	12/23/1997
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	33.6795716
Longitude:	-117.8855671
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:	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

Orange Co. Industrial Site:

Case ID:	88IC052
Region:	ORANGE
Record ID:	RO0000136
Current Status:	CLOSED 2/5/1988
Closure Type:	Transferred to OCLOP Program
Released Chemical:	DATA NOT ENTERED, SEE FILE

I35 West 1/4-1/2 0.409 mi. 2159 ft. — **G & M OIL CO #21**, **2995 BRISTOL ST**, **COSTA MESA, CA 92626** — **HIST CORTESE**, **CA FID UST** — **S101631294**, **N/A**

Site 2 of 3 in cluster I

Relative: Lower

Actual: 40 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002785T

CA FID UST:

Facility ID:	30011098
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7147549402
Mail To:	Not reported
Mailing Address:	15402 ELECTRONIC LN O J OT
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

I36 West 1/4-1/2 0.409 mi. 2159 ft. — **G & M OIL CO INC #21**, **2995 BRISTOL**, **COSTA MESA, CA 92626** — **NPDES**, **LUST**, **CHMIRS**, **HAZNET** — **S103650460**, **N/A**

Site 3 of 3 in cluster I

Relative: Lower

Actual: 40 ft.

NPDES:

Npdes Number:	CAG918002
Facility Status:	Historical
Agency Id:	17493
Region:	8
Regulatory Measure Id:	343247
Order No:	Not reported
Regulatory Measure Type:	Enrollee
Place Id:	228210
WDID:	8 303568001
Program Type:	NPDES
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/05/2008
Expiration Date Of Regulatory Measure:	11/01/2012
Termination Date Of Regulatory Measure:	07/30/2010
Discharge Name:	G & M Oil Company
Discharge Address:	16868 A Street
Discharge City:	Huntington Beach
Discharge State:	CA
Discharge Zip:	92647

G & M OIL CO INC #21 (Continued) **S103650460**

LUST:

Region:	STATE
Global Id:	T0605901918
Latitude:	33.6797936
Longitude:	-117.8858121
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	10/07/2002
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002785T
LOC Case Number:	95UT068
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:

LUST:

Global Id:	T0605901918
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:	T0605901918
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:	T0605901918
Action Type:	RESPONSE
Date:	04/14/2010
Action:	Clean Up Fund - 5-Year Review Summary

Global Id:	T0605901918
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Free Product Removal

Global Id:	T0605901918
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	In Situ Physical/Chemical Treatment (other than SVE)

G & M OIL CO INC #21 (Continued) **S103650460**

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 10/06/2009
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 11/03/2009
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 02/26/2007
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 09/25/2008
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 04/17/2012
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 03/24/2008
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 05/26/2010
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 07/23/2010
Action: File review

Global Id: T0605901918
Action Type: RESPONSE
Date: 04/03/2012
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605901918
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 10/31/1995
Action: Notice of Responsibility

Global Id: T0605901918
Action Type: ENFORCEMENT

G & M OIL CO INC #21 (Continued) **S103650460**

Date: 01/31/2001
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 05/02/2005
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 02/05/2009
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 01/20/2011
Action: File review

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 10/13/2010
Action: File review

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 04/05/2011
Action: File review

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 01/04/2007
Action: Staff Letter

Global Id: T0605901918
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 07/13/2009
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 04/08/2011
Action: Staff Letter

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 06/13/2011
Action: File review

Global Id: T0605901918
Action Type: ENFORCEMENT
Date: 04/03/2009
Action: Staff Letter

G & M OIL CO INC #21 (Continued) **S103650460**

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	95UT068
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:	RO0002659

Region:	ORANGE
Facility Id:	95UT068
Current Status:	Not reported
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	Not reported
Case Type:	Not reported
Record ID:	RO0002659

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083002785T
Local Case Num:	95UT068
Case Type:	Other ground water affected
Substance:	12034,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	NOR
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	New Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605901918
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	10/25/1995
Enforcement Date:	Not reported
Close Date:	Not reported
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	10/7/2002
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:	33.6797936

G & M OIL CO INC #21 (Continued) **S103650460**

Longitude: -117.8858121
MTBE Date: 5/9/2003
Max MTBE GW: 26.1
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

CHMIRS:
OES Incident Number: 02-2608
OES notification: 5/15/200201:16:37 PM
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
Special Studies 1: Not reported
Special Studies 2: Not reported
Special Studies 3: Not reported
Special Studies 4: Not reported
Special Studies 5: Not reported
Special Studies 6: 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
Comments: Not reported
Facility Telephone: Not reported

G & M OIL CO INC #21 (Continued) **S103650460**

Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2002
Agency:	G&M Oil
Incident Date:	5/10/200212:00:00 AM
Admin Agency:	Orange Cnty Management Div - HazMat Div.
Amount:	Not reported
Contained:	Yes
Site Type:	Service Station
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	Not reported
BBLS:	0
Cups:	0
CUFT:	0
Gallons:	11
Grams:	0
Pounds:	0
Liters:	0
Ounces:	0
Pints:	0
Quarts:	0
Sheen:	0
Tons:	0
Unknown:	0
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
Description:	Per caller, when a customer was pumping gas the pump would not turn off.

HAZNET:

Year:	2011
Gepaid:	CAL000004974
Contact:	ANDREA MUNOZ, COMPLIANCE MANAGER
Telephone:	7143754700
Mailing Name:	Not reported
Mailing Address:	16868 A ST
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926474831
Gen County:	Not reported
TSD EPA ID:	CAD008252405
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.068
Facility County:	Orange

Year:	2010
Gepaid:	CAL000004974

G & M OIL CO INC #21 (Continued) **S103650460**

Contact:	ANDREA MUNOZ, COMPLIANCE MANAGER
Telephone:	7143754700
Mailing Name:	Not reported
Mailing Address:	16868 A ST
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926474831
Gen County:	Not reported
TSD EPA ID:	CAD097030993
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.06
Facility County:	Orange

Year:	2009
Gepaid:	CAL000004974
Contact:	JIM SMITH, COMPLIANCE MANAGER
Telephone:	7143754700
Mailing Name:	Not reported
Mailing Address:	16868 A STREET
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Orange
TSD EPA ID:	CAD981696420
TSD County:	Los Angeles
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.693
Facility County:	Orange

Year:	2008
Gepaid:	CAL000004974
Contact:	JIM SMITH, COMPLIANCE MANAGER
Telephone:	7143754700
Mailing Name:	Not reported
Mailing Address:	16868 A STREET
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Orange
TSD EPA ID:	CAD981696420
TSD County:	Los Angeles
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.7089
Facility County:	Orange

Year:	2008
Gepaid:	CAL000004974
Contact:	JIM SMITH, COMPLIANCE MANAGER
Telephone:	7143754700
Mailing Name:	Not reported
Mailing Address:	16868 A STREET
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Orange
TSD EPA ID:	CAD981696420
TSD County:	Los Angeles
Waste Category:	Other organic solids

G & M OIL CO INC #21 (Continued) **S103650460**

Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.11
Facility County: Orange

Click this hyperlink while viewing on your computer to access
25 additional CA_HAZNET: record(s) in the EDR Site Report.

37
ENE
1/4-1/2
0.417 mi.
2203 ft.

PRIME TECHNOLOGIES, INC.
3183 REDHILL AVENUE
COSTA MESA, CA 92626

ENVIROSTOR **S110494201**
N/A

Relative:
Higher

Actual:
44 ft.

ENVIROSTOR:

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
Facility ID:	71002874
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	Not reported
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.64113
Longitude:	-117.9186
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD981573108
Alias Type:	EPA Identification Number
Alias Name:	71002874
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

PRIME TECHNOLOGIES, INC. (Continued) **S110494201**

Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

J38 **CHEVRON #9-1660** **LUST** **S106170908**
WNW **3048 BRISTOL STREET** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.438 mi.
2313 ft. **Site 1 of 5 in cluster J**

Relative:
Lower

Actual:
38 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Preliminary site assessment underway
Case Number:	Not reported
Local Case Num:	04UT001
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:	PS
How Stopped:	Other Means
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605933179
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	12/9/2003
Discover Date:	12/9/2003
Enforcement Date:	Not reported
Close Date:	Not reported
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	0
Longitude:	0
MTBE Date:	9/22/2004
Max MTBE GW:	210
MTBE Concentration:	0
Max MTBE Soil:	77
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*

CHEVRON #9-1660 (Continued) **S106170908**

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

J39 WNW 1/4-1/2 0.438 mi. 2313 ft. **CHEVRON STATION NO 91660** **RCRA-SQG** **1000595129**
3048 BRISTOL ST **FINDS** **CAD983590225**
COSTA MESA, CA 92626 **HIST CORTESE**
LUST
Site 2 of 5 in cluster J **HAZNET**

Relative: Lower

Actual: 38 ft.

RCRA-SQG:
Date form received by agency: 06/17/2002
Facility name: CHEVRON STATION NO 91660
Facility address: 3048 BRISTOL ST
COSTA MESA, CA 926263036
EPA ID: CAD983590225
Mailing address: P O BOX 6004
SAN RAMON, CA 94583
Contact: KATHY NORRIS
Contact address: P O BOX 6004
SAN RAMON, CA 94583
Contact country: US
Contact telephone: (925) 842-5931
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: CHEVRON PRODUCTS CO
Owner/operator address: P O BOX 6004
SAN RAMON, CA 94583
Owner/operator country: Not reported
Owner/operator telephone: (925) 842-5931
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

CHEVRON STATION NO 91660 (Continued) **1000595129**

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

Hazardous Waste Summary:
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.

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110002850068

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.

UORS (California - Used Oil Recycling System). California Integrated Waste Management Board (CIWMB) helps communities establish and promote convenient collection opportunities for used oil and used oil filters.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA

CHEVRON STATION NO 91660 (Continued) **1000595129**

Reg Id: 083000926T

LUST:

Region:	STATE
Global Id:	T0605933179
Latitude:	33.682038
Longitude:	-117.885197
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/29/2006
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	SK
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	04UT001
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:

LUST:

Global Id:	T0605933179
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:	T0605933179
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

LUST:

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	01/09/2004
Action:	Notice of Responsibility

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	08/10/2004
Action:	Staff Letter

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	08/29/2006
Action:	Closure/No Further Action Letter

CHEVRON STATION NO 91660 (Continued) **1000595129**

Global Id:	T0605933179
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	01/20/2004
Action:	Staff Letter

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	06/01/2004
Action:	Staff Letter

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	12/29/2004
Action:	Staff Letter

Global Id:	T0605933179
Action Type:	ENFORCEMENT
Date:	09/13/2005
Action:	Staff Letter

Global Id:	T0605933179
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Region:	STATE
Global Id:	T0605901898
Latitude:	33.682047
Longitude:	-117.885201
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/17/1997
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002751T
LOC Case Number:	95UT051
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:

LUST:

Global Id:	T0605901898
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

CHEVRON STATION NO 91660 (Continued) **1000595129**

Phone Number: 7144336255

Global Id: T0605901898
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

LUST:
Global Id: T0605901898
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901898
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 95UT051
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 10/17/1997
Case Type: Other Ground Water
Record ID: RO0002252

Region: ORANGE
Facility Id: 04UT001
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 08/29/2006
Case Type: Other Ground Water
Record ID: RO0003270

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083002751T
Local Case Num: 95UT051
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

CHEVRON STATION NO 91660 (Continued) **1000595129**

Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901898
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	8/7/1995
Enforcement Date:	Not reported
Close Date:	10/17/1997
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	33.6822345
Longitude:	-117.8855121
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

HAZNET:

Year:	2010
Gepaid:	CAL000031298
Contact:	MARYLOU MENDEZ
Telephone:	7145454257
Mailing Name:	Not reported
Mailing Address:	3048 BRISTOL ST
Mailing City,St,Zip:	COSTA MESA, CA 926263036
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Oil/water separation sludge
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	5.838

CHEVRON STATION NO 91660 (Continued) **1000595129**

Facility County: Orange

Year: 2008
Gepaid: CAL000031298
Contact: MARYLOU MENDEZ
Telephone: 7145454257
Mailing Name: MENDEZ AUTOMOTIVE SERVICES
Mailing Address: 3048 BRISTOL ST
Mailing City,St,Zip: COSTA MESA, CA 926263036
Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Tank bottom waste
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 5.838
Facility County: Orange

Year: 1999
Gepaid: CAD983590225
Contact: LOU BACCA
Telephone: 4155551212
Mailing Name: Not reported
Mailing Address: 3048 BRISTOL
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Oil/water separation sludge
Disposal Method: Transfer Station
Tons: 0.6255
Facility County: Orange

Year: 1998
Gepaid: CAD983590225
Contact: LOU BACCA
Telephone: 4155551212
Mailing Name: Not reported
Mailing Address: 3048 BRISTOL
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT000613893
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Transfer Station
Tons: .1167
Facility County: Orange

Year: 1997
Gepaid: CAD983590225
Contact: LOU BACCA
Telephone: 4155551212
Mailing Name: Not reported
Mailing Address: 3048 BRISTOL
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD099452708

CHEVRON STATION NO 91660 (Continued) **1000595129**

TSD County:	Los Angeles
Waste Category:	Oil/water separation sludge
Disposal Method:	Transfer Station
Tons:	.7589
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
7 additional CA_HAZNET: record(s) in the EDR Site Report.

J40 **CHEVRON #9-1660** **HIST CORTESE** **S101609512**
WNW **3048 BRISTOL ST** **CA FID UST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.438 mi.
2313 ft. **Site 3 of 5 in cluster J**

Relative:
Lower

Actual:
38 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002751T

CA FID UST:

Facility ID:	30010149
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145454257
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

J41 **SHELL (1818-1101)** **HIST CORTESE** **S101609607**
WNW **3045 BRISTOL** **CA FID UST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626** **SWEEPS UST**
0.453 mi.
2394 ft. **Site 4 of 5 in cluster J**

Relative:
Lower

Actual:
38 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001510T

CA FID UST:

Facility ID:	30001024
Regulated By:	UTNKA

SHELL (1818-1101) (Continued) **S101609607**

Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	8004474355
Mail To:	Not reported
Mailing Address:	P O BOX
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:	Not reported
Comp Number:	6396
Number:	Not reported
Board Of Equalization:	44-000074
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006396-000002
Actv Date:	Not reported
Capacity:	8000
Tank Use:	UNKNOWN
Stg:	PRODUCT
Content:	Not reported
Number Of Tanks:	4

Status:	Not reported
Comp Number:	6396
Number:	Not reported
Board Of Equalization:	44-000074
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006396-000003
Actv Date:	Not reported
Capacity:	5000
Tank Use:	UNKNOWN
Stg:	PRODUCT
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	6396
Number:	Not reported
Board Of Equalization:	44-000074
Ref Date:	Not reported
Act Date:	Not reported

SHELL (1818-1101) (Continued) **S101609607**

Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-006396-000004
Actv Date: Not reported
Capacity: 5000
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 6396
Number: Not reported
Board Of Equalization: 44-000074
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-006396-000005
Actv Date: Not reported
Capacity: 8000
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 6396
Number: 9
Board Of Equalization: 44-000074
Ref Date: 09-30-92
Act Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-006396-000001
Actv Date: Not reported
Capacity: 550
Tank Use: PETROLEUM
Stg: P
Content: Not reported
Number Of Tanks: 4

Status: A
Comp Number: 6396
Number: 9
Board Of Equalization: 44-000074
Ref Date: 09-30-92
Act Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-006396-000009
Actv Date: Not reported
Capacity: 12000

SHELL (1818-1101) (Continued) **S101609607**

Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	6396
Number:	9
Board Of Equalization:	44-000074
Ref Date:	09-30-92
Act Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006396-000010
Actv Date:	Not reported
Capacity:	12000
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	6396
Number:	9
Board Of Equalization:	44-000074
Ref Date:	09-30-92
Act Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006396-000011
Actv Date:	Not reported
Capacity:	12000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

J42 **SHELL OIL** **LUST** **S100230416**
WNW **3045 BRISTOL** **Notify 65** **N/A**
1/4-1/2 **COSTA MESA, CA 92627**
0.454 mi.
2396 ft. **Site 5 of 5 in cluster J**

Relative:
Lower

Actual:
38 ft.

LUST:

Region:	STATE
Global Id:	T0605901151
Latitude:	33.6820635
Longitude:	-117.8857771
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/20/2004
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001510T
LOC Case Number:	90UT120

SHELL OIL (Continued) **S100230416**

File Location: Local Agency Warehouse
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:

LUST:
Global Id: T0605901151
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: T0605901151
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

LUST:
Global Id: T0605901151
Action Type: ENFORCEMENT
Date: 09/15/2004
Action: Closure/No Further Action Letter

Global Id: T0605901151
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901151
Action Type: ENFORCEMENT
Date: 05/09/1990
Action: Notice of Responsibility

Global Id: T0605901151
Action Type: ENFORCEMENT
Date: 04/16/2003
Action: Staff Letter

Global Id: T0605901151
Action Type: ENFORCEMENT
Date: 08/18/2003
Action: Staff Letter

Global Id: T0605901151
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

SHELL OIL (Continued) **S100230416**

Global Id: T0605901151
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605901151
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 90UT120
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 09/15/2004
Case Type: Other Ground Water
Record ID: RO0002257

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001510T
Local Case Num: 90UT120
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: CLOS
Funding: Not reported
How Discovered: SA
How Stopped: New Tank
Leak Cause: Unknown
Leak Source: Tank
Global ID: T0605901151
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 4/25/1990
Enforcement Date: Not reported
Close Date: 5/20/2004
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: 8/1/2002
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: =
Operator: Not reported
Facility Contact: Not reported

SHELL OIL (Continued) **S100230416**

Interim: Not reported
Oversite Program: LUST
Latitude: 33.6820635
Longitude: -117.8857771
MTBE Date: 1/9/2002
Max MTBE GW: 51
MTBE Concentration: 0
Max MTBE Soil: 6.9
MTBE Fuel: 1
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

Notify 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 90220

43
WNW
1/4-1/2
0.462 mi.
2438 ft.

UNOCAL S S #5297
3067 BRISTOL
COSTA MESA, CA 92626

HIST CORTESE **S101299429**
LUST **N/A**
HAZNET

Relative:
Lower

Actual:
38 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000430T

LUST:
Region: STATE
Global Id: T0605900345
Latitude: 33.682661
Longitude: -117.886078
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/10/2000
Lead Agency: ORANGE COUNTY LOP
Case Worker: DB
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083000430T
LOC Case Number: 86UT040
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)

UNOCAL S S #5297 (Continued) **S101299429**

Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0605900345
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: T0605900345
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: T0605900345
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900345
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900345
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 86UT040
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 03/10/2000
Case Type: Other Ground Water
Record ID: RO0001744

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000430T

UNOCAL S S #5297 (Continued) **S101299429**

Local Case Num:	86UT040
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:	T0605900345
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	3/21/1986
Enforcement Date:	Not reported
Close Date:	3/10/2000
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	33.6828535
Longitude:	-117.8857861
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

HAZNET:

Year:	2011
Gepaid:	CAL000343667
Contact:	SHANTI DEWAN
Telephone:	9493559027

UNOCAL S S #5297 (Continued) **S101299429**

Mailing Name: Not reported
Mailing Address: 30343 CANWOOD ST STE 200
Mailing City,St,Zip: AGOURA HILLS, CA 913014329
Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Tank bottom waste
Disposal Method: Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Tons: 0.4587
Facility County: Orange

Year: 2011
Gepaid: CAL000343667
Contact: SHANTI DEWAN
Telephone: 9493559027
Mailing Name: Not reported
Mailing Address: 30343 CANWOOD ST STE 200
Mailing City,St,Zip: AGOURA HILLS, CA 913014329
Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1
Facility County: Orange

Year: 1997
Gepaid: CAL000046528
Contact: UNION OIL COMPANY OF CALIFORNI
Telephone: 7144286560
Mailing Name: Not reported
Mailing Address: PO BOX 25376
Mailing City,St,Zip: SANTA ANA, CA 927995376
Gen County: Orange
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Treatment, Tank
Tons: 5.6961
Facility County: Orange

Year: 1996
Gepaid: CAL000046528
Contact: UNION OIL COMPANY OF CALIFORNI
Telephone: 7144286560
Mailing Name: Not reported
Mailing Address: PO BOX 25376
Mailing City,St,Zip: SANTA ANA, CA 927995376
Gen County: Orange
TSD EPA ID: CAD981696420
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Tons: .4587
Facility County: Orange

UNOCAL S S #5297 (Continued) **S101299429**

Year:	1996
Gepaid:	CAL000046528
Contact:	UNION OIL COMPANY OF CALIFORNI
Telephone:	7144286560
Mailing Name:	Not reported
Mailing Address:	PO BOX 25376
Mailing City,St,Zip:	SANTA ANA, CA 927995376
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	.7297
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
4 additional CA_HAZNET: record(s) in the EDR Site Report.

K44 **SANTA ANA TOWER FAA/AFSFO-8525** **HIST CORTESE** **S101619826**
SE **18990 IKE JONES RD** **LUST** **N/A**
1/4-1/2 **SANTA ANA, CA 92707** **CA FID UST**
0.467 mi.
2464 ft. **Site 1 of 5 in cluster K**

Relative:
Higher

Actual:
52 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000556T

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Pollution Characterization
Case Number:	083000556T
Local Case Num:	Not reported
Case Type:	Soil only
Substance:	Heater Fuel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	PAULARINO
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:	T0605900442
How Stopped Date:	Not reported
Enter Date:	7/21/1987
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Workplan:	Not reported

SANTA ANA TOWER FAA/AFSFO-8525 (Continued) **S101619826**

Pollution Char:	7/20/1987
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	7/21/1987
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.671156
Longitude:	-117.8662246
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:	RS
Staff Initials:	AR
Lead Agency:	Regional Board
Local Agency:	30000L
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CA FID UST:

Facility ID:	30000644
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145575696
Mail To:	Not reported
Mailing Address:	MONTGOMERY FLD ATTN:
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SANTA ANA 92707
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

K45 SE 1/4-1/2 0.467 mi. 2464 ft.

SANTA ANA TOWER FAA/AFSFO-8525
18990 IKE JONES RD
SANTA ANA, CA 92707

Site 2 of 5 in cluster K

LUST **U001578334**
UST **N/A**
HIST UST
SWEEPS UST

Relative: Higher

Actual: 52 ft.

LUST:

Region:	STATE
Global Id:	T0605900442
Latitude:	33.671156
Longitude:	-117.8662246
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	07/20/1987
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	RS
Local Agency:	Not reported
RB Case Number:	083000556T
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Heating Oil / Fuel Oil
Site History:	Part of larger John Wayne Airport facility investigation.

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605900442
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

LUST:

Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	06/11/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	07/28/2009
Action:	Staff Letter
Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	01/17/2012
Action:	File review
Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	03/02/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0605900442
Action Type:	ENFORCEMENT

SANTA ANA TOWER FAA/AFSFO-8525 (Continued) **U001578334**

Date:	07/26/2012
Action:	File review
Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	05/12/2008
Action:	Site Visit / Inspection / Sampling
Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	12/12/2008
Action:	File review
Global Id:	T0605900442
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0605900442
Action Type:	ENFORCEMENT
Date:	10/07/2010
Action:	File review

UST:

Facility ID:	6663
Latitude:	33.67527
Longitude:	-117.87268

HIST UST:

Region:	STATE
Facility ID:	00000059017
Facility Type:	Other
Other Type:	STANDBY POWER
Total Tanks:	0001
Contact Name:	MATTHEW KING
Telephone:	6192935271
Owner Name:	FEDERAL AVIATION ADMINISTRATIO
Owner Address:	8575 GIBBS DRIVE, SUITE 101
Owner City,St,Zip:	SAN DIEGO, CA 92123
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000515
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	None

SWEEPS UST:

Status:	A
Comp Number:	6663
Number:	9
Board Of Equalization:	44-016512
Ref Date:	09-30-92

SANTA ANA TOWER FAA/AFSFO-8525 (Continued) **U001578334**

Act Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006663-000001
Actv Date:	Not reported
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	1

K46 **ORANGE COUNTY FIRE STATION #33** **LUST** **S101300014**
SE **18992 IKE JONES RD** **N/A**
1/4-1/2 **SANTA ANA, CA 92707**
0.469 mi.
2474 ft. **Site 3 of 5 in cluster K**

Relative:
Higher

Actual:
52 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Preliminary site assessment underway
Case Number:	083000548T
Local Case Num:	Not reported
Case Type:	Soil only
Substance:	Heater Fuel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	PAULARINO
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0605900437
How Stopped Date:	9/2/1986
Enter Date:	7/21/1987
Review Date:	Not reported
Prelim Assess:	7/11/2003
Discover Date:	9/2/1986
Enforcement Date:	Not reported
Close Date:	Not reported
Workplan:	Not reported
Pollution Char:	7/20/1987
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	7/21/1987
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.671156
Longitude:	-117.8662246

ORANGE COUNTY FIRE STATION #33 (Continued) **S101300014**

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:	RS
Staff Initials:	AR
Lead Agency:	Regional Board
Local Agency:	30000L
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

K47 **STATION #33** **LUST** **U001578341**
SE **18992 IKE JONES RD** **HIST UST** **N/A**
1/4-1/2 **SANTA ANA, CA 92707**
0.469 mi.
2474 ft. **Site 4 of 5 in cluster K**

Relative:
Higher

Actual:
52 ft.

LUST:

Region:	STATE
Global Id:	T0605900437
Latitude:	33.6751372
Longitude:	-117.8724236
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	07/11/2003
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	RS
Local Agency:	Not reported
RB Case Number:	083000548T
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Alcohols, Heating Oil / Fuel Oil, Gasoline
Site History:	Part of Larger John Wayne Airport Facility investigation.

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605900437
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

LUST:

Global Id:	T0605900437
Action Type:	ENFORCEMENT
Date:	09/23/2010

STATION #33 (Continued) **U001578341**

Action: File review

Global Id: T0605900437
Action Type: RESPONSE
Date: 01/15/2004
Action: Soil and Water Investigation Report

Global Id: T0605900437
Action Type: RESPONSE
Date: 10/31/2003
Action: Other Report / Document

Global Id: T0605900437
Action Type: RESPONSE
Date: 01/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 07/28/2009
Action: Staff Letter

Global Id: T0605900437
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 01/17/2012
Action: File review

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 08/01/2003
Action: Staff Letter

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 04/10/2003
Action: Staff Letter

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 03/02/2010
Action: Technical Correspondence / Assistance / Other

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 09/04/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 01/10/2003
Action: 13267 Requirement

STATION #33 (Continued) **U001578341**

Global Id: T0605900437
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 05/12/2008
Action: Site Visit / Inspection / Sampling

Global Id: T0605900437
Action Type: RESPONSE
Date: 08/31/2006
Action: Other Report / Document

Global Id: T0605900437
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900437
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 01/29/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0605900437
Action Type: ENFORCEMENT
Date: 06/01/2006
Action: Staff Letter

Global Id: T0605900437
Action Type: RESPONSE
Date: 03/30/2003
Action: Soil and Water Investigation Workplan

Global Id: T0605900437
Action Type: RESPONSE
Date: 07/15/2003
Action: Preliminary Site Assessment Report

HIST UST:
Region: STATE
Facility ID: 00000027182
Facility Type: Other
Other Type: FIRE DEPARTMENT
Total Tanks: 0002
Contact Name: CAPTS. CIZAR, WILBOURNE, WILSO
Telephone: 7147512800
Owner Name: ORANGE COUNTY FIRE DEPARTMENT
Owner Address: 180 S. WATER STREET
Owner City,St,Zip: ORANGE, CA 92666

STATION #33 (Continued) **U001578341**

Tank Num: 001
Container Num: 1
Year Installed: 1975
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1975
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor

48
WSW
1/4-1/2
0.479 mi.
2528 ft.

ANTIMITE PEST CONTROL
696 RANDOLPH
COSTA MESA, CA 92626

LUST **S103959921**
HAZNET **N/A**

Relative:
Lower

Actual:
41 ft.

LUST:
Region: STATE
Global Id: T0605902196
Latitude: 33.6769419
Longitude: -117.885585
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/07/2003
Lead Agency: ORANGE COUNTY LOP
Case Worker: DB
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083003252T
LOC Case Number: 98UT054
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:

LUST:
Global Id: T0605902196
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: T0605902196
Contact Type: Regional Board Caseworker
Contact Name: NANCY OLSON-MARTIN
Organization Name: SANTA ANA RWQCB (REGION 8)

ANTIMITE PEST CONTROL (Continued) **S103959921**

Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: nolson-martin@waterboards.ca.gov
Phone Number: Not reported

LUST:

Global Id: T0605902196
Action Type: REMEDIATION
Date: 01/01/1950
Action: Soil Vapor Extraction (SVE)

Global Id: T0605902196
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605902196
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605902196
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605902196
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:

Region: ORANGE
Facility Id: 98UT054
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/20/2003
Case Type: Other Ground Water
Record ID: RO0002390

LUST REG 8:

Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083003252T
Local Case Num: 98UT054
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

ANTIMITE PEST CONTROL (Continued) **S103959921**

How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank
Global ID:	T0605902196
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	8/6/1998
Enforcement Date:	Not reported
Close Date:	5/7/2003
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
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:	33.6769487
Longitude:	-117.8848721
MTBE Date:	10/18/2001
Max MTBE GW:	137
MTBE Concentration:	0
Max MTBE Soil:	.009
MTBE Fuel:	1
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

HAZNET:

Year:	1998
Gepaid:	CAC001464752
Contact:	DAVID BARDEN
Telephone:	5624987277
Mailing Name:	Not reported
Mailing Address:	5125 PICCADILLY CIRCLE
Mailing City,St,Zip:	WESTMINSTER, CA 926830000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	.3127

ANTIMITE PEST CONTROL (Continued) **S103959921**

Facility County: Orange

K49 **MILLION AIR** **NPDES** **S101126397**
SE **19300 IKE JONES RD** **HIST CORTESE** **N/A**
1/4-1/2 **SANTA ANA, CA 92707** **LUST**
0.481 mi. **Orange Co. Industrial Site**
2540 ft. **Site 5 of 5 in cluster K** **HAZNET**

Relative:
Higher

Actual:
52 ft.

NPDES:

Npdes Number:	CAS000002
Facility Status:	Terminated
Agency Id:	0
Region:	8
Regulatory Measure Id:	328344
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30C348202
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/31/2007
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/10/2009
Discharge Name:	Martin Aviation
Discharge Address:	19300 Ike Jones Rd
Discharge City:	Santa Ana
Discharge State:	California
Discharge Zip:	92707

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000539T

LUST:

Region:	STATE
Global Id:	T0605900431
Latitude:	33.671156
Longitude:	-117.8662246
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/18/1987
Lead Agency:	SANTA ANA, CITY OF
Case Worker:	CC
Local Agency:	SANTA ANA, CITY OF
RB Case Number:	083000539T
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605900431

MILLION AIR (Continued) **S101126397**

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:	T0605900431
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

LUST:

Global Id:	T0605900431
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0605900431
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605900431
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000539T
Local Case Num:	Not reported
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Cross Street:	BRISTOL
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Subsurface Monitoring
How Stopped:	Not reported
Leak Cause:	Overfill
Leak Source:	Other Source
Global ID:	T0605900431
How Stopped Date:	8/15/1987
Enter Date:	7/21/1987

MILLION AIR (Continued) **S101126397**

Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	8/15/1987
Enforcement Date:	Not reported
Close Date:	12/18/1987
Workplan:	Not reported
Pollution Char:	7/20/1987
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	7/21/1987
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.671156
Longitude:	-117.8662246
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:	JB
Lead Agency:	Local Agency
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

Orange Co. Industrial Site:

Case ID:	89IC006
Region:	ORANGE
Record ID:	RO0000235
Current Status:	CLOSED 8/25/1989
Closure Type:	Closed pre 1994, file review required to determine closure type
Released Chemical:	DATA NOT ENTERED, SEE FILE

HAZNET:

Year:	2010
Gepaid:	CAL000342546
Contact:	TONY GECK
Telephone:	7142635697
Mailing Name:	Not reported
Mailing Address:	1150 S VINEYARD AVE
Mailing City,St,Zip:	ONTARIO, CA 917617753
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported

MILLION AIR (Continued) **S101126397**

Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.187
Facility County:	Orange

Year:	2009
Gepaid:	CAL000342546
Contact:	TONY GECK
Telephone:	7142635697
Mailing Name:	Not reported
Mailing Address:	1150 S VINEYARD AVE
Mailing City,St,Zip:	ONTARIO, CA 917617753
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.187
Facility County:	Orange

L50 **PEP BOYS #660** **LUST** **S106175994**
WSW **2946 BRISTOL** **N/A**
1/4-1/2 **COSTA MESA, CA 92626**
0.481 mi.
2540 ft. **Site 1 of 3 in cluster L**

Relative:
Lower

Actual:
42 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083003260T
Local Case Num:	98UT073
Case Type:	Soil only
Substance:	Waste Oil
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:	T0605902200
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	10/2/1998
Enforcement Date:	Not reported
Close Date:	3/10/2000
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported

PEP BOYS #660 (Continued) **S106175994**

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:	33.6775596
Longitude:	-117.8865351
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:	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

L51 **PEP BOYS** **HIST CORTESE** **S101631302**
WSW **2946 BRISTOL ST** **CA FID UST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626** **SWEEPS UST**
0.481 mi.
2540 ft. **Site 2 of 3 in cluster L**

Relative:
Lower

Actual:
42 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083003260T

CA FID UST:

Facility ID:	30017418
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7145491533
Mail To:	Not reported
Mailing Address:	1122 WASHINGTON BLVD P O
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

PEP BOYS (Continued) **S101631302**

Status: Active

SWEEPS UST:

Status:	Not reported
Comp Number:	1965
Number:	Not reported
Board Of Equalization:	44-010401
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-001965-000001
Actv Date:	Not reported
Capacity:	550
Tank Use:	UNKNOWN
Stg:	PRODUCT
Content:	Not reported
Number Of Tanks:	1

Status:	A
Comp Number:	1965
Number:	9
Board Of Equalization:	44-010401
Ref Date:	09-30-92
Act Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-001965-000004
Actv Date:	Not reported
Capacity:	550
Tank Use:	PETROLEUM
Stg:	P
Content:	Not reported
Number Of Tanks:	1

L52 **PEP BOYS #660** **FINDS** **1007676836**
WSW **2946 BRISTOL ST** **LUST** **N/A**
1/4-1/2 **COSTA MESA, CA 92626** **UST**
0.481 mi. **HAZNET**
2540 ft. **Site 3 of 3 in cluster L**

Relative:
Lower

Actual:
42 ft.

FINDS:

Registry ID: 110017952429

Environmental Interest/Information System
UORS (California - Used Oil Recycling System). California Integrated Waste Management Board (CIWMB) helps communities establish and promote convenient collection opportunities for used oil and used oil filters.

LUST:

Region:	STATE
Global Id:	T0605902200
Latitude:	33.678113

PEP BOYS #660 (Continued) **1007676836**

Longitude:	-117.8860998
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/10/2000
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	DB
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083003260T
LOC Case Number:	98UT073
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0605902200
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:	T0605902200
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:	T0605902200
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605902200
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	98UT073
Current Status:	Certification (Case Closed)
Released Substance:	Waste oil/Used oil
Date Closed:	03/10/2000
Case Type:	Soil Only
Record ID:	RO0002818

PEP BOYS #660 (Continued) **1007676836**

UST:
Facility ID: 1965
Latitude: 33.67768
Longitude: -117.88654

HAZNET:
Year: 2008
Gepaid: CAD981662869
Contact: ANGELA BANKS, PROJECT MGR
Telephone: 2154309645
Mailing Name: Not reported
Mailing Address: 3111 W ALLEGHENY AVE
Mailing City,St,Zip: PHILADELPHIA, PA 191321116
Gen County: Orange
TSD EPA ID: CAT080025711
TSD County: San Bernardino
Waste Category: Waste oil and mixed oil
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 5.1718
Facility County: Orange

Year: 2008
Gepaid: CAD981662869
Contact: ANGELA BANKS, PROJECT MGR
Telephone: 2154309645
Mailing Name: Not reported
Mailing Address: 3111 W ALLEGHENY AVE
Mailing City,St,Zip: PHILADELPHIA, PA 191321116
Gen County: Orange
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 2.4472
Facility County: Orange

Year: 2008
Gepaid: CAD981662869
Contact: ANGELA BANKS, PROJECT MGR
Telephone: 2154309645
Mailing Name: Not reported
Mailing Address: 3111 W ALLEGHENY AVE
Mailing City,St,Zip: PHILADELPHIA, PA 191321116
Gen County: Orange
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Unspecified aqueous solution
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.6048
Facility County: Orange

Year: 2008
Gepaid: CAD981662869

PEP BOYS #660 (Continued) **1007676836**

Contact:	ANGELA BANKS, PROJECT MGR
Telephone:	2154309645
Mailing Name:	Not reported
Mailing Address:	3111 W ALLEGHENY AVE
Mailing City,St,Zip:	PHILADELPHIA, PA 191321116
Gen County:	Orange
TSD EPA ID:	CAT080025711
TSD County:	San Bernardino
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	2.4318
Facility County:	Orange

Year:	2003
Gepaid:	CAD981662869
Contact:	ANGELA BANKS, PROJECT MGR
Telephone:	2154309645
Mailing Name:	Not reported
Mailing Address:	3111 W ALLEGHENY AVENUE
Mailing City,St,Zip:	PHILADELPHIA, PA 191321116
Gen County:	Orange
TSD EPA ID:	CAD099452708
TSD County:	Orange
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Tons:	1.16
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
4 additional CA_HAZNET: record(s) in the EDR Site Report.

53
WSW
1/2-1
0.526 mi.
2778 ft.

EXOTIC MATERIAL INC
2930 BRISTOL ST
COSTA MESA, CA 92626

ENVIROSTOR **S100200509**
N/A

Relative:
Lower

Actual:
40 ft.

ENVIROSTOR:

Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	* Mmonroy
Division Branch:	Cleanup Cypress
Facility ID:	30280530
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	* RCRA 3012 - Past Haz Waste Disp Inven Site
Status:	Refer: Other Agency
Status Date:	08/23/1984
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported

EXOTIC MATERIAL INC (Continued) **S100200509**

Latitude: 33.67743
Longitude: -117.8858
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: 10193, 10196, 10198
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: DOW CHEMICAL COMPANY (SEAL BEACH)
Alias Type: Alternate Name
Alias Name: PERKIN-ELMER CORP
Alias Type: Alternate Name
Alias Name: CAD008339988
Alias Type: EPA Identification Number
Alias Name: 30280530
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/25/1994
Comments: DATABASE VALIDATION PROGRAM CONFIRMS NFA FOR DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 08/23/1984
Comments: FACILITY DRIVE-BY OLD LOCATION: BLDG VACANT. WAREHOUSE W/ OFFICE IN FRONT. NO VISIBLE PROB. CURR LOC: DRUMS STACKD AROUND SMALL METAL STORAGE. NO VISIBLE PROB. CLEAN SUBMIT TO EPA PRELIM ASSESS DONE RCRA 3012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 10/12/1983
Comments: FACILITY IDENTIFIED ID FROM ERRIS

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

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54 **VALENTEC INTERNATIONAL CORP.** **SLIC** **S103652395**
NE **3190 PULLMAN STREET** **Orange Co. Industrial Site** **N/A**
1/2-1 **COSTA MESA, CA 92626** **HAZNET**
0.621 mi. **ENVIROSTOR**
3281 ft.

Relative:
Lower

Actual:
36 ft.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 07/23/2002

VALENTEC INTERNATIONAL CORP. (Continued) **S103652395**

Global Id:	SL208263881
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	33.685804
Longitude:	-117.870568
Case Type:	Cleanup Program Site
Case Worker:	WDM
Local Agency:	Not reported
RB Case Number:	SL208263881
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Orange Co. Industrial Site:

Case ID:	96IC016
Region:	ORANGE
Record ID:	RO0000536
Current Status:	CLOSED 5/1/1996
Closure Type:	Closure certification issued
Released Chemical:	PERCHLOROETHYLENE, TRICHLOROETHYLENE

HAZNET:

Year:	2000
Gepaid:	CAD067658864
Contact:	SAFETY COMPONENTS INT'L INC
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3190 PULLMAN ST
Mailing City,St,Zip:	COSTA MESA, CA 926263319
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified solvent mixture
Disposal Method:	Recycler
Tons:	.6672
Facility County:	Orange

Year:	2000
Gepaid:	CAD067658864
Contact:	SAFETY COMPONENTS INT'L INC
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3190 PULLMAN ST
Mailing City,St,Zip:	COSTA MESA, CA 926263319
Gen County:	Orange
TSD EPA ID:	CAD000633164
TSD County:	Imperial
Waste Category:	Other inorganic solid waste
Disposal Method:	Disposal, Land Fill
Tons:	32.8692
Facility County:	Orange

Year: 2000

VALENTEC INTERNATIONAL CORP. (Continued) **S103652395**

Gepaid:	CAD067658864
Contact:	SAFETY COMPONENTS INT'L INC
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3190 PULLMAN ST
Mailing City,St,Zip:	COSTA MESA, CA 926263319
Gen County:	Orange
TSD EPA ID:	CAD008252405
TSD County:	Los Angeles
Waste Category:	Unspecified solvent mixture
Disposal Method:	Recycler
Tons:	2.0016
Facility County:	Orange

Year:	2000
Gepaid:	CAD067658864
Contact:	SAFETY COMPONENTS INT'L INC
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3190 PULLMAN ST
Mailing City,St,Zip:	COSTA MESA, CA 926263319
Gen County:	Orange
TSD EPA ID:	CAD000633163
TSD County:	0
Waste Category:	Other inorganic solid waste
Disposal Method:	Disposal, Land Fill
Tons:	10.9564
Facility County:	Orange

Year:	2000
Gepaid:	CAD067658864
Contact:	SAFETY COMPONENTS INT'L INC
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3190 PULLMAN ST
Mailing City,St,Zip:	COSTA MESA, CA 926263319
Gen County:	Orange
TSD EPA ID:	CAT080033681
TSD County:	Los Angeles
Waste Category:	Latex waste
Disposal Method:	Disposal, Land Fill
Tons:	.6672
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
77 additional CA_HAZNET: record(s) in the EDR Site Report.

ENVIROSTOR:

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

VALENTEC INTERNATIONAL CORP. (Continued) **S103652395**

Facility ID:	71002538
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	Not reported
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.68594
Longitude:	-117.8712
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD067658864
Alias Type:	EPA Identification Number
Alias Name:	71002538
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

55
South
1/2-1
0.698 mi.
3687 ft.

Relative:
Higher

Actual:
52 ft.

SIGMA CIRCUITS INC
2970 AIRWAY AVE
COSTA MESA, CA 92626

CERC-NFRAP **1000294703**
RCRA-SQG **CAD981658669**
FINDS
SLIC
Orange Co. Industrial Site
HAZNET
EMI
ENVIROSTOR

CERC-NFRAP:

Site ID:	0903532
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID:	13055501.00000
Person ID:	9271184.00000

SIGMA CIRCUITS INC (Continued) **1000294703**

Contact Sequence ID: 13290511.00000
Person ID: 13003854.00000

Contact Sequence ID: 13296106.00000
Person ID: 13003858.00000

Contact Sequence ID: 13301964.00000
Person ID: 13004003.00000

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: ZEUS MFG
Alias Address: Not reported
CA

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 12/01/1987
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 03/15/1989
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 03/15/1989
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SIGMA CIRCUITS INC
Facility address: 2970 AIRWAY AVE
COSTA MESA, CA 92626
EPA ID: CAD981658669
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
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: 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: ANGLYNN LYNN
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999

SIGMA CIRCUITS INC (Continued) **1000294703**

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

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: 09/01/1996
Facility name: SIGMA CIRCUITS INC
Classification: Small Quantity Generator

Date form received by agency: 03/15/1996
Facility name: SIGMA CIRCUITS INC
Site name: SIGMA CIRCUITS, INC - SOUTHERN CA DIVISI
Classification: Large Quantity Generator

Date form received by agency: 03/25/1994
Facility name: SIGMA CIRCUITS INC
Site name: SIGMA CIRCUITS INC.
Classification: Large Quantity Generator

Date form received by agency: 02/26/1992
Facility name: SIGMA CIRCUITS INC
Classification: Large Quantity Generator

Date form received by agency: 04/06/1990
Facility name: SIGMA CIRCUITS INC
Classification: Large Quantity Generator

SIGMA CIRCUITS INC (Continued) **1000294703**

Date form received by agency: 11/11/1986
Facility name: SIGMA CIRCUITS INC
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: 12/02/1991
Date achieved compliance: 11/08/1993
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: 11/08/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 12/02/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/08/1993
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110000784278

Environmental Interest/Information System

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

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.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 04/03/1997
Global Id: SLT8R1824103
Lead Agency: ORANGE COUNTY LOP

SIGMA CIRCUITS INC (Continued) **1000294703**

Lead Agency Case Number:	Not reported
Latitude:	33.680164
Longitude:	-117.869715
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	SLT8R182
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Orange Co. Industrial Site:

Case ID:	86IC010
Region:	ORANGE
Record ID:	RO0003078
Current Status:	CLOSED 12/9/1987
Closure Type:	Closed pre 1994, file review required to determine closure type
Released Chemical:	PLATING WASTE - OTHER METALS

Case ID:	89IC003
Region:	ORANGE
Record ID:	RO0000205
Current Status:	CLOSED 5/31/1991
Closure Type:	Closed pre 1994, file review required to determine closure type
Released Chemical:	PLATING WASTE - COPPER

Case ID:	89IC056
Region:	ORANGE
Record ID:	RO0000234
Current Status:	CLOSED 7/19/1991
Closure Type:	Closed pre 1994, file review required to determine closure type
Released Chemical:	ACID WASTE

Case ID:	96IC032
Region:	ORANGE
Record ID:	RO0000554
Current Status:	CLOSED 4/3/1997
Closure Type:	Closure certification issued
Released Chemical:	LEAD COMPOUNDS

HAZNET:

Year:	2006
Gepaid:	CAL000272087
Contact:	EDWIN URIAS PRODUCTION DIR
Telephone:	7142410050
Mailing Name:	Not reported
Mailing Address:	2970 AIRWAY AVE
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAD008252405
TSD County:	Los Angeles
Waste Category:	Unspecified solvent mixture
Disposal Method:	Recycler

SIGMA CIRCUITS INC (Continued) **1000294703**

Tons: 0.45
Facility County: Orange

Year: 2005
Gepaid: CAL000272087
Contact: EDWIN URIAS PRODUCTION DIR
Telephone: 7142410050
Mailing Name: Not reported
Mailing Address: 2970 AIRWAY AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD008252405
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues 10 percent or more
Disposal Method: Recycler
Tons: 0.13
Facility County: Not reported

Year: 2004
Gepaid: CAL000272087
Contact: EDWIN URIAS PRODUCTION DIR
Telephone: 7142410050
Mailing Name: Not reported
Mailing Address: 2970 AIRWAY AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD008252405
TSD County: Los Angeles
Waste Category: Aqueous solution with total organic residues 10 percent or more
Disposal Method: Recycler
Tons: 0.13
Facility County: Not reported

Year: 2003
Gepaid: CAL000272087
Contact: THOMAS CRONE
Telephone: 7142410050
Mailing Name: Not reported
Mailing Address: 2970 AIRWAY AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD008252405
TSD County: Orange
Waste Category: Unspecified solvent mixture
Disposal Method: Recycler
Tons: 0.66
Facility County: Orange

Year: 2003
Gepaid: CAL000272087
Contact: THOMAS CRONE
Telephone: 7142410050
Mailing Name: Not reported
Mailing Address: 2970 AIRWAY AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAD008252405

SIGMA CIRCUITS INC (Continued) **1000294703**

TSD County:	Orange
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	0.13
Facility County:	Orange

Click this hyperlink while viewing on your computer to access
66 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	45852
Air District Name:	SC
SIC Code:	3679
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:	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:	45852
Air District Name:	SC
SIC Code:	3672
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:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	45852
Air District Name:	SC
SIC Code:	3672
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
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	1

SIGMA CIRCUITS INC (Continued) **1000294703**

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:	45852
Air District Name:	SC
SIC Code:	3672
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:	8
Reactive Organic Gases Tons/Yr:	8
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

ENVIROSTOR:

Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	* Mmonroy
Division Branch:	Cleanup Cypress
Facility ID:	30280370
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	* CERC2
Status:	Refer: Other Agency
Status Date:	10/18/1988
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.66989
Longitude:	-117.8760
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	10003, 10009, 10034, 10037, 10061, 10067, 10119, 10198, 20011, 20015
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	30280370
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	10/25/1994
Comments:	Database verification project confirms NFA for DTSC.

SIGMA CIRCUITS INC (Continued) **1000294703**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 06/23/1988
Comments: PRELIM ASSESS DONE PRELIMINARY ASSESSMENT COMPLETED. THERE IS A NEW COMPANY ON LOCATION KNOWN AS SIGMA CIRCUIT. SIGMA CIRCUIT LISTED AS A GENERATOR. SIGMA CIRCUIT MANUFAC- TURES PRINTED CIRCUIT BOARDS.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 09/02/1982
Comments: FACILITY IDENTIFIED VIA A TIP FACILITY DRIVE-BY APPROX. 250 DRUMS AT SITE ABANDONED & ACCESSIBLE TO THE PUBLIC;SPILLS; OPEN DRUMS; CORRODED DRUMS; WATER REACTIVE DRUM ON SIDE & BUILDING. FINAL STRATEGY SITE REFERRED: TO HWMB- LA -ENF. TIP FROM CO SANIT INSPECTOR FIRM ABANDONED CHEMICALS AT FORMER SITE

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

56
South
1/2-1
0.724 mi.
3825 ft.

ALLIED SIGNAL SUBSTRATE TECH & INTER **HIST UST** **U001576790**
2955 AIRWAY AVENUE **EMI** **N/A**
COSTA MESA, CA 92626 **ENVIROSTOR**

Relative:
Higher

Actual:
52 ft.

HIST UST:
Region: STATE
Facility ID: 00000064585
Facility Type: Other
Other Type: MANUFACTURING
Total Tanks: 0002
Contact Name: Not reported
Telephone: 7149796300
Owner Name: COMMODORE INTERNATIONAL LIMITE
Owner Address: 1200 WILLSON DRIVE
Owner City,St,Zip: WESTCHESTER, PA 19380

Tank Num: 001
Container Num: 1
Year Installed: 1972
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: 1980

ALLIED SIGNAL SUBSTRATE TECH & INTER (Continued) **U001576790**

Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Visual

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	58258
Air District Name:	SC
SIC Code:	9999
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:	0
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

ENVIROSTOR:

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
Facility ID:	71002508
Site Code:	Not reported
Assembly:	74
Senate:	37
Special Program:	Not reported
Status:	Refer: Other Agency
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.66970
Longitude:	-117.8769
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD063119796
Alias Type:	EPA Identification Number
Alias Name:	71002508
Alias Type:	Envirostor ID Number

ALLIED SIGNAL SUBSTRATE TECH & INTER (Continued) **U001576790**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Agreement
Completed Date:	07/07/1999
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

57
SW
1/2-1
0.839 mi.
4431 ft.

COSTA MESA AIR NATIONAL GUARD
S OF PRESIDIO DR & WEST OF NEWPORT BLVD
COSTA MESA, CA 92626

HIST Cal-Sites **S101481491**
Cortese **N/A**
ENVIROSTOR

Relative:
Higher

Actual:
46 ft.

Calsite:

Facility ID:	30970004
Region:	3
Region Name:	GLENDALE
Branch:	SO
Branch Name:	OMF-SOUTHERN CALIF
File Name:	Not reported
State Senate District:	01011995
Status:	ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	DTSC
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
Facility Type:	OPEN
Type Name:	OPEN MILITARY BASE
NPL:	Not Listed
SIC Code:	97
SIC Name:	NATIONAL SECURITY/INTERNATIONAL AFFAIRS
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Not reported
Staff Member Responsible for Site:	Not reported
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	Not reported
Region Water Control Board Name:	Not reported
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:	30970004
Activity:	BWEBS

COSTA MESA AIR NATIONAL GUARD (Continued) **S101481491**

Activity Name:	BASEWIDE ENVIRONMENTAL BASELINE SURVEY
AWP Code:	SITE1
Proposed Budget:	0
AWP Completion Date:	12162002
Revised Due Date:	Not reported
Comments Date:	12162002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
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:	30970004
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	08081991
Revised Due Date:	Not reported
Comments Date:	08081991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
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:	S OF PRESIDIO DR & WEST OF NEWPORT BLVD
Alternate City,St,Zip:	COSTA MESA, CA 92626
Background Info:	The Costa Mesa ANG station is an 8.5 acre facility that has been active since 1964. The facility is located on former Santa Ana A rmy Air Base property. Activities include routine maintenance of vehicles, generators, and various ground equipment. Hazardous w astes resulting from these activities include varying amounts of waste fuels, oils, paints, thinners, and solvents. A preliminary assessment was submitted in December 1990 where a recommendation for NFA was concluded.
Comments Date:	08081991

COSTA MESA AIR NATIONAL GUARD (Continued) **S101481491**

Comments: Letter sent to Air National Guard (ANG) stating no concurr- ance
Comments Date: 08081991
Comments: with nfa recommendation & explaining pea process and funding opti
Comments Date: 08081991
Comments: on for DTSC oversight.
Comments Date: 12162002
Comments: BWEBS - SITE 1: In June 2002, the Phase II EBS was submitted pres
Comments Date: 12162002
Comments: enting the results of the soil and groundwater field investigatio
Comments Date: 12162002
Comments: ns. A total of nine areas of concern (AOCs) were identified wher
Comments Date: 12162002
Comments: e potential risks to human health and the environment may exist.
Comments Date: 12162002
Comments: These include a battery room floor drain, motor vehicle lift are
Comments Date: 12162002
Comments: a, fuel storage area, grease rack, oil and water sparator, diesel
Comments Date: 12162002
Comments: refueller spill, groundwater sampling, lead-based paint sampling
Comments Date: 12162002
Comments: , and hydraulic fluid spill area. Contaminants detected include p
Comments Date: 12162002
Comments: etroleum hydrocarbons, volatile organic compounds, and lead-based
Comments Date: 12162002
Comments: paint. Also, the extent of contamination was not determined. D
Comments Date: 12162002
Comments: TSC submitted comments on August 26, 2002 not concurring with the
Comments Date: 12162002
Comments: No Further Action recommendations by the Air Force, and requeste
Comments Date: 12162002
Comments: d additional sampling to be conducted to determine the extent of
Comments Date: 12162002
Comments: contamination. The Air Force responded with a final letter on Oc
Comments Date: 12162002
Comments: tober 8, 2002 finalizing the EBS report and deferring any future
Comments Date: 12162002
Comments: actions until a relocation date for the CMANG is known.
ID Name: Not reported
ID Value: Not reported
Alternate Name: SANTA ANA ARMY BASE (1940S & 50S)COSTA MESA AIR NATIONAL GUARD
Special Programs Code: DSMOA
Special Programs Name: DEFENSE MEMORANDUM OF AGREEMENT

CORTESE:
Region: CORTESE
Envirostor Id: 30970004
Site/Facility Type: MILITARY EVALUATION
Cleanup Status: ACTIVE
Status Date: 06/28/2011
Site Code: 400498
Latitude: 33.671666
Longitude: -117.88888
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: export
Order No: Not reported

COSTA MESA AIR NATIONAL GUARD (Continued) **S101481491**

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

ENVIROSTOR:
Site Type: Military Evaluation
Site Type Detailed: Open Base
Acres: 8.5
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Isaac Hirbawi
Supervisor: Manny Alonzo
Division Branch: Cleanup Cypress
Facility ID: 30970004
Site Code: 400498
Assembly: 74
Senate: 37
Special Program: DSMOA
Status: Active
Status Date: 06/28/2011
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: DERA
Latitude: 33.67166
Longitude: -117.8888
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: SANTA ANA ARMY BASE (1940S & 50S)
Alias Type: Alternate Name
Alias Name: T0605959838
Alias Type: GeoTracker Global ID
Alias Name: 400498
Alias Type: Project Code (Site Code)
Alias Name: 30970004
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Baseline Survey
Completed Date: 12/16/2002
Comments: BWEBS - SITE 1: In June 2002, the Phase II EBS was submitted presenting the results of the soil and groundwater field investigations. A total of nine areas of concern (AOCs) were identified where potential risks to human health and the environment may exist. These include a battery room floor drain, motor vehicle lift area, fuel storage area, grease rack, oil and water sparator, diesel refueller spill, groundwater sampling, lead-based paint sampling, and hydraulic fluid spill area. Contaminants detected include petroleum hydrocarbons, volatile organic compounds, and

COSTA MESA AIR NATIONAL GUARD (Continued) **S101481491**

lead-based paint. Also, the extent of contamination was not determined. DTSC submitted comments on August 26, 2002 not concurring with the No Further Action recommendations by the Air Force, and requested additional sampling to be conducted to determine the extent of contamination. The Air Force responded with a final letter on October 8, 2002 finalizing the EBS report and deferring any future actions until a relocation date for the CMANG is known.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 08/08/1991
Comments: Letter sent to Air National Guard (ANG) stating no concurr- ance with nfa recommendation & explaining pea process and funding option for DTSC oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 03/04/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 07/24/1991
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: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Schedule Due Date: 02/08/2013
Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Schedule Due Date: 03/29/2013
Schedule Revised Date: Not reported

58
SSW
1/2-1
0.881 mi.
4650 ft.

AL & J'S CLEANERS **ENVIROSTOR** **S106797623**
270 BRISTOL STREET, NO. 106 (1F) **N/A**
COSTA MESA, CA 92626

Relative:
Higher

Actual:
50 ft.

ENVIROSTOR:
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

AL & J'S CLEANERS (Continued) **S106797623**

Division Branch: Cleanup Cypress
Facility ID: 30720003
Site Code: Not reported
Assembly: 68
Senate: 35
Special Program: Not reported
Status: Refer: 1248 Local Agency
Status Date: 04/08/2004
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: 30720003
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

59
SE
1/2-1
0.912 mi.
4816 ft.

JOHN WAYNE AIRPORT FUELSTORAGE
19801 AIRPORT WAY SOUTH
SANTA ANA, CA 90603

Notify 65 **S100178912**
EMI **N/A**

Relative:
Higher

Actual:
49 ft.

Notify 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 90603

EMI:
Year: 1990
County Code: 30
Air Basin: SC
Facility ID: 63657
Air District Name: SC

JOHN WAYNE AIRPORT FUELSTORAGE (Continued) **S100178912**

SIC Code:	8249
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:	5
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

60
SSW
1/2-1
0.913 mi.
4818 ft.

UNOCAL SERVICE STATION #5909
1476 SOUTH EAST BRISTOL S
COSTA MESA, CA 90220

Notify 65 **S100230462**
N/A

Relative:
Higher

Actual:
49 ft.

Notify 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	90220

Count: 6 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
AGUANGO	U001577458	WARD RANCH	HWY. 79	92660	HIST UST
COSTA MESA	92293676	EAST 19TH STREET	EAST 19TH STREET	92627	ERNS
COSTA MESA	U001599103	CUSTOM MOTORS	767 BAKER ST	92626	HIST UST
IRVINE	S109444593	GODDARD STREET	GODDARD ST	92614	NPDES
ORANGE COUNTY	2011981419	ELLIS AVE AND GOLDEN WEST STREET	ELLIS AVE AND GOLDEN WEST STRE		ERNS
SAN ANNA	2002593964	MINNIE STREET AND EDINGER	MINNIE STREET AND EDINGER	92707	ERNS

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: 06/07/2012
Date Data Arrived at EDR: 07/05/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/05/2012
Next Scheduled EDR Contact: 10/22/2012
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: 06/07/2012
Date Data Arrived at EDR: 07/05/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/05/2012
Next Scheduled EDR Contact: 10/22/2012
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: 06/07/2012
Date Data Arrived at EDR: 07/05/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/05/2012
Next Scheduled EDR Contact: 10/22/2012
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/27/2011
Date Data Arrived at EDR: 02/27/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 14

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 08/28/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Quarterly

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: 12/10/2010
Date Data Arrived at EDR: 01/11/2011
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/09/2012
Next Scheduled EDR Contact: 01/21/2013
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

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.

Date of Government Version: 12/28/2011
Date Data Arrived at EDR: 02/27/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 14

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 08/28/2012
Next Scheduled EDR Contact: 12/10/2012
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: 08/19/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 132

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
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: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/14/2013
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: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/14/2013
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: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/14/2013
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: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

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: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
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: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Varies

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: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/21/2012
Next Scheduled EDR Contact: 09/03/2012
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: 04/02/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/02/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Annually

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: 08/06/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/21/2012
Next Scheduled EDR Contact: 11/19/2012
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: 08/06/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/21/2012
Next Scheduled EDR Contact: 11/19/2012
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: 08/20/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 44

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/20/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Quarterly

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: 08/28/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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 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 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 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

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: Quarterly

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: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 09/18/2012
Date Data Arrived at EDR: 09/18/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 15

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

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: Varies

SLIC: Statewide SLIC Cases

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: 09/18/2012
Date Data Arrived at EDR: 09/18/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 15

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
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: Quarterly

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: Semi-Annually

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: Varies

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: Semi-Annually

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: Semi-Annually

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: Semi-Annually

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: Annually

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: 05/25/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/16/2012
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/07/2012
Date Data Arrived at EDR: 05/08/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

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: 04/12/2012
Date Data Arrived at EDR: 05/09/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 62

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
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: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
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: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/07/2012
Date Data Arrived at EDR: 02/17/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 88

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/18/2012
Date Data Arrived at EDR: 09/18/2012
Date Made Active in Reports: 10/04/2012
Number of Days to Update: 16

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-327-5092
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/21/2013
Data Release Frequency: Quarterly

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: 05/07/2012
Date Data Arrived at EDR: 05/08/2012
Date Made Active in Reports: 07/16/2012
Number of Days to Update: 69

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

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: 11/28/2011
Date Data Arrived at EDR: 11/29/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 42

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

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: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

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: 02/07/2012
Date Data Arrived at EDR: 02/17/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 88

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
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: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

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: 02/28/2012
Date Data Arrived at EDR: 02/29/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 76

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
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: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

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: 04/12/2012
Date Data Arrived at EDR: 05/02/2012
Date Made Active in Reports: 07/16/2012
Number of Days to Update: 75

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/12/2012
Next Scheduled EDR Contact: 10/29/2012
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

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: 08/06/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/21/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Quarterly

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: 02/17/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 42

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/02/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Varies

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: 06/25/2012
Date Data Arrived at EDR: 06/25/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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: 07/03/2012
Next Scheduled EDR Contact: 10/08/2012
Data Release Frequency: No Update Planned

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: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/11/2012
Date Data Arrived at EDR: 06/14/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/19/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 07/09/2012
Date Data Arrived at EDR: 07/12/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 56

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 10/01/2012
Next Scheduled EDR Contact: 12/03/2012
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: 08/03/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

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: 03/16/2012
Date Data Arrived at EDR: 06/12/2012
Date Made Active in Reports: 07/16/2012
Number of Days to Update: 34

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/17/2012
Data Release Frequency: Quarterly

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: 08/06/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/21/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Quarterly

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

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: 06/30/2012
Date Data Arrived at EDR: 09/12/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/01/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

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: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

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

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/29/2012
Next Scheduled EDR Contact: 12/17/2012
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

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

Local Land Records

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: 02/16/2012
Date Data Arrived at EDR: 03/26/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/27/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 09/18/2012
Date Data Arrived at EDR: 09/19/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Varies

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: 09/10/2012
Date Data Arrived at EDR: 09/11/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/11/2012
Next Scheduled EDR Contact: 12/24/2012
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: 04/01/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/02/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Annually

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: 03/28/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 24

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 09/18/2012
Date Data Arrived at EDR: 09/18/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 15

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 09/18/2012
Date Data Arrived at EDR: 09/18/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 15

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA-NonGen: RCRA - Non 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). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/19/2012
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: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Semi-Annually

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: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Varies

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: 06/01/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 56

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Varies

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: 02/27/2012
Date Data Arrived at EDR: 03/14/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 92

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/12/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Annually

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: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/28/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Varies

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: 08/18/2011
Date Data Arrived at EDR: 09/08/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 21

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/04/2012
Next Scheduled EDR Contact: 12/17/2012
Data Release Frequency: Semi-Annually

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: 12/31/2009
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 131

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/20/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Annually

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: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/29/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Every 4 Years

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/22/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Quarterly

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: 08/22/2012
Next Scheduled EDR Contact: 12/10/2012
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

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: 07/27/2012
Next Scheduled EDR Contact: 11/12/2012
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: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 06/21/2012
Next Scheduled EDR Contact: 10/08/2012
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: 11/01/2010
Date Data Arrived at EDR: 11/10/2010
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 98

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Annually

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: 06/21/2011
Date Data Arrived at EDR: 07/15/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 60

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Quarterly

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: 01/10/2012
Date Data Arrived at EDR: 01/12/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/02/2012
Next Scheduled EDR Contact: 01/21/2013
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: 10/23/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 79

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/11/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Quarterly

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

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: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/31/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Biennially

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

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/20/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 44

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/20/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 08/14/2012
Date Data Arrived at EDR: 09/19/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 14

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/19/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Varies

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: 04/02/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/11/2012
Number of Days to Update: 69

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 10/02/2012
Next Scheduled EDR Contact: 01/14/2013
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

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: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: No Update Planned

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: 01/19/2012
Date Data Arrived at EDR: 01/19/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 33

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Annually

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: 10/01/2012
Next Scheduled EDR Contact: 01/14/2013
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: 08/15/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 41

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 11/12/2012
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.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 14

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/16/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 19

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/28/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Varies

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: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Semi-Annually

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: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 11/05/2012
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: 05/24/2012
Date Data Arrived at EDR: 06/05/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/14/2012
Next Scheduled EDR Contact: 12/03/2012
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: 07/31/2012
Date Data Arrived at EDR: 08/13/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 02/27/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Quarterly

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: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: N/A

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: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Varies

FINANCIAL ASSURANCE 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 03/01/2007
Date Data Arrived at EDR: 06/01/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
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: 08/14/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 44

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/14/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Varies

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/28/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 36

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/28/2012
Next Scheduled EDR Contact: 12/10/2012
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: 07/16/2012
Date Data Arrived at EDR: 07/17/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 51

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/17/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Quarterly

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: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/14/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan 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: 07/16/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Varies

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: 09/06/2012
Date Data Arrived at EDR: 09/12/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 21

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/10/2012
Next Scheduled EDR Contact: 12/24/2012
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: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/17/2012
Date Data Arrived at EDR: 09/19/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 14

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/19/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: 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 Historical Auto Stations: EDR Proprietary Historic Gas 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.

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 Historical Cleaners: EDR Proprietary Historic Dry 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.

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

COUNTY RECORDS

ALAMEDA COUNTY:

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: 04/03/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/08/2012
Number of Days to Update: 34

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/27/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 04/03/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/08/2012
Number of Days to Update: 34

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/27/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 06/13/2012
Date Data Arrived at EDR: 06/14/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 22

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/06/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/16/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

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: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/29/2012
Date Data Arrived at EDR: 05/29/2012
Date Made Active in Reports: 06/21/2012
Number of Days to Update: 23

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/16/2012
Next Scheduled EDR Contact: 10/26/2012
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/23/2012
Date Data Arrived at EDR: 07/26/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 42

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 09/13/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 12/29/2011
Date Data Arrived at EDR: 02/02/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 19

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/24/2012
Date Data Arrived at EDR: 07/27/2012
Date Made Active in Reports: 09/14/2012
Number of Days to Update: 49

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/17/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/12/2012
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 08/02/2012
Number of Days to Update: 10

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/12/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 07/24/2012
Date Data Arrived at EDR: 07/31/2012
Date Made Active in Reports: 09/14/2012
Number of Days to Update: 45

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 10/09/2012
Next Scheduled EDR Contact: 01/21/2013
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/29/2012
Next Scheduled EDR Contact: 12/17/2012
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/05/2012
Next Scheduled EDR Contact: 12/17/2012
Data Release Frequency: No Update Planned

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/13/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 24

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/13/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 24

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/13/2012
Date Made Active in Reports: 09/14/2012
Number of Days to Update: 32

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/05/2012
Date Data Arrived at EDR: 09/11/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 22

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 49

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/06/2012
Number of Days to Update: 18

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/07/2012
Date Data Arrived at EDR: 04/16/2012
Date Made Active in Reports: 05/08/2012
Number of Days to Update: 22

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/09/2012
Next Scheduled EDR Contact: 01/21/2013
Data Release Frequency: Quarterly

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: 02/02/2012
Date Data Arrived at EDR: 04/17/2012
Date Made Active in Reports: 05/08/2012
Number of Days to Update: 21

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/09/2012
Next Scheduled EDR Contact: 01/21/2013
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

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: 08/29/2012
Date Data Arrived at EDR: 08/30/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 34

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/13/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

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: 08/17/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 44

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2011
Date Data Arrived at EDR: 11/04/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 39

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

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: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

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: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/25/2012
Date Data Arrived at EDR: 06/27/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 34

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/09/2012
Date Data Arrived at EDR: 07/16/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 52

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/13/2012
Date Data Arrived at EDR: 09/18/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 15

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/13/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

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

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/04/2012
Date Data Arrived at EDR: 09/06/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/04/2012
Next Scheduled EDR Contact: 12/17/2012
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/08/2012
Date Data Arrived at EDR: 08/16/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 48

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/18/2012
Date Data Arrived at EDR: 06/21/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 15

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/13/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/18/2012
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 14

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/13/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 03/31/2012
Date Data Arrived at EDR: 06/29/2012
Date Made Active in Reports: 08/09/2012
Number of Days to Update: 41

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 10/01/2012
Next Scheduled EDR Contact: 01/14/2013
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 09/06/2012
Date Data Arrived at EDR: 09/11/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 22

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/05/2012
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

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: 03/30/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 42

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/24/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Quarterly

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: 10/04/2012
Next Scheduled EDR Contact: 01/21/2013
Data Release Frequency: Annually

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: 08/14/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Quarterly

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: 06/28/2012
Date Data Arrived at EDR: 08/02/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 35

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/30/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/27/2012
Date Data Arrived at EDR: 06/29/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 32

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/29/2012
Date Data Arrived at EDR: 07/09/2012
Date Made Active in Reports: 08/02/2012
Number of Days to Update: 24

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/24/2012
Next Scheduled EDR Contact: 01/07/2013
Data Release Frequency: Annually

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: 08/20/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 09/20/2012
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/20/2012
Next Scheduled EDR Contact: 12/03/2012
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
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: 08/01/2012
Date Data Arrived at EDR: 08/09/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 55

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/09/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 57

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 39

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2012
Next Scheduled EDR Contact: 12/10/2012
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/27/2012
Number of Days to Update: 70

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/18/2012
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

125 BAKER STREET
125 BAKER STREET EAST
COSTA MESA, CA 92626

TARGET PROPERTY COORDINATES

Latitude (North):	33.6796 - 33˚ 40’ 46.56’’
Longitude (West):	117.8786 - 117˚ 52’ 42.96’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	418556.8
UTM Y (Meters):	3726784.5
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	33117-F8 NEWPORT BEACH (DIGITAL), CA
Most Recent Revision:	0
East Map:	33117-F7 TUSTIN, CA
Most Recent Revision:	1981

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 principal 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).

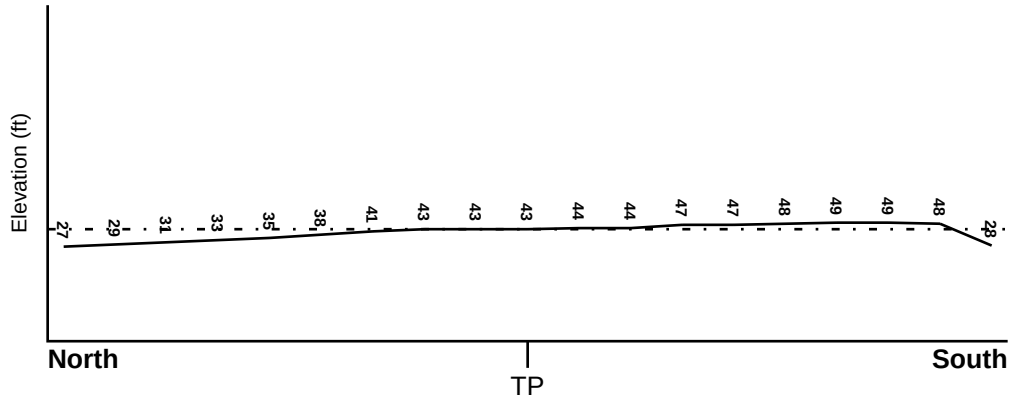
TOPOGRAPHIC INFORMATION

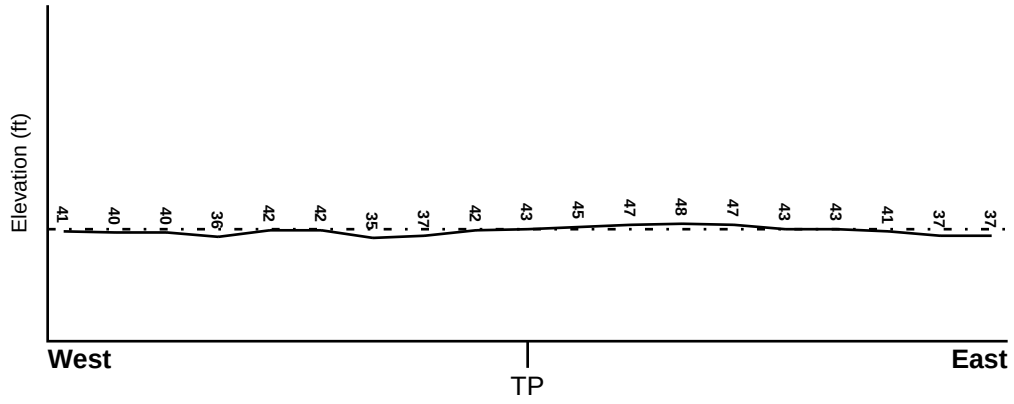
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 43 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

Target Property County	FEMA Flood Electronic Data
ORANGE, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	06059C - FEMA DFIRM Flood data
Additional Panels in search area:	Not Reported

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
Location Relative to TP:	1/8 - 1/4 Mile SSE
Site Name:	Western Digital Corporation
Site EPA ID Number:	CAD051983567
Surficial Aquifer Flow Dir.:	South
Measured Depth to Water:	35.5 feet.
Hydraulic Connection:	Aquifers underlying the site are hydraulically connected.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

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
3	1/8 - 1/4 Mile SW	NNE
4	1/8 - 1/4 Mile SSE	SSW

* ©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
7	1/4 - 1/2 Mile WNW	Not Reported
8	1/4 - 1/2 Mile SW	Not Reported
C9	1/2 - 1 Mile NW	SE
C10	1/2 - 1 Mile NW	SE
11	1/2 - 1 Mile West	Not Reported
12	1/2 - 1 Mile South	S
14	1/2 - 1 Mile West	SW
16	1/2 - 1 Mile SE	WNW
17	1/2 - 1 Mile SSW	SE
19	1/2 - 1 Mile SE	E

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

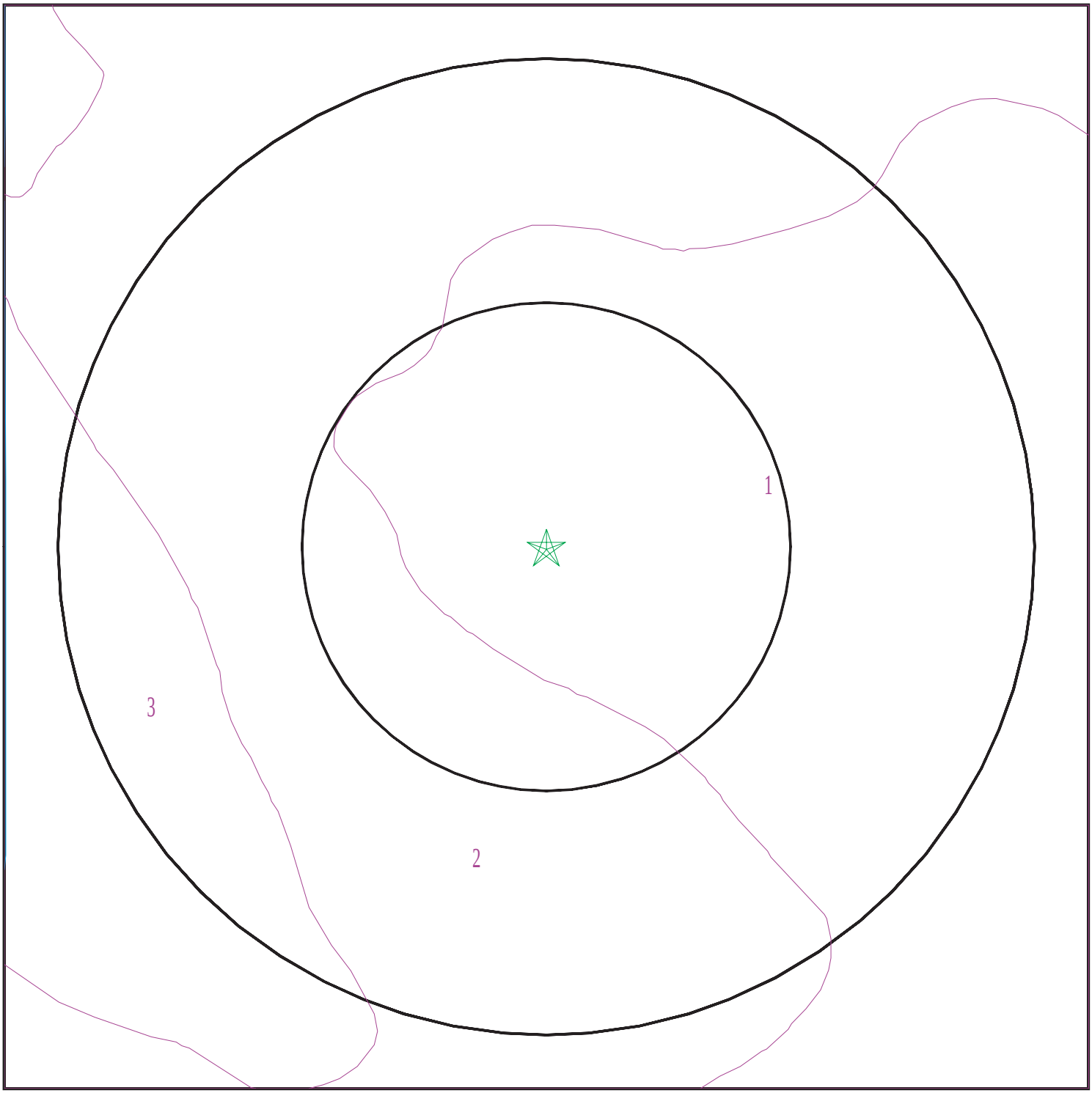
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

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 - 3427558.1s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	125 Baker Street	CLIENT:	Geocon Geotechnical & Env
ADDRESS:	125 Baker Street East Costa Mesa CA 92626	CONTACT:	Mike Akoto
		INQUIRY #:	3427558.1s
LAT/LONG:	33.6796 / 117.8786	DATE:	October 10, 2012 10:14 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: MYFORD

Soil Surface Texture: sandy loam

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: Moderately well drained

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	22 inches	sandy loam	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 6.1
2	22 inches	27 inches	sandy clay	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 6.1
3	27 inches	38 inches	sandy clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 6.1
4	38 inches	70 inches	sandy clay loam	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 6.1
5	70 inches	79 inches	sandy loam	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 6.1

Soil Map ID: 2

Soil Component Name: MYFORD

Soil Surface Texture: sandy loam

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: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
2	11 inches	18 inches	sandy clay	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
3	18 inches	27 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
4	27 inches	70 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
5	70 inches	79 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

Soil Map ID: 3

Soil Component Name: CHINO

Soil Surface Texture: silty clay 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: Somewhat poorly drained

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	24 inches	silty clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	24 inches	59 inches	sandy clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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.

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
A2	USGS3125212	1/8 - 1/4 Mile West
B6	USGS3125222	1/4 - 1/2 Mile WNW
15	USGS3125316	1/2 - 1 Mile SSW

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

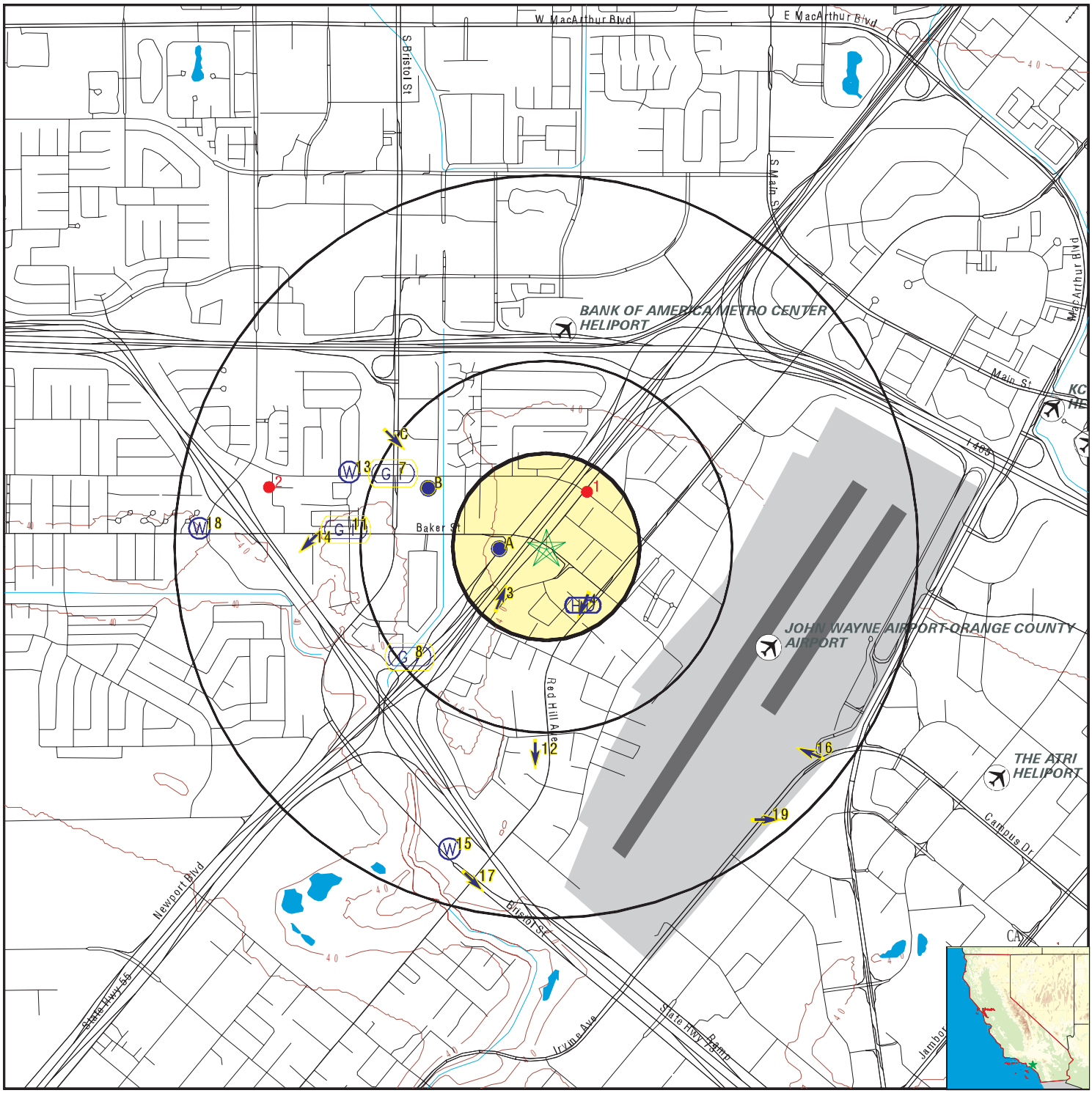
MAP ID	WELL ID	LOCATION FROM TP
A1	CADW40000005052	0 - 1/8 Mile West
B5	CADW40000005067	1/4 - 1/2 Mile WNW
13	7058	1/2 - 1 Mile WNW
18	CADW40000005058	1/2 - 1 Mile West

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG80000008134	1/8 - 1/4 Mile NE
2	CAOG80000008148	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 3427558.1s



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

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data
Oil, gas or related wells

N

SITE NAME:	125 Baker Street	CLIENT:	Geocon Geotechnical & Env
ADDRESS:	125 Baker Street East Costa Mesa CA 92626	CONTACT:	Mike Akoto
		INQUIRY #:	3427558.1s
LAT/LONG:	33.6796 / 117.8786	DATE:	October 10, 2012 10:14 am

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **West** **0 - 1/8 Mile** **Lower**	**CA WELLS**	**CADW40000005052**

Longitude:	-117.8798
Latiude:	33.6793
Stwellno:	06S10W01L001S
Districtco:	3
Welluseco:	Z
Countyco:	30
Gwcode:	800100
Site id:	CADW40000005052

A2 **West** **1/8 - 1/4 Mile** **Lower**		**FED USGS**	**USGS3125212**

Agency cd:	USGS	Site no:	334047117524801
Site name:	006S010W01L001S		
Latitude:	334047	EDR Site id:	USGS3125212
Longitude:	1175248	Dec lat:	33.67974183
Dec lon:	-117.88088998	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	059
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	0		
Altitude datum:	Not Reported		
Hydrologic:	Newport Bay. California. Area = 154 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1952-02-28
Water quality data end date:	1969-03-20	Water quality data count:	31
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation			Database	EDR ID Number
3 **SW** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000135T NNE Not Reported Not Reported 26 02/22/1995	**AQUIFLOW**	**64529**
4 **SSE** **1/8 - 1/4 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000442T SSW 35 ft 70 ft Not Reported 12/1996	**AQUIFLOW**	**69459**

B5
WNW
1/4 - 1/2 Mile
Lower

CA WELLS **CADW40000005067**

Longitude:	-117.8831
Latiude:	33.6818
Stwellno:	06S10W01E002S
Districtco:	3
Welluseco:	Z
Countyco:	30
Gwcode:	800100
Site id:	CADW40000005067

B6
WNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS3125222**

Agency cd:	USGS	Site no:	334055117530001
Site name:	006S010W01E002S		
Latitude:	334055	EDR Site id:	USGS3125222
Longitude:	1175300	Dec lat:	33.68196395
Dec lon:	-117.8842234	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	059
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	0		
Altitude datum:	Not Reported		
Hydrologic:	Newport Bay. California. Area = 154 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1952-02-20
Water quality data end date:	1968-06-07	Water quality data count:	22
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

7
WNW
1/4 - 1/2 Mile
Lower

Site ID:	083001510T	**AQUIFLOW**	**65353**
Groundwater Flow:	Not Reported		
Shallow Water Depth:	Not Reported		
Deep Water Depth:	Not Reported		
Average Water Depth:	23.5		
Date:	10/15/1992		

8
SW
1/4 - 1/2 Mile
Lower

Site ID:	083002072T	**AQUIFLOW**	**38855**
Groundwater Flow:	Not Reported		
Shallow Water Depth:	25		
Deep Water Depth:	26		
Average Water Depth:	Not Reported		
Date:	03/31/1998		

C9
NW
1/2 - 1 Mile
Lower

Site ID:	083000430T	**AQUIFLOW**	**68226**
Groundwater Flow:	SE		
Shallow Water Depth:	22.15		
Deep Water Depth:	25.6		
Average Water Depth:	Not Reported		
Date:	03/31/1999		

C10
NW
1/2 - 1 Mile
Lower

Site ID:	083000430T	**AQUIFLOW**	**68227**
Groundwater Flow:	SE		
Shallow Water Depth:	22.15		
Deep Water Depth:	25.6		
Average Water Depth:	Not Reported		
Date:	03/31/1999		

11
West
1/2 - 1 Mile
Lower

Site ID:	083000637T	**AQUIFLOW**	**66542**
Groundwater Flow:	Not Reported		
Shallow Water Depth:	Not Reported		
Deep Water Depth:	Not Reported		
Average Water Depth:	25.27		
Date:	01/1987		

Map ID Direction Distance Elevation			Database	EDR ID Number
12 **South** **1/2 - 1 Mile** **Higher**	Site ID:	083000468T	**AQUIFLOW**	**34270**
	Groundwater Flow:	S		
	Shallow Water Depth:	6.81		
	Deep Water Depth:	9.35		
	Average Water Depth:	Not Reported		
	Date:	04/24/1997		

13
WNW
1/2 - 1 Mile
Lower

CA WELLS **7058**

Water System Information:

Prime Station Code:	06S/10W-02H03 S	User ID:	TEE
FRDS Number:	3000572001	County:	Orange
District Number:	08	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Destroyed
Source Lat/Long:	334057.0 1175313.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01 PAULARINO ST WELL - DESTROYED		
System Number:	3000572		
System Name:	PAULARINO WATER ASSOCIATION		
Organization That Operates System:	Not Reported		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		

14 **West** **1/2 - 1 Mile** **Lower**	Site ID:	083001627T	**AQUIFLOW**	**34037**
	Groundwater Flow:	SW		
	Shallow Water Depth:	26.10		
	Deep Water Depth:	26.45		
	Average Water Depth:	Not Reported		
	Date:	04/22/1996		

15
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS3125316**

Agency cd:	USGS	Site no:	334004117525601
Site name:	006S010W12E003S		
Latitude:	334004	EDR Site id:	USGS3125316
Longitude:	1175256	Dec lat:	33.66779776
Dec lon:	-117.8831123	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	059
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	0		
Altitude datum:	Not Reported		
Hydrologic:	Newport Bay. California. Area = 154 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1952-04-15
Water quality data end date:	1964-07-24	Water quality data count:	13
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

16
SE
1/2 - 1 Mile
Higher

Site ID:	083000209T	**AQUIFLOW**	**33998**
Groundwater Flow:	WNW		
Shallow Water Depth:	Not Reported		
Deep Water Depth:	Not Reported		
Average Water Depth:	33		
Date:	05/09/1994		

17
SSW
1/2 - 1 Mile
Higher

Site ID:	083000343T	**AQUIFLOW**	**65355**
Groundwater Flow:	SE		
Shallow Water Depth:	33.29		
Deep Water Depth:	35.11		
Average Water Depth:	Not Reported		
Date:	05/20/1987		

18
West
1/2 - 1 Mile
Lower

CA WELLS **CADW40000005058**

Longitude:	-117.8939
Latiude:	33.6803
Stwellno:	06S10W02G001S
Districtco:	3
Welluseco:	Z
Countyco:	30
Gwcode:	800100
Site id:	CADW40000005058

19
SE
1/2 - 1 Mile
Higher

Site ID:	083000403T	**AQUIFLOW**	**66483**
Groundwater Flow:	E		
Shallow Water Depth:	21.9		
Deep Water Depth:	24.2		
Average Water Depth:	Not Reported		
Date:	12/1997		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance	Database	EDR ID Number

1
NE
1/8 - 1/4 Mile

OIL_GAS **CAOG80000008134**

Districtnu:	1	Apinumber:	05901162
Activewell:	N	Well type:	OG
Wellsymbol:	DH	Confidenti:	Not Reported
Operatorna:	Chevron U.S.A. Inc.		
Wellnumber:	1	Leasename:	Irvine
Blmwell:	N	Countyname:	Orange
Fieldname:	Any Field		
Areaname:	Any Area		
Section :	1	Township:	06S
Range:	10W	Basemeridi:	SB
Elevation:	Not Reported		
Locationde:	Not Reported		
Latitude83:	33.681747		
Longitude8:	-117.876696		
Gissourcec:	hud		
Comments:	Not Reported		
Operatorco:	C5640	Cacountyco:	059
Fieldcode:	000	Areacode:	00
Td:	0		
Site id:	CAOG80000008134		

2
WNW
1/2 - 1 Mile

OIL_GAS **CAOG80000008148**

Districtnu:	1	Apinumber:	05920355
Activewell:	N	Well type:	OG
Wellsymbol:	DH	Confidenti:	Not Reported
Operatorna:	Occidental Petroleum Corporation		
Wellnumber:	1	Leasename:	Wallace C.H.
Blmwell:	N	Countyname:	Orange
Fieldname:	Any Field		
Areaname:	Any Area		
Section :	2	Township:	06S
Range:	10W	Basemeridi:	SB
Elevation:	Not Reported		
Locationde:	Not Reported		
Latitude83:	33.681929		
Longitude8:	-117.891546		
Gissourcec:	hud		
Comments:	Not Reported		
Operatorco:	O0500	Cacountyco:	059
Fieldcode:	000	Areacode:	00
Td:	0		
Site id:	CAOG80000008148		

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.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

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 Services
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 Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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 Health Services
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.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
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.

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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 B

125 Baker Street
125 Baker Street East
Costa Mesa, CA 92626

Inquiry Number: 3427558.4
October 11, 2012

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography October 11, 2012

Target Property:

125 Baker Street East

Costa Mesa, CA 92626

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=555'	Flight Year: 1938	Laval
1947	Aerial Photograph. Scale: 1"=666'	Flight Year: 1947	Fairchild
1952	Aerial Photograph. Scale: 1"=555'	Flight Year: 1952	Pacific Air
1968	Aerial Photograph. Scale: 1"=480'	Flight Year: 1968	Teledyne
1977	Aerial Photograph. Scale: 1"=666'	Flight Year: 1977	Teledyne
1989	Aerial Photograph. Scale: 1"=666'	Flight Year: 1989	USGS
1994,1995	Aerial Photograph. Scale: 1"=500'	/Composite DOQQ - acquisition dates: 1994,1995	EDR

INQUIRY #: 3427558.4
YEAR: 1938
= 555'
N

INQUIRY #: 3427558.4
YEAR: 1947
= 666'
N

INQUIRY #: 3427558.4
YEAR: 1952
= 555'
N

INQUIRY #: 3427558.4
YEAR: 1968
= 480'
N

INQUIRY #: 3427558.4
YEAR: 1977
= 666'
N

INQUIRY #: 3427558.4
YEAR: 1989
= 666'
N

INQUIRY #: 3427558.4
YEAR: 1994,1995 (DOQQ)
= 500'
N

APPENDIX C

125 Baker Street
125 Baker Street East
Costa Mesa, CA 92626

Inquiry Number: 3427558.2
October 09, 2012

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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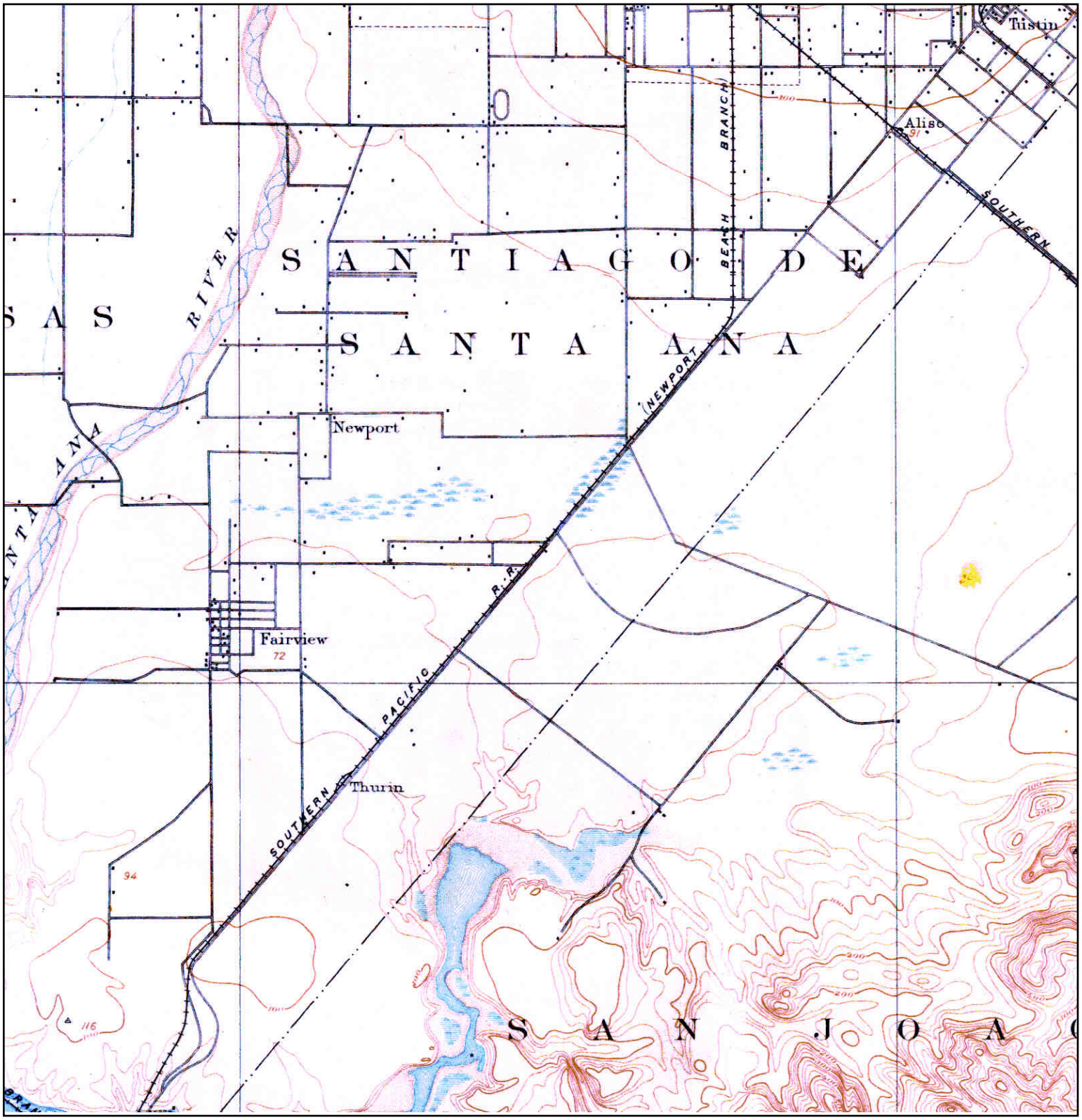
Historical Topographic Map



N	TARGET QUAD NAME: SANTA ANA MAP YEAR: 1901 SERIES: 15 SCALE: 1:62500	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

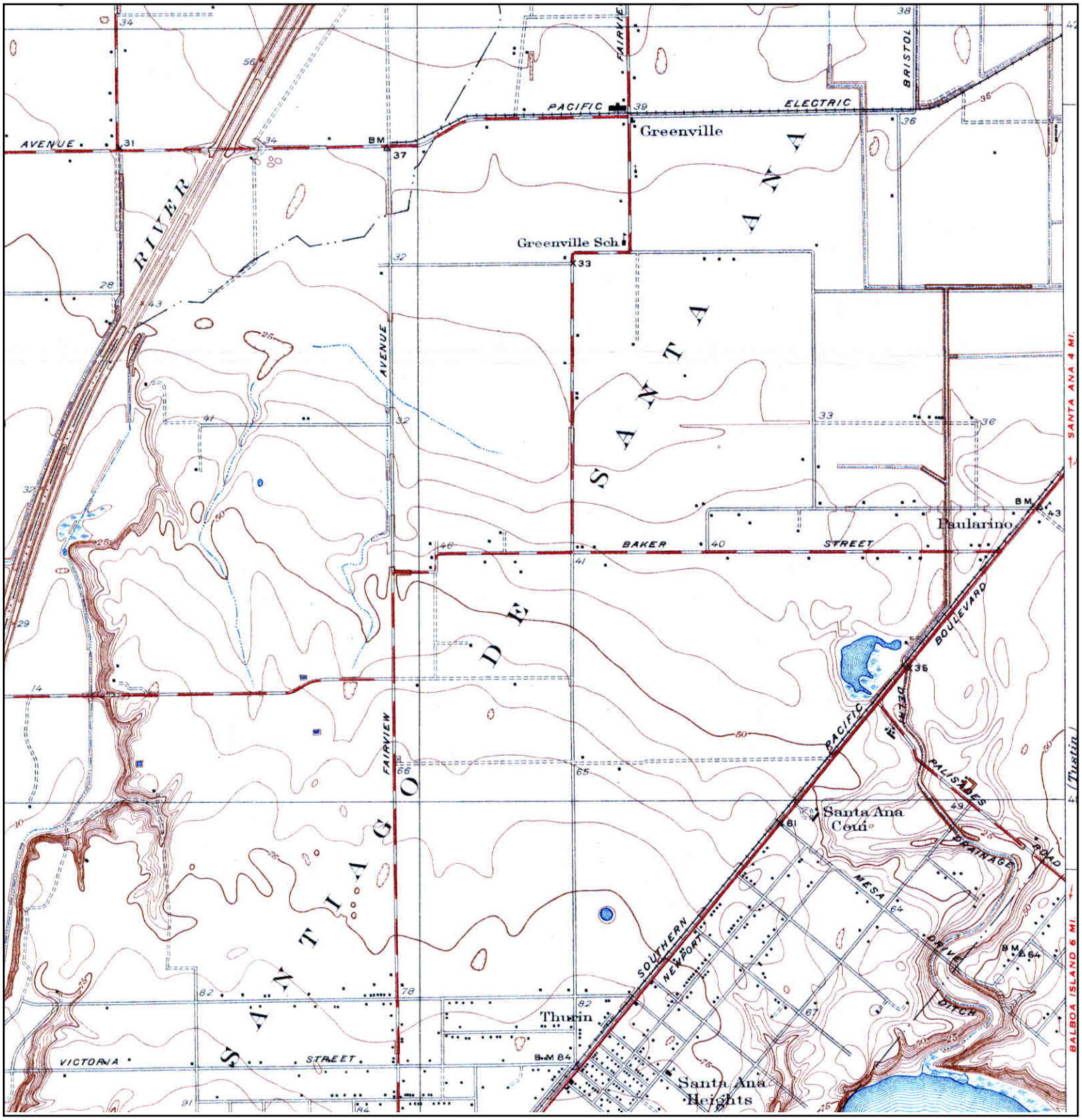
Historical Topographic Map

N	TARGET QUAD NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 SERIES: 60 SCALE: 1:250000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map

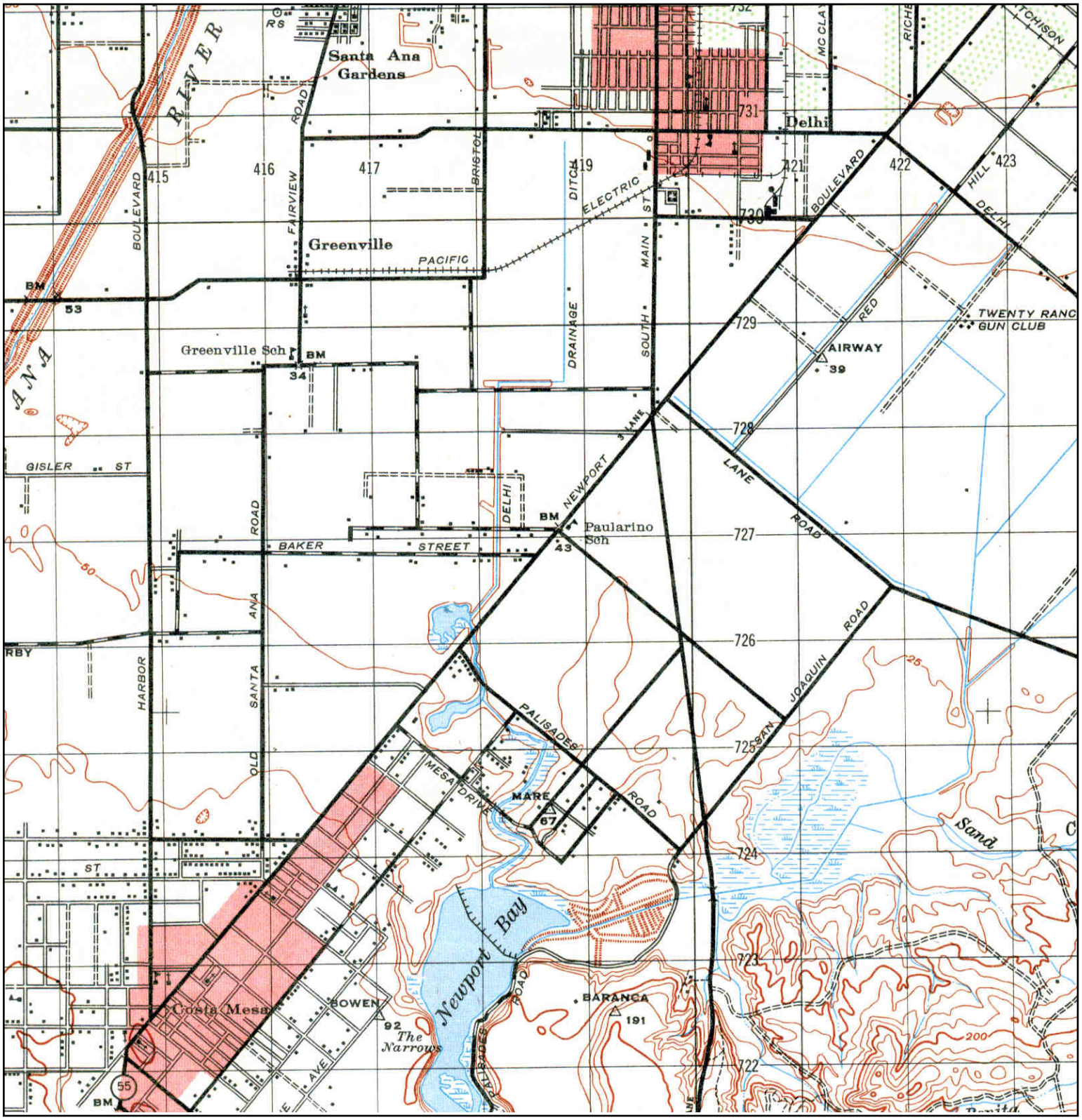
N	**TARGET QUAD** NAME: CORONA MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



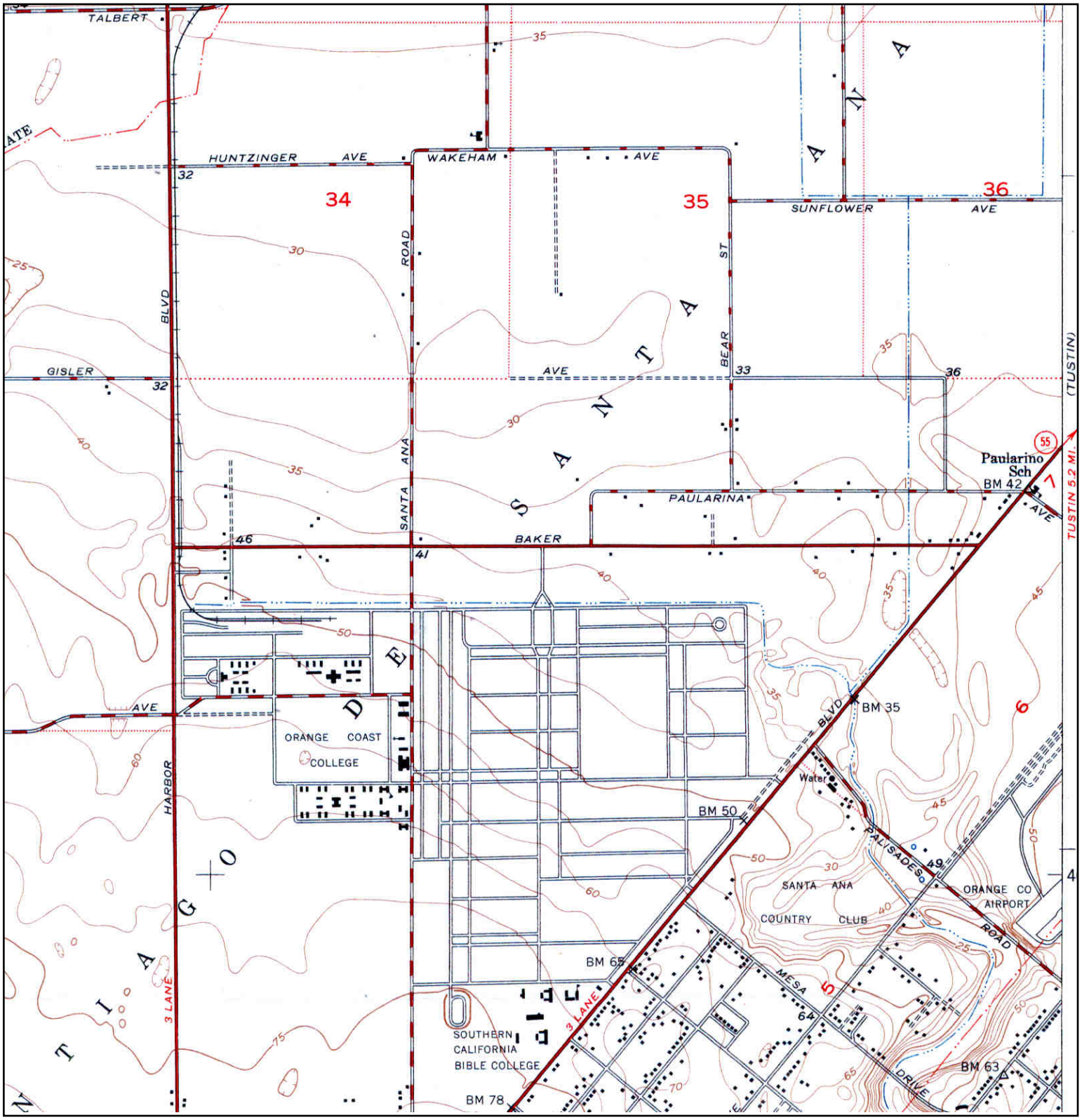
N	TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:31680	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



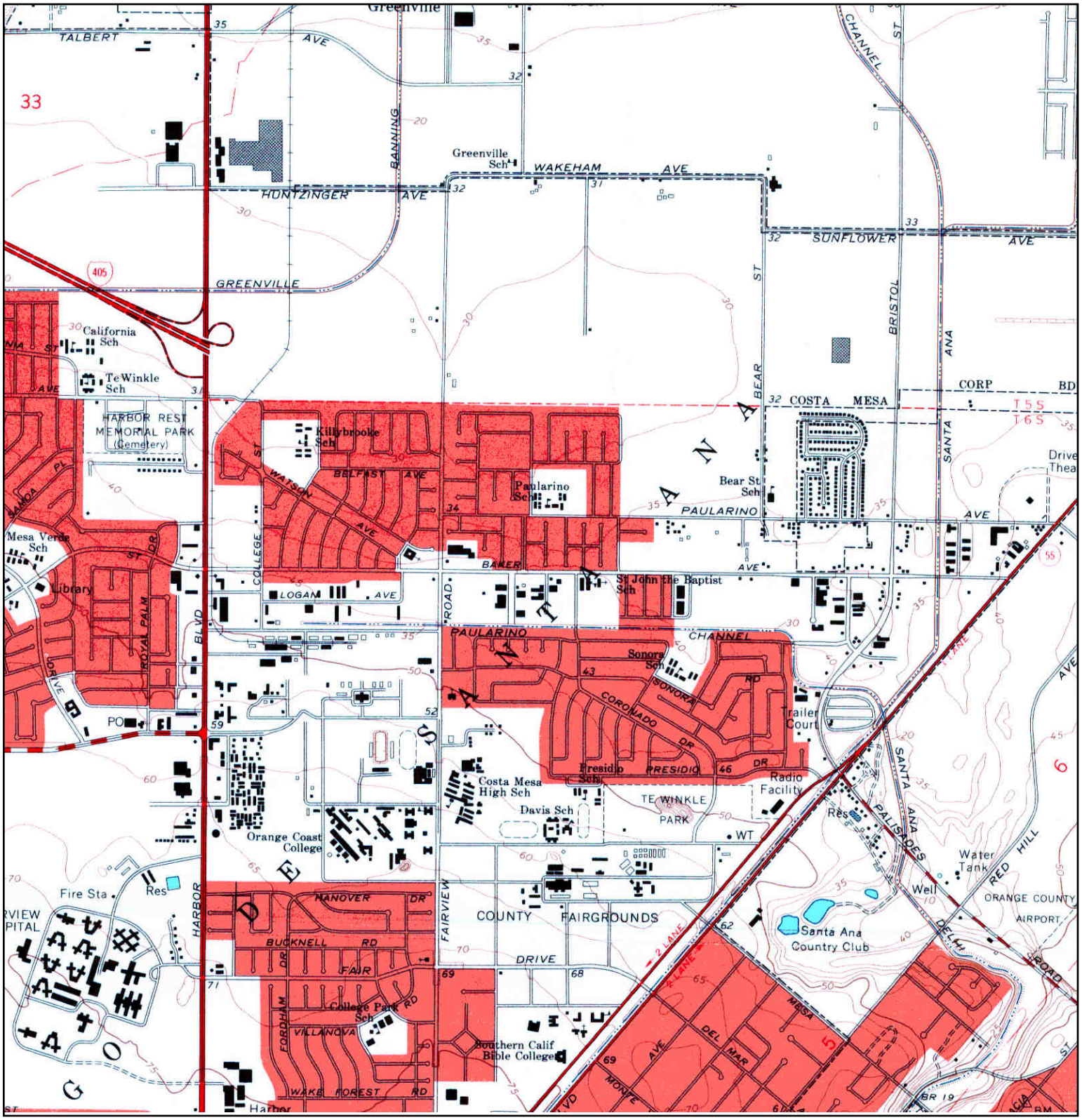
N	TARGET QUAD NAME: SANTA ANA MAP YEAR: 1942 SERIES: 15 SCALE: 1:50000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



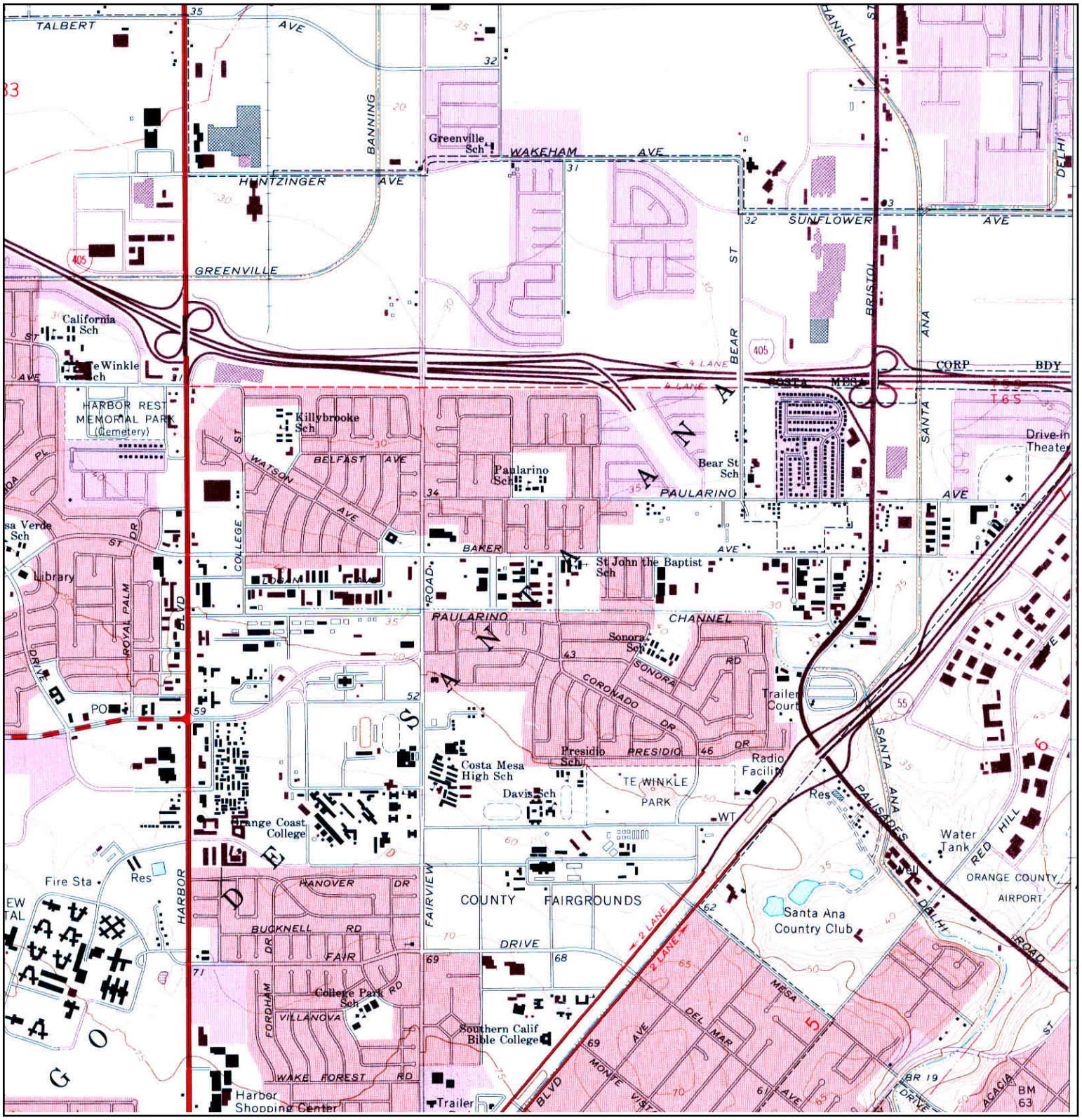
N	TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1951 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



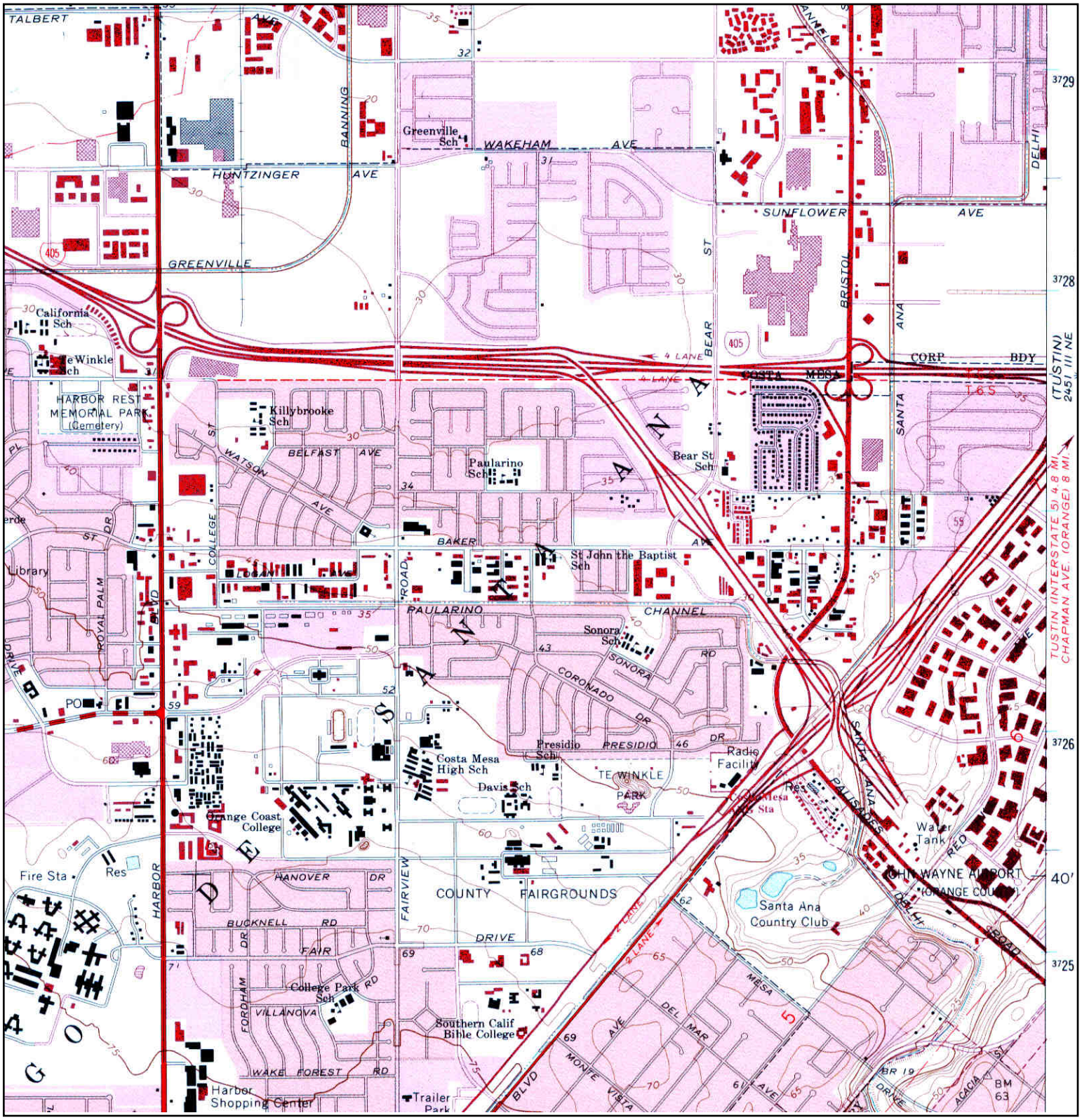
N	TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1965 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



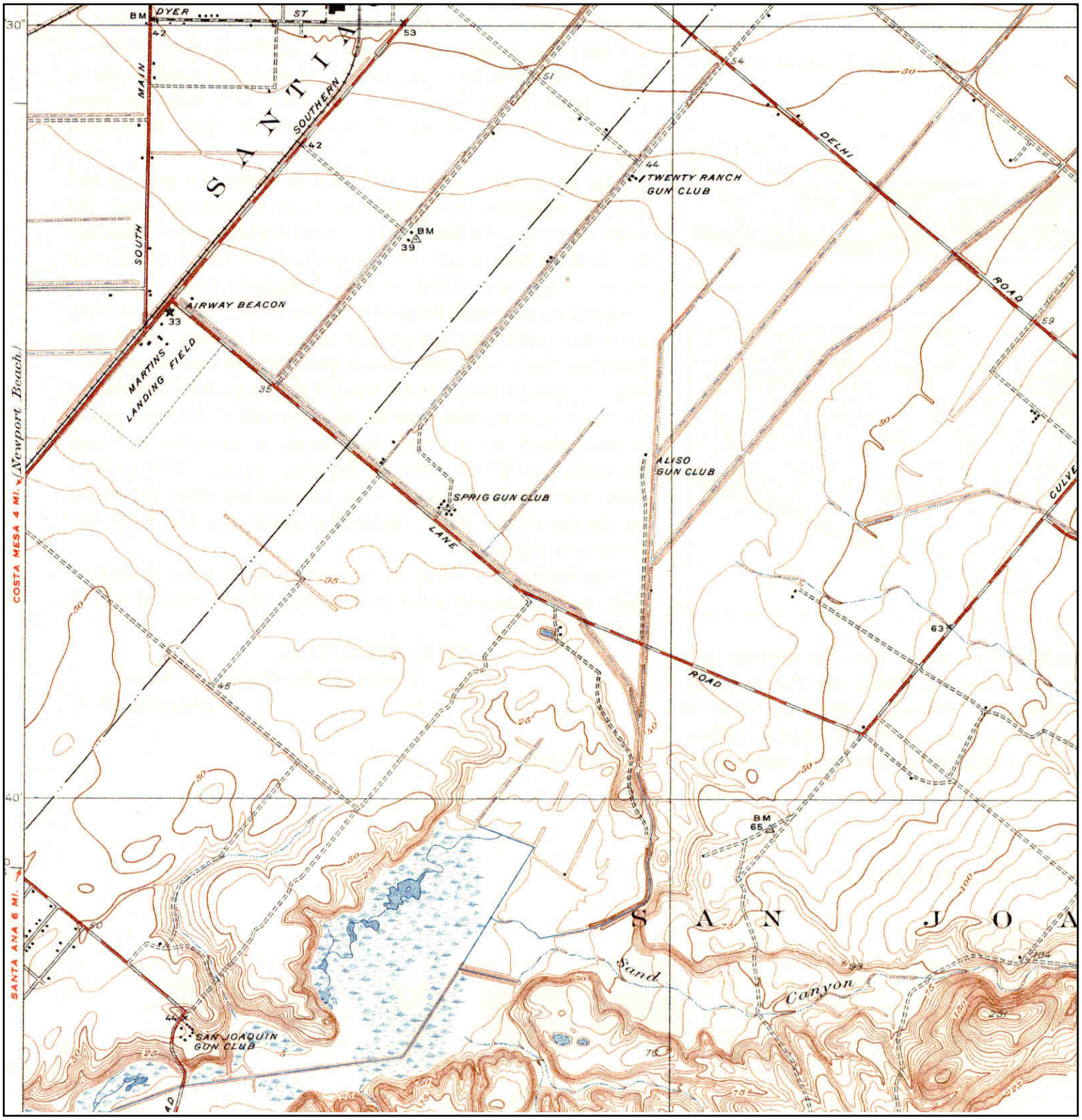
N	TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1972 PHOTOREVISED FROM :1965 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



N	TARGET QUAD NAME: NEWPORT BEACH MAP YEAR: 1981 PHOTOREVISED FROM :1965 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

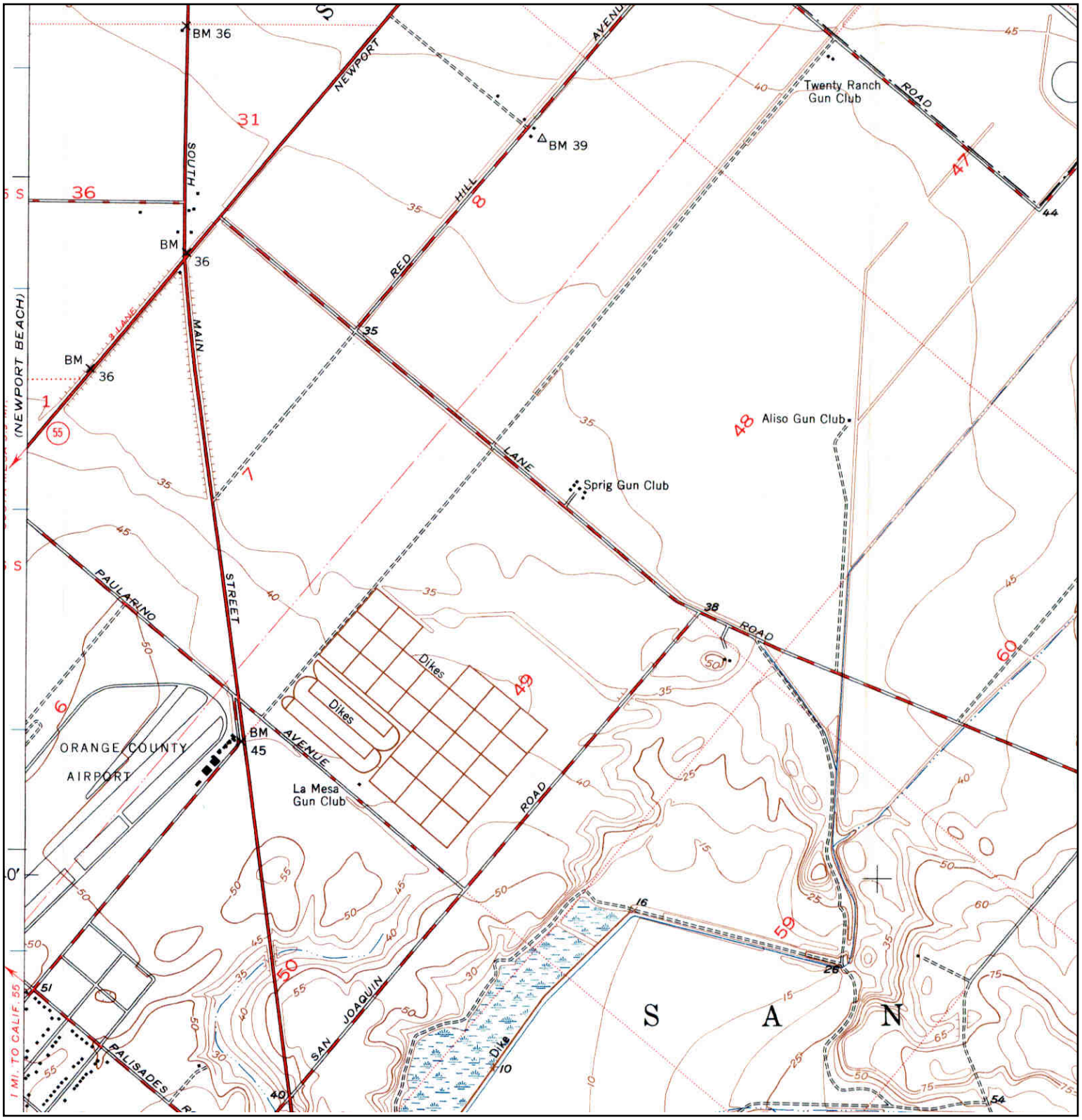
Historical Topographic Map



Unsurveyed Area on the Topographic Map

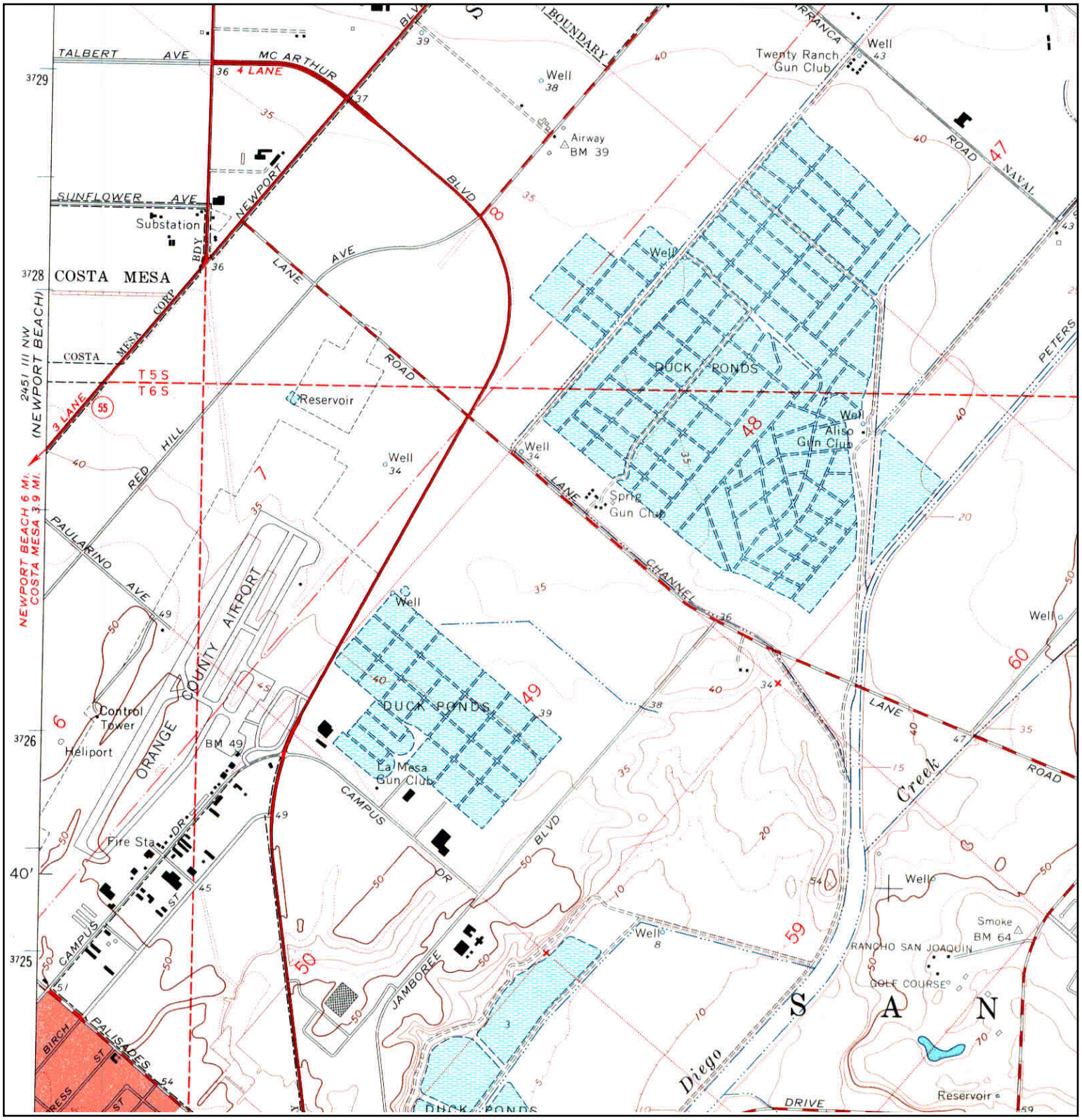
N	ADJOINING QUAD NAME: TUSTIN MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:31680	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



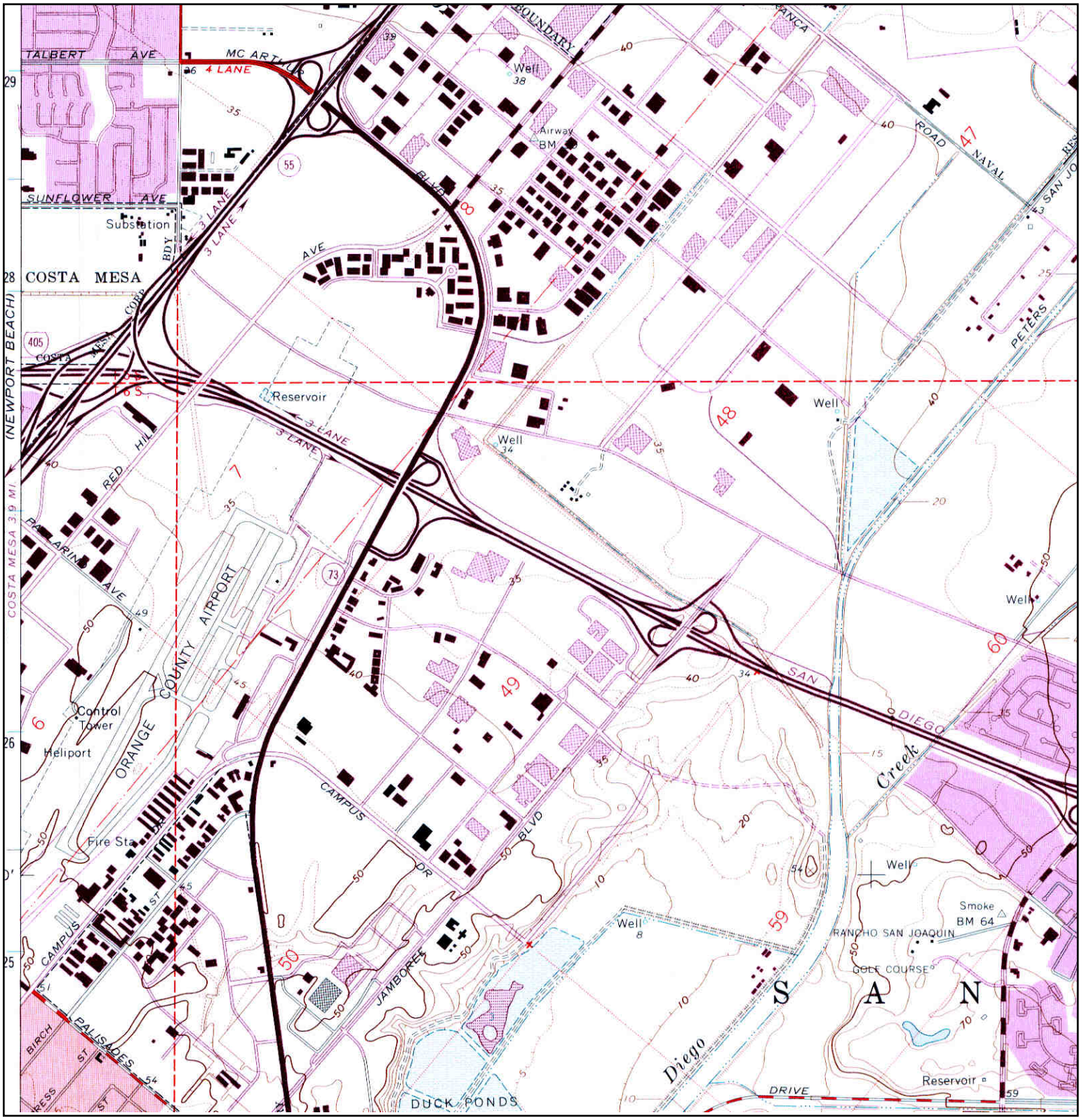
N	ADJOINING QUAD NAME: TUSTIN MAP YEAR: 1948 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



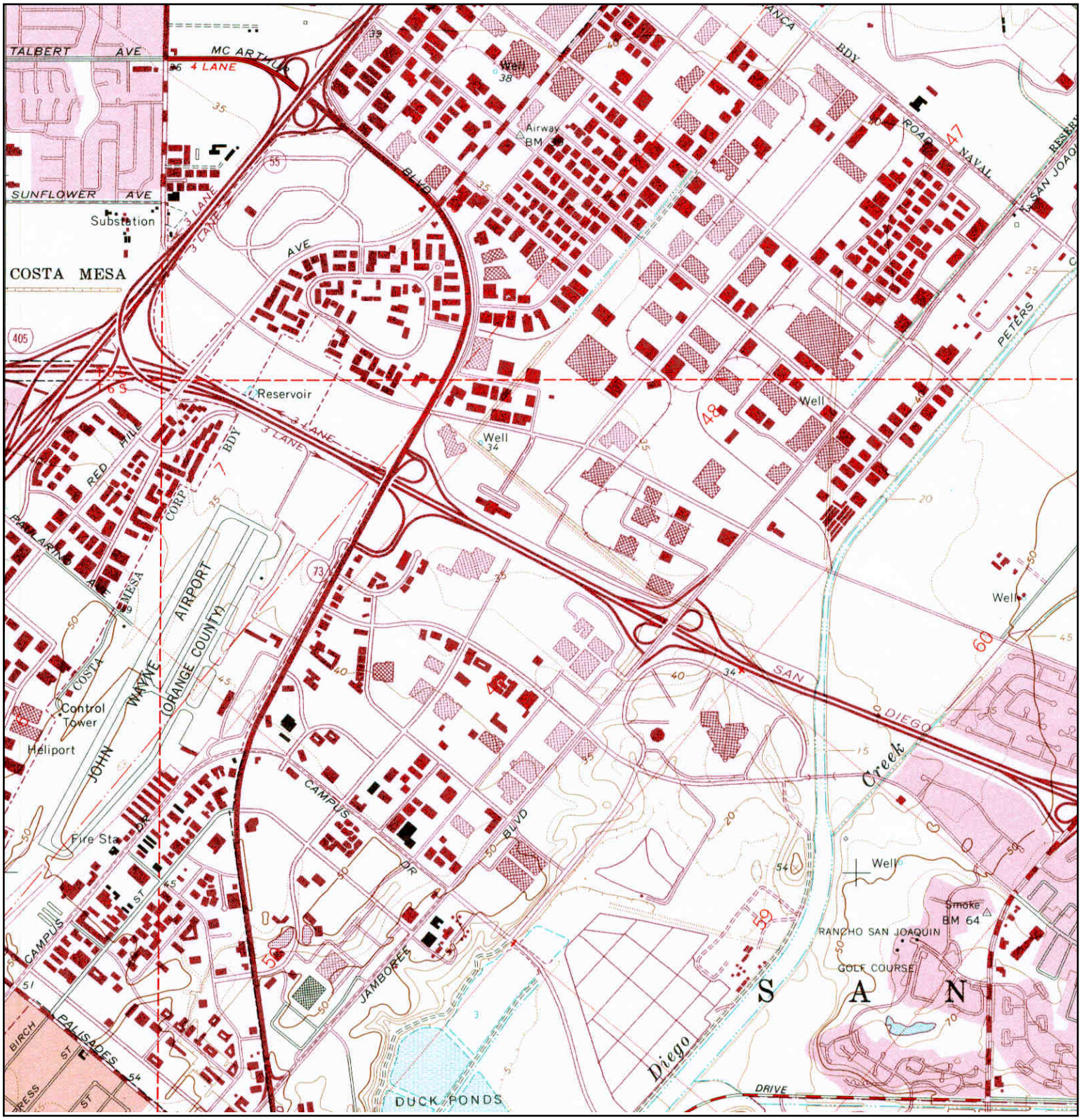
N	ADJOINING QUAD NAME: TUSTIN MAP YEAR: 1965 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



N	ADJOINING QUAD NAME: TUSTIN MAP YEAR: 1972 PHOTOREVISED FROM :1965 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

Historical Topographic Map



N	ADJOINING QUAD NAME: TUSTIN MAP YEAR: 1981 PHOTOREVISED FROM :1965 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 125 Baker Street ADDRESS: 125 Baker Street East Costa Mesa, CA 92626 LAT/LONG: 33.6796 / -117.8786	CLIENT: Geocon Geotechnical & Env CONTACT: Mike Akoto INQUIRY#: 3427558.2 RESEARCH DATE: 10/09/2012

APPENDIX D

125 Baker Street

125 Baker Street East
Costa Mesa, CA 92626

Inquiry Number: 3427558.5
October 09, 2012

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

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Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2012. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2012	Cole Information Services	-	X	X	-
2007	Cole Information Services	-	X	X	-
2002	Haines Company	X	X	X	-
2001	Pacific Telephone	-	-	-	-
1997	Pacific Bell	-	-	-	-
1995	Pacific Bell	-	X	X	-
1992	Pacific Bell	-	-	-	-
1991	Pacific Bell	X	X	X	-
1986	Pacific Bell	X	X	X	-
1980	Pacific Telephone	X	X	X	-
1975	Luskey Brothers & Co., Inc.	-	X	X	-
1971	Luskey Brothers Co., Inc.	-	-	-	-
1970	General Telephone Co., of California	-	X	X	-
1966	Pacific Telephone	-	X	X	-
1965	Ross Publications, Inc.,	-	-	-	-
1961	Luskey Brothers & Co.,	-	-	-	-
1960	Luskey Brothers & Co.,	-	-	-	-
1956	Luskey Brothers & Co., Inc.	-	-	-	-
1955	The Pacific Telephone and Telegraph Co.	-	-	-	-
1952	Luskeys Directory Service Co.	-	-	-	-
1950	West Directory Co.	-	-	-	-
1946	Southern California Telephone Co.	-	-	-	-
1945	McCutcheon & Bragonier	-	-	-	-
1941	Southern California Telephone Co.	-	-	-	-
1936	Western Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1930	Western Directory Co.	-	-	-	-
1926	Pacific Telephone	-	-	-	-
1925	Western Directory Co.	-	-	-	-
1922	Kaasen Directory Co.	-	-	-	-
1921	Western Directory Co.	-	-	-	-
1920	Santa Ana Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

125 Baker Street East
Costa Mesa, CA 92626

FINDINGS DETAIL

Target Property research detail.

BAKER E

125 BAKER E

Year	*Uses*	*Source*
2002	ADVERTISING	Haines Company
	ARGENBRIGHT	Haines Company
	ASSOCIATES CITYNHOMELOAN	Haines Company
	BUILDING A HL SERVICES	Haines Company
	CAIRNSTONEINC	Haines Company
	CAPITAL CORP GROUP WEST	Haines Company
	CHIROPRACTIC	Haines Company
	COUNTY MAGAZINE WILLIAMSREAL	Haines Company
	DAVISMURRAY	Haines Company
	DGMEASSOCIATES	Haines Company
	DGSM 4 ASSOCIATES	Haines Company
	DRPNETWORKINC	Haines Company
	ESTATE MNG INC	Haines Company
	GOVERNESS AGNCY	Haines Company
	GROUP STATEWIDE GENERAL	Haines Company
	HAMILTON WATER	Haines Company
	HUTCHISONACO	Haines Company
	INSURANCE AG TIC ENTERPRISES LC	Haines Company
	INSURANCE SERV	Haines Company
	KAPLAN TEST PREP	Haines Company
	NAGASECORP	Haines Company
	ORANGE COAST	Haines Company
	PAYLESSORUG	Haines Company
	PRO INSURANCE	Haines Company
	RAKE KMACONSULTING	Haines Company
	SECURITY INC BELDEN	Haines Company

FINDINGS

Year	Uses	Source
2002	SHRTLND RPRTNG GENL BENEFITS	Haines Company
	STAFFING RODHEIM MARKETING	Haines Company
	STORE PICKLE COMPUTER	Haines Company
	THE GREAT AMERICAN	Haines Company
	WHEREORANGE	Haines Company
1991	Belden & Co CPA	Pacific Bell
	Bosshard & Co nc	Pacific Bell
	Bosshard HL	Pacific Bell
	Bosshard Royal C	Pacific Bell
	Break Through	Pacific Bell
	Breakaway Health Corp	Pacific Bell
	Ekstrand Roy A atty	Pacific Bell
	EM C Corp	Pacific Bell
	Governess Agency The	Pacific Bell
	Kaplan Educational Center	Pacific Bell
	Nelson Ralston Robb Communications	Pacific Bell
	Nelson Robert Nelson Ralston Robb Communications	Pacific Bell
	ONeill James G atty	Pacific Bell
	Operation Golden Bear	Pacific Bell
	Pole Development Corp	Pacific Bell
	Pro Buying Group	Pacific Bell
	Progressive Retailers Organization	Pacific Bell
	Rodheim Marketing Group	Pacific Bell
	Stanley H Kaplan Educational Center Ltd	Pacific Bell
	Stonehill Anna Lisa MD	Pacific Bell
	Thomasson Melissa J Ph D	Pacific Bell
1986	Azeka De Almeida Planning	Pacific Bell
	Computer Assisted Training Inc	Pacific Bell
	Drapers Corporate Offices	Pacific Bell
	Duplex Products Inc	Pacific Bell
	General Media Inc	Pacific Bell
	Group Sales Olc	Pacific Bell
	Nati Nutritional Food Assn	Pacific Bell
	National Education Corp	Pacific Bell
	ORAN GE COAS T DE N TAL XRAY	Pacific Bell
	Priam Corp	Pacific Bell
1980	Ball Corp	Pacific Telephone
	Costa Mesa	Pacific Telephone

FINDINGS

Year	Uses	Source
1980	Donovan D A Investigations	Pacific Telephone
	Drapers Corporate Offices	Pacific Telephone
	Hartsteln J	Pacific Telephone
	Raub Jack GCo	Pacific Telephone
	Van Heusen Company The	Pacific Telephone
	Van Hiel Bryn J	Pacific Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BAKER E

150 BAKER E

Year	Uses	Source
2002	CREELPRINT	Haines Company
	CALIFORNIA	Haines Company

183 BAKER E

Year	Uses	Source
2002	VINEYARDCHRISTIAN	Haines Company
	VINEYARDCHRISTIAN	Haines Company
	VINEYARD CHRISTIAN	Haines Company

215 BAKER E

Year	Uses	Source
2002	ONUNE MICRO	Haines Company

225 BAKER E

Year	Uses	Source
2002	XXXX	Haines Company

235 BAKER E

Year	Uses	Source
2002	FOOOSALESWESTINC	Haines Company

250 BAKER E

Year	Uses	Source
2002	ORANGE CO JEWISHCOMMUNITY	Haines Company
	CAMPUS	Haines Company
	CENTER UNITED JEWISH	Haines Company
	THEJEWISHSENIOR	Haines Company
	BNAIBRITHHILLEL	Haines Company
	FNDTN BUREAUOFJEWISH	Haines Company
	EDUCATION COMNTYFOUNDATION	Haines Company
	OFJFOC HILLEL FNDTN OF	Haines Company
	CENTER OFOC JEWISH FAMILY	Haines Company

FINDINGS

Year	Uses	Source
2002	SERVICE JEWISH FDRTN OF	Haines Company
	ORNGECOUJA NAAMATUSA	Haines Company

345 BAKER E

Year	Uses	Source
2002	XXXX	Haines Company

BAKER ST

102 BAKER ST

Year	Uses	Source
2002	KARPJerome	Haines Company

104 BAKER ST

Year	Uses	Source
2002	00 LLADOMona L	Haines Company
	E 192 EMADISi	Haines Company
	DUONGSuong	Haines Company
	Y 207 MARSHALL Cra 0g	Haines Company
	LONSDALEGary	Haines Company
	GURUNATHMulambar	Haines Company
	GOMEZE	Haines Company
	L 121 GIA 0 UINTOJoe	Haines Company
	BAKER 92626 COOT FLORESGonzalo Duran	Haines Company
	CUSTODIO Meyh II	Haines Company
	DAYSara J	Haines Company
	M 201 DICKSONMi	Haines Company
	T 107 DOSHIAm Me	Haines Company
	T 107 DOSNIDiilp	Haines Company
	H 201 DROBNYMilan 714 S	Haines Company

106 BAKER ST

Year	Uses	Source
2002	VANDEe Schaai M 714 546 B	Haines Company

112 BAKER ST

Year	Uses	Source
2002	BOYERJoel S	Haines Company

FINDINGS

126 BAKER ST

Year	Uses	Source
2002	S 6 BOJORROUSEDamien V	Haines Company

203 BAKER ST

Year	Uses	Source
2002	HOAGLANOBerkley	Haines Company
	HU Erie	Haines Company
	D 202 HUMMELKur J	Haines Company
	B 202 HANSENLT	Haines Company
	HAMMONDThos V	Haines Company

204 BAKER ST

Year	Uses	Source
2002	SVESLOSKYTodd 714 641 B	Haines Company
	P 104 SYMONS Michael K	Haines Company
	TAKAHASI Masami	Haines Company
	TANWee G	Haines Company
	U 202 ZELLMERBrad T	Haines Company
	TERAOKAJames K 714 437 791 W	Haines Company
	TATSUMI Kumi	Haines Company
	W 102 YANGDaniel	Haines Company
	N 103 YAMAZAKIKao Uli	Haines Company
	N 103 YAMAMOTOMesaulio	Haines Company
	WILDMANGayl	Haines Company
	C 206 WEINBERGERNicholas	Haines Company
	N 102 WEIBERTOary	Haines Company
	C 101 VELAOSUEZDiana L	Haines Company
	R 204 VAN Liew Rachel A	Haines Company
	TERRIOUEZJose Lus	Haines Company

209 BAKER ST

Year	Uses	Source
2002	PATRICK Valdez	Haines Company
	MELBYKevin R	Haines Company

BAKER ST E

200 BAKER ST E

Year	Uses	Source
2012	DONAHUE SCRIBER	Cole Information Services

FINDINGS

Year	Uses	Source
2012	ELEPHANT BAR	Cole Information Services
	DS TRANSPORTATION	Cole Information Services
	AMERICAN CAREER COLLEGE	Cole Information Services
	DS ANTELOPE MARKET PLACE	Cole Information Services
	DONAHUE SCHRIBER INC	Cole Information Services
2007	AMERICAN CAREER COLLEGE	Cole Information Services
	KLAGES CARTER VAIL & PARTNER	Cole Information Services
	DONAHUE SCHRIBER	Cole Information Services
	JULIUS ASSOCIATES	Cole Information Services

215 BAKER ST E

Year	Uses	Source
2012	BLUE VIOLET NETWORKS	Cole Information Services
	ONLINE MICRO	Cole Information Services
2007	BLUE VIOLET NETWORKS	Cole Information Services
	ONLINE MICRO LLC	Cole Information Services
	PHONEBY	Cole Information Services
	NETPROS TECHNOLOGIES INC	Cole Information Services

235 BAKER ST E

Year	Uses	Source
2012	FOOD SALES WEST INC	Cole Information Services

250 BAKER ST E

Year	Uses	Source
2012	FAMOSA INC	Cole Information Services
	BNAI BRITH YOUTH ORGANIZATION	Cole Information Services
	R DMS INC	Cole Information Services
	COMMUNITY FOUNDATION OF JFOC	Cole Information Services
	HILLEL FOUNDATION OF ORANGE COUNTY	Cole Information Services
	OSCAR FLORES HARDWOOD	Cole Information Services
	BUREAU OF JEWISH EDUCATION	Cole Information Services
	BRIGHAM DORA INTERIORS	Cole Information Services
2007	ORANGE COUNTY BUREAU OF JEWISH EDUCA	Cole Information Services
	B NAI B RUTG YOUTH ORGANIZATION	Cole Information Services
	BURKE REAL ESTATE	Cole Information Services
	DAVID PIERCE HOHMANN ARCHITECT	Cole Information Services
	HILLEL FOUNDATION OF ORANGE COUNTY	Cole Information Services

FINDINGS

Year	Uses	Source
2007	UNITED JEWISH CAMPUS	Cole Information Services

260 BAKER ST E

Year	Uses	Source
2012	ODAY SHAKAR LLC	Cole Information Services
	FASHION FURNITURE RENTAL	Cole Information Services
	FABIAN WEALTH STRATEGIES	Cole Information Services
	BURKE REAL ESTATE GROUP	Cole Information Services
2007	BURKE REAL ESTATE GROUP INC	Cole Information Services

270 BAKER ST E

Year	Uses	Source
2012	AMERICAN CAREER COLLEGE	Cole Information Services
	ASTRO PAK CORP	Cole Information Services
	PAUL FRANK INDUSTRIES	Cole Information Services
2007	ASTRO PAK CORP	Cole Information Services

275 BAKER ST E

Year	Uses	Source
2012	PEI GENESIS	Cole Information Services
	SJ AMOROSO	Cole Information Services
2007	S J AMOROSO CONSTRUCTION INC	Cole Information Services
	CINEMA STADIUM ERECTORS INC	Cole Information Services

300 BAKER ST E

Year	Uses	Source
2007	SOLIDWORKS CORP	Cole Information Services

326 BAKER ST E

Year	Uses	Source
1980	ESTRADA JOSE	Pacific Telephone

332 BAKER ST E

Year	Uses	Source
1980	HERNANDEZ AMBROSIO A (VIRGINIA)	Pacific Telephone

333 BAKER ST E

Year	Uses	Source
2007	NEW BALANCE SOUTH COAST PLAZA	Cole Information Services

FINDINGS

335 BAKER ST E

Year	Uses	Source
2012	TOYOTA RACING DEVELOPMENT	Cole Information Services
2007	TRD USA INC	Cole Information Services
	TOYOTA RACING DEVELOPMENT	Cole Information Services

BRIGGS AVE

200 BRIGGS AVE

Year	Uses	Source
2012	AZ MANUFACTURING	Cole Information Services
2007	REVELLO METAL CRAFT	Cole Information Services
	AZ MANUFACTURING INC	Cole Information Services
2002	COMPNNT	Haines Company
	MOLDEDMED	Haines Company
	MEDICAL MOLDING	Haines Company
	OLUKASGarry	Haines Company
	AZMFGINC	Haines Company
1995	Molded Medical Component Division	Pacific Bell
	Medical Molding Corp Of America	Pacific Bell
1991	Molded Medical Component Division	Pacific Bell
	Medical Personnel Pool	Pacific Bell
	Medical Of c Consultants	Pacific Bell
	Medical Molding Corp Of America	Pacific Bell
1986	Molded Medical Component Division	Pacific Bell
	Medical Molding Corp Of America	Pacific Bell
1980	E LE CTRON IC ME DICAL IN S TRUME N TS IN C E MIi	Pacific Telephone
1975	CALIF INJECTION MOLDING CO INC	Luskey Brothers & Co., Inc.
1970	CALIF INJECTION MOLDING CO INC	General Telephone Co., of California
1966	CALIF INJECTION MOLDING CO INC	Pacific Telephone

240 BRIGGS AVE

Year	Uses	Source
2012	AMIDON ASSOCIATES INC	Cole Information Services
2007	AMERICAN CORES & ELECTRONICS	Cole Information Services
	AMIDON ASSOCS INC	Cole Information Services
2002	ALPHAHITECH	Haines Company
	CORESIELECTRONICS AMIDONASSOCIATES	Haines Company
	INC ASTRON ELECTRONICS	Haines Company

FINDINGS

Year	Uses	Source
2002	BTCPOWER	Haines Company
	ELECTRONICS BROADBAND TELECOM	Haines Company
	COILWINDING	Haines Company
	TCHNLGY CORP MAG LAYERSUSA INC	Haines Company
	MAG LAYERS USA INC	Haines Company
	SPECIALISTS FLAT TRANSFORMER	Haines Company
1995	Respiratory Medical Products Division	Pacific Bell
	Medical Molding Corp Of America	Pacific Bell
1991	Medical Molding Corp Of America	Pacific Bell
	Respiratory Medical Products Division	Pacific Bell
1975	WALJAN PRODUCTS INC	Luskey Brothers & Co., Inc.

250 BRIGGS AVE

Year	Uses	Source
2012	SHAWN MOTORS	Cole Information Services
2007	SOUTH COAST SURFACES	Cole Information Services
2002	XXXX	Haines Company
1975	METZ CORP	Luskey Brothers & Co., Inc.
1970	METZ CO	General Telephone Co., of California
1966	METZ CO	Pacific Telephone

265 BRIGGS AVE

Year	Uses	Source
2012	PRIMARY COLOR SYSTEMS CORPORATION	Cole Information Services
2007	TRIGA USA	Cole Information Services
2002	CIMCO	Haines Company
	a INTESYSTECHNOLOGY	Haines Company
1995	CIMCOInc	Pacific Bell
1991	CIMCOInc	Pacific Bell
	CIMCO	Pacific Bell
1986	CIMCO	Pacific Bell
	CIMCO	Pacific Bell
	Medical Molding Corp Of America	Pacific Bell
	Respiratory Medical Products Division	Pacific Bell
1980	CIMCO	Pacific Telephone

FINDINGS

270 BRIGGS AVE

Year	Uses	Source
1986	Pan Western Research Corp	Pacific Bell
1980	Pan Western Research Corp	Pacific Telephone
1970	Signet Marking Devices	General Telephone Co., of California
1966	Signet Marking Devices	Pacific Telephone

275 BRIGGS AVE

Year	Uses	Source
2002	XXXX	Haines Company
1980	Calvert F M @Huntington Beach@	Pacific Telephone
	Calvert Enterprises	Pacific Telephone
1975	Calvert Enterprises	Luskey Brothers & Co., Inc.
	Space Age Sales Co	Luskey Brothers & Co., Inc.
1970	Calvert Enterprises	General Telephone Co., of California

E BAKER

200 E BAKER

Year	Uses	Source
1991	Competitive Trailers Inc	Pacific Bell
	Competitive Technology Inc	Pacific Bell
	Acticom Imaging Systems Inc	Pacific Bell
	Pacific Teal Development Corp	Pacific Bell

215 E BAKER

Year	Uses	Source
1991	Browning Kate Design	Pacific Bell
	Cambridge West Showroom	Pacific Bell
	Concepts II Ltd	Pacific Bell
	Davis Diane K Design	Pacific Bell
	Floorworks	Pacific Bell
	Flor C	Pacific Bell
	Flor GM	Pacific Bell
	Hartley Design Group	Pacific Bell
	Interior Design Studio The	Pacific Bell
	La Scala Design	Pacific Bell
	Lyghting By Harris	Pacific Bell
	Marions Custom Floor Covering	Pacific Bell
	Marketing & Communication Resources	Pacific Bell

FINDINGS

Year	Uses	Source
1991	We Design	Pacific Bell
1986	Stephen C Groat Develpement Inc	Pacific Bell

225 E BAKER

Year	Uses	Source
1980	Air Instrument Systems	Pacific Telephone

250 E BAKER

Year	Uses	Source
1986	BRIGGS CUN N IN GHAM AUTOMOTIVE MUS E UM	Pacific Bell
	Cunningham Automotive Museum	Pacific Bell
1980	Cunningham Automotive Museum	Pacific Telephone

275 E BAKER

Year	Uses	Source
1991	Maxwell Data Management Inc	Pacific Bell
	Magil Paul Alan & Associates	Pacific Bell
	Val Pak Coastal Orange County	Pacific Bell
1986	Magil Paul Alan & Associates	Pacific Bell
1980	True Cut Samplers Div Of Cl I Mock Co	Pacific Telephone
	PS I Industries Flange Insulation Insulating & Sealig S Gaskets	Pacific Telephone
	Frost Engineering Service Co	Pacific Telephone
	Frost ngineering Service Co	Pacific Telephone
	PO Box 19700 @Irvine@	Pacific Telephone

345 E BAKER

Year	Uses	Source
1991	Corporate Office	Pacific Bell
1986	Corporate Office	Pacific Bell
1980	Corporate Office	Pacific Telephone

PULLMAN ST

3150 PULLMAN ST

Year	Uses	Source
2002	t METRO BAY PLASTICS	Haines Company
	a SRWCOMPUTER	Haines Company
	COMPONENT INC	Haines Company
1995	Metro Bay Products Inc	Pacific Bell

FINDINGS

Year	Uses	Source
1995	TK CInc	Pacific Bell
1991	Betatron Inc	Pacific Bell
	Environmental Communications Incorporated	Pacific Bell
1986	Betatron Inc	Pacific Bell
	Environmental Communications Incorporated	Pacific Bell
	Information Communications Systems	Pacific Bell
1980	Operations	Pacific Telephone
	Purchasing	Pacific Telephone
	In	Pacific Telephone
	Information Development Corp POBox 3663 A .31	Pacific Telephone
	Famiyr Education	Pacific Telephone
	Temple Isaiah Of Newport Beach Conservative	Pacific Telephone
	Applications	Pacific Telephone
1975	Environmental Communications Incorporated	Luskey Brothers & Co., Inc.

RED HILL AVE

3050 RED HILL AVE

Year	Uses	Source
2012	ANAJET INC	Cole Information Services
2007	INFOGRAPHIC SYSTEMS CORP	Cole Information Services
	GE SECURITY INC	Cole Information Services
	CCTV CORP	Cole Information Services
2002	a IMAGYNMEDICAL	Haines Company
	TECHNOLOGIES	Haines Company

3115 RED HILL AVE

Year	Uses	Source
2012	COUNTY OF ORANGE	Cole Information Services
	ALCOHOL & DRUG ABUSE SERVICESCOUNTY	Cole Information Services
2007	ORANGE COUNTY HEALTH CARE AGENCY BEH	Cole Information Services
	HEALTH CARE AGENCY ADULT OUTPNT	Cole Information Services
	ALCOHOL & DRUG ABUSE CLINIC	Cole Information Services
	CHILDREN & YOUTH SERVICES	Cole Information Services

FINDINGS

Year	Uses	Source
1995	Aliso Viejo S Mareblu Aliso Viejo	Pacific Bell
	Costa Mesa	Pacific Bell

3121 RED HILL AVE

Year	Uses	Source
2012	SIGNET MARKING DEVICES	Cole Information Services
2007	SIGNET MARKING DEVICES	Cole Information Services
1995	Signet Marking Devices	Pacific Bell
1986	S IGN E T MARKIN G DE VICE S	Pacific Bell
1975	Signet Marking Devices	Luskey Brothers & Co., Inc.
	Americana Printing	Luskey Brothers & Co., Inc.
	Letters & Signage Factory	Luskey Brothers & Co., Inc.

3128 RED HILL AVE

Year	Uses	Source
2007	HUNT C MICHAEL	Cole Information Services
	WALTER HARPER CO	Cole Information Services
1980	Corp Hdqtrs	Pacific Telephone

3140 RED HILL AVE

Year	Uses	Source
2012	CLARK CHIROPRACTIC CENTER	Cole Information Services
	MIND LAW FIRM	Cole Information Services
	REDWOOD FINANCIAL	Cole Information Services
	EMERALD WEALTH MANAGEMENT	Cole Information Services
	SOLUTIONS JDM MARKETING	Cole Information Services
	POWER PHYSICAL THERAPY & SPORTS MEDI	Cole Information Services
	GERBODE CHIROPRACTIC	Cole Information Services
	HILLIARD & ASSOCIATES INSURANCE	Cole Information Services
	KBQUEST GROUP INC	Cole Information Services
	MIRRAFATI SID MD	Cole Information Services
	MIRA AESTHETIC CENTER	Cole Information Services
	PRICE & ASSOCIATES	Cole Information Services
	ACS SERVICES CORPORATION	Cole Information Services
	NEW HOPE CHRISTIAN CENTER	Cole Information Services
	WINTECH STAFFING GROUP INC	Cole Information Services
2007	MILLER FAMILY CHIROPRACTIC	Cole Information Services
	ZONO INC	Cole Information Services
	SWEATYBALLZ LLC	Cole Information Services

FINDINGS

Year	Uses	Source
2007	MERCURY FINANCIAL SERVICES CORP	Cole Information Services
	GERBODE CHIROPRACTIC CENTER	Cole Information Services
	HILLIARD & ASSOCIATES INSURANCE BROK	Cole Information Services
	MERCURY INSURANCE GROUP HILLIARD &	Cole Information Services
	ASAP GAMES LLC	Cole Information Services
	HIGHER GROUND COUNSELING	Cole Information Services
	PRICE & ASSOCIATES	Cole Information Services
	CHINA BLUE STAR USA GROUP INC	Cole Information Services
	REM CAPITAL GROUP INC	Cole Information Services
	DILLINGER CAROLY M	Cole Information Services
	CREATIVE PET PRODUCTS INC	Cole Information Services
	STAR QUEST INC	Cole Information Services
1995	CLARK CHIROPRACTIC CENTER FOR THE FAMILY	Pacific Bell
	Clark Craig R DC	Pacific Bell
	Johnson Roger A psyclgst	Pacific Bell
	Kalros Psychological Services	Pacific Bell
	Mc Kelvey Michael SDC	Pacific Bell
	Mc Kelvey Michael S DC	Pacific Bell
	Mesa Chiropractic Family Health Care Centre	Pacific Bell
	Mile Square Insurance	Pacific Bell
	MILLER J RANDALL DR FAMILY CHIROPRACTIC HEALTH CARE	Pacific Bell
	Noble John Ratty	Pacific Bell
	Price & Associates	Pacific Bell
	Pro Capital Resources Inc	Pacific Bell
	Select Real Estate	Pacific Bell
	Shorco Publishing Inc	Pacific Bell
	Trend Advertising Associates	Pacific Bell
1991	Johnson Roger A psyclgst	Pacific Bell
	Kairos Psychological Services	Pacific Bell
	Laping Marlene psyclgst	Pacific Bell
	Laping Rob	Pacific Bell
	Smith Randall E MFCC	Pacific Bell
	Whelan Real Estate	Pacific Bell
	Harrah Calvinpsyclsgt	Pacific Bell
	Harrah LJ	Pacific Bell

FINDINGS

Year	Uses	Source
1986	Michael Brandman Associates	Pacific Bell
	Bishop Hawk Of So Ca lit	Pacific Bell

3146 RED HILL AVE

Year	Uses	Source
2012	CONNOLLY CHARLES A	Cole Information Services
	ROBINSON MICHAEL G	Cole Information Services
	CHAVOS ANTHONY G	Cole Information Services
	MIRKOVICH MICHAEL J	Cole Information Services
	RIBANT DENNIS	Cole Information Services
	ALANI DOUGLAS D PLC	Cole Information Services
	AMERILAND NUTRITION INC	Cole Information Services
	MANALO SUZANNE A	Cole Information Services
	WEINBERG CATHERINE J	Cole Information Services
	BUCKNER ALANI KHOURI CHAVOS & MIRKOV	Cole Information Services
	INVESTMENT PROPERTIES II LLC	Cole Information Services
	DEMPSEY MIRANDA	Cole Information Services
	AFFANT COMMUNICATIONS	Cole Information Services
	BUCKNER WILLIAM D	Cole Information Services
2007	DNS NETWORK SERVICES	Cole Information Services
	WALL STREET DEVELOPMENT NEVADA INC	Cole Information Services
	AFFANT COMMUNICATION	Cole Information Services
	CHINA RESOURCE GROUP	Cole Information Services
	BREDFELDTCORSON ODUKOYA RLLP	Cole Information Services
	BUCKNER WILLIAM D	Cole Information Services
	LA PAZ CENTER LLC	Cole Information Services
1995	Buckner & Young	Pacific Bell
	Dynamic Marketing Associates	Pacific Bell
	Essex Realty Management Inc	Pacific Bell
	Orion Computers	Pacific Bell
	Orion Pacific Technologies	Pacific Bell
	Quigg & Company Inc	Pacific Bell
	Reedy Alan Matty	Pacific Bell
	Wilmore City Development Corp	Pacific Bell
1991	Accident Attorneys Law Center	Pacific Bell
	Dynamic Marketing Associates	Pacific Bell
	Fidelity Futures Inc	Pacific Bell
	Fidelity Management Service Inc	Pacific Bell

FINDINGS

Year	Uses	Source
1991	Kentex Petroleum Inc	Pacific Bell
	Peeklon atty	Pacific Bell
	Provest Inc	Pacific Bell
	Putman Philip A And Associates	Pacific Bell
	Putnam Philip A atty	Pacific Bell
	Reedy & Peek Attorneys	Pacific Bell
	Young Hal A Jr atty	Pacific Bell
1986	AVIDD E LE CTRON ICS CO	Pacific Bell
	AVIDD E LE CTRON ICS CO	Pacific Bell
	Covington & Associates Incap	Pacific Bell
	Incap Inc	Pacific Bell
	Summit Media Services	Pacific Bell

3150 RED HILL AVE

Year	Uses	Source
1991	BASSO& ASSOCIATES INC	Pacific Bell
	Basso Dominic	Pacific Bell
	Basso JL	Pacific Bell
	Bassod JW 7	Pacific Bell

3151 RED HILL AVE

Year	Uses	Source
2007	PATENT LAW & VENTURE GROUP	Cole Information Services

3152 RED HILL AVE

Year	Uses	Source
2012	MORTGAGE NOW	Cole Information Services
	DMX	Cole Information Services
	INSPHERE INSURANCE SOLUTIONS	Cole Information Services
	SYNCVOICE COMMUNICATIONS	Cole Information Services
	MURR & ASSOCIATES ADVERTISING	Cole Information Services
2007	PREFERRED AUTO SALES	Cole Information Services
	SUPERIOR STAFFING SERVICES	Cole Information Services
	BEACON BAY AUTO WASHES	Cole Information Services
	CASTNER JOSEPHS RETIREMENT GROUP	Cole Information Services
	MURR & ASSOCIATES INC	Cole Information Services
1995	Polytec PIInc	Pacific Bell
	Phoenix Network	Pacific Bell
	Newport Center Travel Bureau	Pacific Bell

FINDINGS

Year	Uses	Source
1995	Murr & Associates Inc	Pacific Bell
	Great Western Travel	Pacific Bell
	Graphic Arts Knights The	Pacific Bell
	Blanchi Vineyards	Pacific Bell
	Bianchi Vincent Jas	Pacific Bell
	Ariel West Public Relations	Pacific Bell
	United Ventures Touring	Pacific Bell
1991	Murr & Associates Inc	Pacific Bell
	Graphic Arts Knights The	Pacific Bell
1986	Smith E Gary atty	Pacific Bell
	Polygon Homes By	Pacific Bell
	Nunes Frank C atty	Pacific Bell
	Murr & Associates Inc	Pacific Bell
	Mac Dowell John R atty	Pacific Bell
	Lowe Michael T	Pacific Bell
	Lang Lampert Architects	Pacific Bell
	Lamedman Maria J atty	Pacific Bell
	Kipper David R	Pacific Bell
	ee William H tty	Pacific Bell
	Anthony Jack H atty	Pacific Bell
	Booth Mitchel Strange & Smith	Pacific Bell
	Bnggs Robert H	Pacific Bell
	Burt C Gentle Co Inc	Pacific Bell
	Dodds Debra A atty	Pacific Bell
	Gentle Burt C Co Inc	Pacific Bell
	Graphic Arts Knights The	Pacific Bell
	Gnswold Corporate Office	Pacific Bell
	Gnswolds Development Corp	Pacific Bell
	HTM Mortgage Serivces Div Of Homes By Polygon	Pacific Bell
	Higgins James I atty	Pacific Bell
	Hill Walter B Jr	Pacific Bell
	Homes By Polygon	Pacific Bell

3158 RED HILL AVE

Year	Uses	Source
1995	WNC& Associates	Pacific Bell
	Schraff Group The	Pacific Bell
	New Century Concepts	Pacific Bell

FINDINGS

Year	Uses	Source
1995	Neighborhood Mortgage	Pacific Bell
	Jencor Construction Inc	Pacific Bell
	Europath	Pacific Bell
	Ekstrand Roy A atty	Pacific Bell
	Consolidated Mortgage Services	Pacific Bell
	Cherry Communications	Pacific Bell
1991	Symbolized Systems Inc	Pacific Bell
	Sigmond David E	Pacific Bell
	Sigmond Co The	Pacific Bell
	Investigations Corp Of America	Pacific Bell
	Fibercom Inc	Pacific Bell
	Desmos	Pacific Bell
	Advertising Design Service	Pacific Bell
	ADS	Pacific Bell
1986	Nova Pacific	Pacific Bell
	New Source Corp	Pacific Bell
	Chandler & Chandler Advertising	Pacific Bell
	Callister Thomas K	Pacific Bell
	Bacall Corp	Pacific Bell

3159 RED HILL AVE

Year	Uses	Source
2007	PROGRESSIVE ELECTRONIC TECH	Cole Information Services
1995	Quantum Management Inc	Pacific Bell
	Rising Star Contract Service	Pacific Bell
	Stoneridge Reality Inc	Pacific Bell
1991	Physician Sales And Service	Pacific Bell
1986	Happen Photography	Pacific Bell
	Sharnborg Jon & Associates	Pacific Bell

3160 RED HILL AVE

Year	Uses	Source
1995	Pacific College Of Business	Pacific Bell
1991	Corporate Ofc	Pacific Bell
1980	Stern Lawrence Alan pub relatns & advg	Pacific Telephone
	Northwest Lumber Co	Pacific Telephone

FINDINGS

RED OFILL AVE

3146 RED OFILL AVE

Year	*Uses*	*Source*
1991	Reedy Alan M atty	Pacific Bell

W BAKER ST

112 W BAKER ST

Year	*Uses*	*Source*
1966	Hoss Edna	Pacific Telephone

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
125 Baker Street East	2012, 2007, 2001, 1997, 1995, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
102 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
104 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
106 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
112 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
112 W BAKER ST	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
126 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
150 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
183 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
200 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
200 BRIGGS AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
200 BRIGGS AVE	2012, 2007, 2001, 1997, 1992, 1971, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
200 E BAKER	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
203 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
204 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
209 BAKER ST	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
215 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
215 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
215 E BAKER	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
225 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
225 E BAKER	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
235 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
235 BAKER ST E	2007, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
240 BRIGGS AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
240 BRIGGS AVE	2012, 2007, 2001, 1997, 1992, 1986, 1980, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
250 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
250 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
250 BRIGGS AVE	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1971, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
250 BRIGGS AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
250 E BAKER	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
260 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
265 BRIGGS AVE	2012, 2007, 2001, 1997, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
265 BRIGGS AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
270 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
270 BRIGGS AVE	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1975, 1971, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
275 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
275 BRIGGS AVE	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1971, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
275 E BAKER	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
300 BAKER ST E	2012, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3050 RED HILL AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3050 RED HILL AVE	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3115 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3115 RED HILL AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3121 RED HILL AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3121 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1991, 1980, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3128 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3128 RED HILL AVE	2012, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
3140 RED HILL AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3140 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3146 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3146 RED HILL AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3146 RED OFILL AVE	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3150 PULLMAN ST	2012, 2007, 2001, 1997, 1992, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3150 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3151 RED HILL AVE	2012, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3152 RED HILL AVE	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3152 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3158 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3159 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3159 RED HILL AVE	2012, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
3160 RED HILL AVE	2012, 2007, 2002, 2001, 1997, 1992, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
326 BAKER ST E	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
332 BAKER ST E	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
333 BAKER ST E	2012, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
335 BAKER ST E	2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
345 BAKER E	2012, 2007, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
345 E BAKER	2012, 2007, 2002, 2001, 1997, 1995, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

APPENDIX E

6. Transaction Screen Questionnaire

6.1 *Persons to Be Questioned*——The following questions should be asked of (*1*) the current *owner* of the *property*, (2) any major *occupant* of the *property* or, if the *property* does not have any major *occupants*, at least 10% of the *occupants* of the *property*, and (*3*) in addition to the current *owner* and the *occupants* identified in (2), any *occupant* likely to be using, treating, generating, storing, or disposing of *hazardous substances* or *petroleum products* on or from the *property*. A major *occupant* is any *occupant* using at least 40% of the leasable area of the property or any anchor tenant when the *property* is a shopping center. In a multifamily property containing both residential and commercial uses, the *preparer* does not need to ask questions of the residential *occupants*. The *preparer* should ask each person to answer all questions to the best of the respondent's *actual knowledge* and in good faith. When completing the *site visit* column, the *preparer* should be sure to observe the *property* and any buildings and other structures on the *property*. The guide provides further details on the appropriate use of this questionnaire.

Description of Site: Address:

2 STORY OFFICE
125 EAST BAKER
COSTA MESA CA

Question	Owner[1]	Occupants (if applicable)	Observed During Site Visit
1a. Is the *property* used for an industrial use?	Yes (No) Unk	Yes No Unk	Yes No
1b. Is any *adjoining property* used for an industrial use?	(Yes) No Unk	Yes No Unk	Yes No
2a. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?	Yes No (Unk)	Yes No Unk	Yes No
2b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial use in the past?	(Yes) No Unk	Yes No Unk	Yes No
3a. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes (No) Unk	Yes No Unk	Yes No
3b. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes No (Unk)	Yes No Unk	Yes No
4a. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes No (Unk)	Yes No Unk	Yes No
4b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes No (Unk)	Yes No Unk	Yes No
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes (No) Unk	Yes No Unk	Yes No
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the *property* or at the facility?	Yes No (Unk)	Yes No Unk	Yes No
6a. Are there currently any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility?	Yes (No) Unk	Yes No Unk	Yes No
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility?	Yes No (Unk)	Yes No Unk	Yes No
7a. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that originated from a contaminated site?	Yes No (Unk)	Yes No Unk	Yes No

[1] Unk = "unkown" or "no response"

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Question	Owner	Occupants (if applicable)	Observed During Site Visit
7b. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that is of an unknown origin?	Yes No Unk	Yes No Unk	Yes No
8a. Are there currently any *pits, ponds*, or *lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes No Unk	Yes No Unk	Yes No
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any *pits, ponds*, or *lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes No Unk	Yes No Unk	Yes No
9a. Is there currently any stained soil on the *property*?	Yes No Unk	Yes No Unk	Yes No
9b. Did you observe evidence or do you have any prior knowledge that there has been previously, any stained soil on the *property*?	Yes No Unk	Yes No Unk	Yes No
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes No Unk	Yes No Unk	Yes No
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes No Unk	Yes No Unk	Yes No
11a. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes No Unk	Yes No Unk	Yes No
11b. Did you observe evidence or do you have any prior knowledge that there have been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes No Unk	Yes No Unk	Yes No
12a. Are there currently any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?	Yes No Unk	Yes No Unk	Yes No
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any flooring, drains, or walls within the facility that were stained by substances other than water or were emitting foul odors?	Yes No Unk	Yes No Unk	Yes No
13a. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes NA No Unk	Yes No Unk	Yes No
13b. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes NA No Unk	Yes No Unk	Yes No
14. Does the *owner* or *occupant* of the *property* have any knowledge of *environmental liens* or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the *property*?	Yes No Unk	Yes No Unk	
15a. Has the *owner* or *occupant* of the *property* been informed of the past existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes No Unk	Yes No Unk	
15b. Has the *owner* or *occupant* of the *property* been informed of the current existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes No Unk	Yes No Unk	
15c. Has the *owner* or *occupant* of the *property* been informed of the past existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes No Unk	Yes No Unk	
15d. Has the *owner* or *occupant* of the *property* been informed of the current existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes No Unk	Yes No Unk	
16. Does the *owner* or *occupant* of the *property* have any knowledge of any *environmental site assessment* of the *property* or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	Yes No Unk SEE Report provided By PA	Yes No Unk	

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Question	Owner			Occupants (if applicable)			Observed During Site Visit	
17. Does the *owner* or *occupant* of the *property* know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property* by any owner or occupant of the *property*?	Yes	No	Unk	Yes	No	Unk		
18a. Does the *property* discharge waste water, on or adjacent to the *property*, other than storm water, into a storm water sewer system?	Yes	No	Unk	Yes	No	Unk	Yes	No
18b. Does the *property* discharge waste water, on or adjacent to the *property*, other than storm water, into a sanitary sewer system?	Yes	No	Unk	Yes	No	Unk	Yes	No
19. Did you observe evidence or do you have any prior knowledge that any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*?	Yes	No	Unk	Yes	No	Unk	Yes	No
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	Yes	No	Unk	Yes	No	Unk	Yes	No

possibly

Government Records/Historical Sources Inquiry
(See guide, Section 10 of ASTM Practice E 1528-96)

21. Do any of the following Federal government record systems list the *property* or any *property* within the circumference of the area noted below:

National Priorities List (NPL) —within 1.0 mile (1.6 km)?	Yes	No
CERCLIS List—within 0.5 mile (0.8 km)?	Yes	No
RCRA CORRACTS Facilities—within 1.0 mile (1.6 km)?	Yes	No
RCRA non-CORRACTS TSD Facilities—within 1.5 mile (0.8 km)?	Yes	No

22. Do any of the following state record systems list the *property* or any *property* within the circumference of the area noted below:

List maintained by state environmental agency of *hazardous waste* sites identified for investigation or remediation that is the state agency equivalent to *NPL*—within approximately 1.0 mile (1.6 km)?	Yes	No
List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to *CERCLIS* within 0.5 mile (0.8 km)?	Yes	No
Leaking Underground Storage Tank (LUST) List—within 0.5 mile (0.8 km)?	Yes	No
Solid Waste/Landfill Facilities—within 0.5 mile (0.8 km)?	Yes	No

23. Based upon a review of *fire insurance maps* or consultation with the local fire department serving the *property*, all as specified in the guide, are any buildings or other improvements on the *property* or on an *adjoining property* identified as having been used for an industrial use or uses likely to lead to contamination of the *property*? Yes No N/A

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The *preparer* of the *transaction screen questionnaire* must complete and sign the following statement. (For definition of *preparer* and *user*, see 5.3 or 3.3.25 of ASTM Practice E 1528-96.)

This questionnaire was completed by:

Name Ross Beal

Title Designer

Firm Parkstone AI Agent for Nader

Address 3033 5th Ave, Ste 335

San Diego, CA

Phone number 619-858-2630

Date 11/20/11

If the preparer is different than the user, complete the following:

Name of user

User's address

User's phone number

Preparer's relationship to site

Preparer's relationship to user
(for example, principal, employee, agent, consultant)

Copies of the completed questionnaire have been filed at:

Copies of the completed questionnaire have been mailed or delivered to:

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

Signature R Beal Date 11/20/11

Signature Date

Signature Date

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Appendix E Preliminary Hydrology Study

PRELIMINARY HYDROLOGY STUDY

AIRPORT GATEWAY APARTMENTS

Costa Mesa, California

Red Oak Investments

Prepared By:

Fuscoe Engineering, Inc.
16795 Von Karman, Suite 100
Irvine, California 92606
949.474.1960
www.fuscoe.com

Project Manager:
John Olivier, P.E.

Date Prepared: August 1, 2013

Job Number: 774.02.01

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PRELIMINARY HYDROLOGY STUDY

AIRPORT GATEWAY APARTMENTS

125 Baker Street
Costa Mesa, CA

PREPARED FOR

Red Oak Investments

PREPARED BY:

Fuscoe Engineering, Inc.
16795 Von Karman Avenue, Suite 100
Irvine, CA 92606
(949) 474-1960

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Appendix 9 Existing Hydrology Map (In Pocket)
Appendix 10 Proposed Hydrology Map (In Pocket)
Appendix 11 Proposed Concept Grading Plan (In Pocket)

1.0 INTRODUCTION

1.1 GEOGRAPHIC SETTING

The proposed project is located at the southwest corner of Baker Street and Pullman Street in the City of Costa Mesa, CA. It is bounded by the 55 freeway on the northwest, Baker Street on the north, and Pullman Street on the west and south.

1.2 PROJECT DESCRIPTION

The Proposed project development consists of a four story residential structure with 236 apartment units that wrap around a five level parking structure. Open interior court yards surrounded by apartments units are proposed. These court yards will require drainage facilities that are located within corridors or under the buildings.

1.3 PURPOSE OF THIS REPORT

The purpose of this report is to accomplish the following objective:

To determine the pre development and post development discharges, runoff volumes and times of concentration for use in determining any potential impacts to the off-site drainage area.

An additional hydrology and hydraulic report will be prepared during development of final construction plans.

1.4 REFERENCES

- Orange County Hydrology Manual, 1986
- Orange County Local Drainage Manual, 1986
- Record Plans and documents from the City of Costa Mesa

Project Site Location Map

2.0 EXISTING TOPOGRAPHIC & HYDROLOGIC CONDITIONS

2.1 EXISTING TOPOGRAPHY

The project site consists of one two story office building surrounding a landscaped courtyard. The building was constructed in 1974 and has been occupied by various companies to the present time. Existing open parking surrounds the building.

2.2 EXISTING ON-SITE DRAINAGE PATTERN AND FACILITIES

A portion of the on-site drainage flows to an existing adjacent storm channel via a catch basin and RCP connection. The remainder of the site flows to Pullman Street via surface flow.

3.0 PROPOSED STORM DRAIN FACILITIES

The proposed development will maintain the historic drainage pattern. A portion of the site will drain to the existing adjacent channel using the existing connection and the remainder will drain to Pullman Street via parkway culvert outlets in the existing curb.

4.0 HYDROLOGY STUDY

4.1 STORM FREQUENCY

This study is intended to determine the pre development and post development discharges and runoff volumes for use in determining any potential impacts to the off-site drainage area. The 2, 25 & 100 year events were chosen as the criteria for comparison purposes.

4.2 METHODOLOGY

This study was prepared in conformance with the Orange County Hydrology Manual.

The project site 2, 25 & 100 year event discharges and runoff volumes were calculated for the pre development and post development conditions.

A.E.S. Computer Software was utilized to compile the hydrologic data and to determine the peak discharges and hydrographs. (Appendix 1-6)

Sub area discharges were added for the pre and post conditions to obtain a total pre and post development discharge for the site. (Appendix 7)

The time of concentration for the site was obtained by averaging the time of concentration for each sub area. (Appendix 7)

Copies of the computer print-outs for hydrologic results and hydrograph generation are included within this report for the 2, 25 & 100 year return frequency storms.

4.3 EXISTING FLOOD PLAIN

FIRM Panel 06059C0267J dated December 3, 2009 indicates that the project site is located within Zone X and is not subject to flooding during an event that has a 1% chance of occurring each year.
(Appendix 8)

5.0 DESIGN CRITERIA

The proposed storm drain system will be designed to be consistent with the following goals and guidelines as presented in the Orange County Hydrology and the Orange County Local Drainage Manuals. Some items listed below may not apply to this project.

- All habitable buildings shall be protected from flooding during a 100-year frequency storm.
- Onsite design storm is based on a 25-year frequency.
- Offsite design storm frequency, subject to individual review by the controlling authority, should be in accordance with the O.C. Hydrology Manual.
- Velocity should not exceed 20 FPS in a standard wall R.C.P.
- On local streets, flow should not exceed top of curb, for a 10-year storm event, and in sump conditions, a 25-year storm event shall be used.
- Maximum W.S. in CB's for design conditions shall be 0.5' below inlet (FL.) elevation.
- Once water is picked up in a storm drain, it should remain in the system.
- Pipe size may not be decreased downstream without the City's approval.
- Branching of flow is not allowed.
- Provide hydraulic and energy grade line calculations and plot of hydraulic grade line on plans with table of appropriate hydraulic data.
- In open channels, the ratio of normal velocity to critical velocity should be less than 0.9 or greater than 1.2.
- Junction structures should be designed according to the Orange County Local Drainage Manual.
- Fill Less Than 20 Feet over structures unless special design is approved.

6.0 RESULTS AND CONCLUSIONS

6.1 SUMMARY OF EXISTING AND PROPOSED CONDITIONS

Existing Conditions

Event	2 Year	25 Year	100 Year
Flow (cfs)	6.47	13.96	17.86
Volume (ac-ft)	0.55	1.30	1.63
Tc (min)	7.7	7.7	7.7

Proposed Conditions

Event	2 Year	25 Year	100 Year
Flow (cfs)	6.35	13.76	17.64
Volume (ac-ft)	0.49	1.21	1.54
Tc	7.6	7.6	7.6

6.2 CONCLUSIONS

The analysis provided in this report provides the following conclusions:

1. As a result of project development, peak discharges, runoff volumes and times of concentration are all slightly decreased.

These results indicate that the proposed project can be constructed in a manner that does not adversely impact storm flows to the surrounding area while providing safe and adequate drainage operation for the proposed project.

7.0 APPENDICES

Appendix 1	Existing Hydrology Studies
Appendix 2	Proposed Hydrology Studies
Appendix 3	County of Orange Rain Fall Data
Appendix 4	Pre & Post Development Loss Rates
Appendix 5	Existing Condition Runoff Hydrographs
Appendix 6	Proposed Condition Runoff Hydrographs
Appendix 7	Hydrologic Data
Appendix 8	FIRM Map
Appendix 9	Existing Hydrology Map (In Pocket)
Appendix 10	Proposed Hydrology Map (In Pocket)
Appendix 11	Proposed Concept Grading Plan (In Pocket)

APPENDIX 1

EXISTING HYDROLOGY STUDIES

```
****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
          (c) Copyright 1983-2013 Advanced Engineering Software (aes)
              Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                                Analysis prepared by:

                                 Fuscoe Engineering
                               16795 Von Karman #100
                                  Irvine, CA 92606
                                   949-474-1960


 ************************** DESCRIPTION OF STUDY **************************
* AIRPORT GATEWAY APARTMENTS                                               *
* EXISTING CONDITION HYDROLOGY                                             *
* 2 YEAR ANALYSIS                                                          *
 ***************************************************************************

  FILE NAME: AGEX2.DAT
  TIME/DATE OF STUDY: 03:57 08/01/2013
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                      --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =     2.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =    4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  =====  ======  =====  =======
  1   42.0     25.0    0.020/0.020/0.020   0.50    1.50 0.0313 0.125 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.50 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     11.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
```

```
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   290.00
  ELEVATION DATA: UPSTREAM(FEET) =     44.90  DOWNSTREAM(FEET) =     44.70

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   12.592
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.332
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        1.01      0.20     0.100    75   12.59
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       1.19
  TOTAL AREA(ACRES) =       1.01   PEAK FLOW RATE(CFS) =       1.19

******************************************************************************
  FLOW PROCESS FROM NODE     12.00 TO NODE     13.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   195.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     45.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.193
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.837
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.07      0.20     0.100    75    7.19
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       0.11
  TOTAL AREA(ACRES) =       0.07   PEAK FLOW RATE(CFS) =       0.11

******************************************************************************
  FLOW PROCESS FROM NODE     13.00 TO NODE     14.00 IS CODE =  62
------------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  1 USED)<<<<<
==============================================================================
  UPSTREAM ELEVATION(FEET) =   45.00  DOWNSTREAM ELEVATION(FEET) =   44.00
  STREET LENGTH(FEET) =   160.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 42.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =  25.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  STREET PARKWAY CROSSFALL(DECIMAL)  =  0.020
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150
```

```
Manning's FRICTION FACTOR for Back-of-Walk Flow Section =   0.0200

  **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       0.16
  STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
  STREET FLOW DEPTH(FEET) =  0.16
  HALFSTREET FLOOD WIDTH(FEET) =    1.50
  AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.49
  PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.23
STREET FLOW TRAVEL TIME(MIN.) =   1.79   Tc(MIN.) =    8.98
*   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.617
SUBAREA LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
COMMERCIAL                  D        0.06      0.20     0.100    75
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA AREA(ACRES) =     0.06      SUBAREA RUNOFF(CFS) =     0.09
EFFECTIVE AREA(ACRES) =       0.13    AREA-AVERAGED Fm(INCH/HR) =  0.02
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.10
TOTAL AREA(ACRES) =         0.1        PEAK FLOW RATE(CFS) =       0.19

END OF SUBAREA STREET FLOW HYDRAULICS:
DEPTH(FEET) = 0.16   HALFSTREET FLOOD WIDTH(FEET) =   1.50
FLOW VELOCITY(FEET/SEC.) =  1.49   DEPTH*VELOCITY(FT*FT/SEC.) =   0.23
LONGEST FLOWPATH FROM NODE     12.00 TO NODE     14.00 =     355.00 FEET.

****************************************************************************
FLOW PROCESS FROM NODE     15.00 TO NODE     16.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   215.00
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     44.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.350
*   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.974
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.60      0.20     0.100    75    6.35
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       1.05
TOTAL AREA(ACRES) =       0.60   PEAK FLOW RATE(CFS) =       1.05

****************************************************************************
FLOW PROCESS FROM NODE     17.00 TO NODE     18.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   255.00
```

```
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     44.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.034
*   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.861
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.75      0.20     0.100    75    7.03
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       1.24
TOTAL AREA(ACRES) =       0.75   PEAK FLOW RATE(CFS) =      1.24

****************************************************************************
FLOW PROCESS FROM NODE     17.00 TO NODE     19.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   240.00
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     41.90

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.004
*   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.038
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.52      0.20     0.100    75    6.00
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       0.94
TOTAL AREA(ACRES) =       0.52   PEAK FLOW RATE(CFS) =      0.94

****************************************************************************
FLOW PROCESS FROM NODE     10.00 TO NODE     20.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   310.00
ELEVATION DATA: UPSTREAM(FEET) =     44.90  DOWNSTREAM(FEET) =     41.70

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.528
*   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.790
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.37      0.20     0.100    75    7.53
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       0.59
```

```
  TOTAL AREA(ACRES) =       0.37   PEAK FLOW RATE(CFS) =       0.59

****************************************************************************
  FLOW PROCESS FROM NODE     21.00 TO NODE     21.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.53
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.790
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                  D        0.63      0.20      0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.63      SUBAREA RUNOFF(CFS) =    1.00
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.02
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       1.59

****************************************************************************
  FLOW PROCESS FROM NODE     22.00 TO NODE     23.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   170.00
  ELEVATION DATA: UPSTREAM(FEET) =     43.00  DOWNSTREAM(FEET) =     41.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.767
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.086
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.14      0.20      0.100    75    5.77
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.26
  TOTAL AREA(ACRES) =      0.14   PEAK FLOW RATE(CFS) =       0.26
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)      =        0.1  TC(MIN.) =      5.77
  EFFECTIVE AREA(ACRES) =      0.14  AREA-AVERAGED Fm(INCH/HR)=  0.02
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)    =       0.26
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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                              Analysis prepared by:

                                 Fuscoe Engineering
                             16795 Von Karman Ave #100
                                  Irvine, CA 92606
                                   949-474-1960


 ************************** DESCRIPTION OF STUDY **************************
* AIRPORT GATEWAY APARTMENTS                                               *
* EXISTING CONDITION HYDROLOGY                                             *
* 25 YEAR ANALYSIS                                                         *
 ***************************************************************************

  FILE NAME: AGEX25.DAT
  TIME/DATE OF STUDY: 07:00 07/31/2013
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  ================  ======  =====  ======  =====  =======
  1   42.0     25.0   0.020/0.020/0.020   0.50    1.50 0.0313 0.125 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.50 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     11.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
```

```
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   290.00
  ELEVATION DATA: UPSTREAM(FEET) =     44.90  DOWNSTREAM(FEET) =     44.70

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   12.592
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.860
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        1.01      0.20     0.100    75   12.59
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.58
  TOTAL AREA(ACRES) =      1.01   PEAK FLOW RATE(CFS) =      2.58

******************************************************************************
  FLOW PROCESS FROM NODE     12.00 TO NODE     13.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   195.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     45.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.193
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.926
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.07      0.20     0.100    75    7.19
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.25
  TOTAL AREA(ACRES) =      0.07   PEAK FLOW RATE(CFS) =      0.25

******************************************************************************
  FLOW PROCESS FROM NODE     13.00 TO NODE     14.00 IS CODE =  62
------------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  1 USED)<<<<<
==============================================================================
  UPSTREAM ELEVATION(FEET) =   45.00  DOWNSTREAM ELEVATION(FEET) =   44.00
  STREET LENGTH(FEET) =   160.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 42.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =  25.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  STREET PARKWAY CROSSFALL(DECIMAL)  =  0.020
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150
```

```
Manning's FRICTION FACTOR for Back-of-Walk Flow Section =   0.0200

  **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       0.34
  STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
  STREET FLOW DEPTH(FEET) =  0.20
  HALFSTREET FLOOD WIDTH(FEET) =    3.83
  AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.27
  PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.26
STREET FLOW TRAVEL TIME(MIN.) =   2.09   Tc(MIN.) =    9.29
*  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.398
SUBAREA LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
COMMERCIAL                 D        0.06      0.20     0.100    75
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA AREA(ACRES) =     0.06      SUBAREA RUNOFF(CFS) =    0.18
EFFECTIVE AREA(ACRES) =      0.13    AREA-AVERAGED Fm(INCH/HR) =  0.02
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.10
TOTAL AREA(ACRES) =        0.1        PEAK FLOW RATE(CFS) =       0.40

END OF SUBAREA STREET FLOW HYDRAULICS:
DEPTH(FEET) = 0.21   HALFSTREET FLOOD WIDTH(FEET) =   4.32
FLOW VELOCITY(FEET/SEC.) =  1.30   DEPTH*VELOCITY(FT*FT/SEC.) =   0.28
LONGEST FLOWPATH FROM NODE     12.00 TO NODE     14.00 =     355.00 FEET.

****************************************************************************
FLOW PROCESS FROM NODE     15.00 TO NODE     16.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   215.00
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     44.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.350
*  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.214
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                 D        0.60      0.20     0.100    75    6.35
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =      2.26
TOTAL AREA(ACRES) =      0.60   PEAK FLOW RATE(CFS) =      2.26

****************************************************************************
FLOW PROCESS FROM NODE     17.00 TO NODE     18.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   255.00
```

```
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     44.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.034
*  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.976
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.75      0.20     0.100    75    7.03
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       2.67
TOTAL AREA(ACRES) =       0.75   PEAK FLOW RATE(CFS) =       2.67

****************************************************************************
FLOW PROCESS FROM NODE     17.00 TO NODE     19.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   240.00
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     41.90

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.004
*  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.349
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.52      0.20     0.100    75    6.00
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       2.03
TOTAL AREA(ACRES) =       0.52   PEAK FLOW RATE(CFS) =       2.03

****************************************************************************
FLOW PROCESS FROM NODE     10.00 TO NODE     20.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   310.00
ELEVATION DATA: UPSTREAM(FEET) =     44.90  DOWNSTREAM(FEET) =     41.70

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.528
*  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.827
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.37      0.20     0.100    75    7.53
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       1.27
```

```
  TOTAL AREA(ACRES) =       0.37   PEAK FLOW RATE(CFS) =       1.27

****************************************************************************
  FLOW PROCESS FROM NODE     21.00 TO NODE     21.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.53
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.827
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                  D        0.63      0.20     0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =     0.63      SUBAREA RUNOFF(CFS) =     2.16
  EFFECTIVE AREA(ACRES) =       1.00   AREA-AVERAGED Fm(INCH/HR) =  0.02
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =         1.0       PEAK FLOW RATE(CFS) =       3.43

****************************************************************************
  FLOW PROCESS FROM NODE     22.00 TO NODE     23.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   170.00
  ELEVATION DATA: UPSTREAM(FEET) =     43.00  DOWNSTREAM(FEET) =     41.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.767
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.449
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.14      0.20     0.100    75    5.77
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       0.56
  TOTAL AREA(ACRES) =       0.14   PEAK FLOW RATE(CFS) =       0.56
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)      =        0.1  TC(MIN.) =       5.77
  EFFECTIVE AREA(ACRES) =       0.14  AREA-AVERAGED Fm(INCH/HR)=  0.02
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)    =       0.56
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                                Analysis prepared by:

                                 Fuscoe Engineering
                               16795 Von Karman #100
                                  Irvine, CA 92606
                                   949-474-1960


 ************************** DESCRIPTION OF STUDY **************************
* AIRPORT GATEWAY APARTMENTS                                               *
* EXISTING CONDITION HYDROLOGY                                             *
* 100 YEAR ANALYSIS                                                        *
 ***************************************************************************

  FILE NAME: AGEX100.DAT
  TIME/DATE OF STUDY: 03:58 08/01/2013
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                      --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   42.0     25.0    0.020/0.020/0.020   0.50    1.50 0.0312 0.125 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.50 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     11.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
```

```
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   290.00
  ELEVATION DATA: UPSTREAM(FEET) =     44.90  DOWNSTREAM(FEET) =     44.70

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   12.592
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.645
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        1.01      0.20     0.100    75   12.59
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       3.29
  TOTAL AREA(ACRES) =       1.01   PEAK FLOW RATE(CFS) =       3.29

******************************************************************************
  FLOW PROCESS FROM NODE     12.00 TO NODE     13.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   195.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     45.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.193
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.024
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.07      0.20     0.100    75    7.19
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       0.32
  TOTAL AREA(ACRES) =       0.07   PEAK FLOW RATE(CFS) =       0.32

******************************************************************************
  FLOW PROCESS FROM NODE     13.00 TO NODE     14.00 IS CODE =  62
------------------------------------------------------------------------------
  >>>>>COMPUTE STREET FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>(STREET TABLE SECTION #  1 USED)<<<<<
==============================================================================
  UPSTREAM ELEVATION(FEET) =   45.00  DOWNSTREAM ELEVATION(FEET) =   44.00
  STREET LENGTH(FEET) =   160.00   CURB HEIGHT(INCHES) =  6.0
  STREET HALFWIDTH(FEET) = 42.00

  DISTANCE FROM CROWN TO CROSSFALL GRADEBREAK(FEET) =  25.00
  INSIDE STREET CROSSFALL(DECIMAL) =  0.020
  OUTSIDE STREET CROSSFALL(DECIMAL)  =  0.020

  SPECIFIED NUMBER OF HALFSTREETS CARRYING RUNOFF =  1
  STREET PARKWAY CROSSFALL(DECIMAL)  =  0.020
  Manning's FRICTION FACTOR for Streetflow Section(curb-to-curb) =   0.0150
```

```
Manning's FRICTION FACTOR for Back-of-Walk Flow Section =   0.0200

  **TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =       0.43
  STREETFLOW MODEL RESULTS USING ESTIMATED FLOW:
  STREET FLOW DEPTH(FEET) =  0.22
  HALFSTREET FLOOD WIDTH(FEET) =    4.62
  AVERAGE FLOW VELOCITY(FEET/SEC.) =    1.30
  PRODUCT OF DEPTH&VELOCITY(FT*FT/SEC.) =    0.29
STREET FLOW TRAVEL TIME(MIN.) =   2.04   Tc(MIN.) =    9.24
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.353
SUBAREA LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
COMMERCIAL                  D        0.06      0.20     0.100    75
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA AREA(ACRES) =     0.06      SUBAREA RUNOFF(CFS) =    0.23
EFFECTIVE AREA(ACRES) =       0.13    AREA-AVERAGED Fm(INCH/HR) =  0.02
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.10
TOTAL AREA(ACRES) =         0.1        PEAK FLOW RATE(CFS) =       0.51

END OF SUBAREA STREET FLOW HYDRAULICS:
DEPTH(FEET) = 0.23   HALFSTREET FLOOD WIDTH(FEET) =   5.10
FLOW VELOCITY(FEET/SEC.) =  1.34   DEPTH*VELOCITY(FT*FT/SEC.) =   0.31
LONGEST FLOWPATH FROM NODE     12.00 TO NODE     14.00 =     355.00 FEET.

****************************************************************************
FLOW PROCESS FROM NODE     15.00 TO NODE     16.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   215.00
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     44.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.350
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.396
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.60      0.20     0.100    75    6.35
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =       2.90
TOTAL AREA(ACRES) =       0.60   PEAK FLOW RATE(CFS) =       2.90

****************************************************************************
FLOW PROCESS FROM NODE     17.00 TO NODE     18.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   255.00
```

```
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     44.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.034
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.088
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.75      0.20     0.100    75    7.03
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =      3.42
TOTAL AREA(ACRES) =      0.75   PEAK FLOW RATE(CFS) =      3.42

****************************************************************************
FLOW PROCESS FROM NODE     17.00 TO NODE     19.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   240.00
ELEVATION DATA: UPSTREAM(FEET) =     46.50  DOWNSTREAM(FEET) =     41.90

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.004
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.571
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.52      0.20     0.100    75    6.00
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =      2.60
TOTAL AREA(ACRES) =      0.52   PEAK FLOW RATE(CFS) =      2.60

****************************************************************************
FLOW PROCESS FROM NODE     10.00 TO NODE     20.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   310.00
ELEVATION DATA: UPSTREAM(FEET) =     44.90  DOWNSTREAM(FEET) =     41.70

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.528
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.894
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
COMMERCIAL                  D        0.37      0.20     0.100    75    7.53
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
SUBAREA RUNOFF(CFS) =      1.62
```

```
  TOTAL AREA(ACRES) =       0.37   PEAK FLOW RATE(CFS) =       1.62

****************************************************************************
  FLOW PROCESS FROM NODE     21.00 TO NODE     21.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.53
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.894
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                  D        0.63      0.20     0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =     0.63      SUBAREA RUNOFF(CFS) =     2.76
  EFFECTIVE AREA(ACRES) =       1.00   AREA-AVERAGED Fm(INCH/HR) =  0.02
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =         1.0       PEAK FLOW RATE(CFS) =       4.39

****************************************************************************
  FLOW PROCESS FROM NODE     22.00 TO NODE     23.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   170.00
  ELEVATION DATA: UPSTREAM(FEET) =     43.00  DOWNSTREAM(FEET) =     41.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.767
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.702
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.14      0.20     0.100    75    5.77
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       0.72
  TOTAL AREA(ACRES) =       0.14   PEAK FLOW RATE(CFS) =       0.72
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)      =        0.1  TC(MIN.) =       5.77
  EFFECTIVE AREA(ACRES) =       0.14  AREA-AVERAGED Fm(INCH/HR)=  0.02
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)    =       0.72
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

APPENDIX 2

PROPOSED HYDROLOGY STUDIES

```
****************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
           (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
        (c) Copyright 1983-2013 Advanced Engineering Software (aes)
            Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                               949-474-1960


 *************************** DESCRIPTION OF STUDY **************************
* AIRPORT GATEWAY APARTMENTS                                                *
* PROPOSED CONDITION HYDROLOGY                                              *
* 2 YEAR ANALYSIS                                                           *
 ***************************************************************************

  FILE NAME: AGPR2.DAT
  TIME/DATE OF STUDY: 04:00 08/01/2013
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =    2.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     20.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
```

```
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   320.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     44.70

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.791
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.539
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                  D        1.18      0.20     0.200    75    9.79
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.59
  TOTAL AREA(ACRES) =      1.18   PEAK FLOW RATE(CFS) =      1.59

******************************************************************************
  FLOW PROCESS FROM NODE     30.00 TO NODE     40.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   320.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     43.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.283
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.694
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                  D        1.40      0.20     0.200    75    8.28
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.08
  TOTAL AREA(ACRES) =      1.40   PEAK FLOW RATE(CFS) =      2.08

******************************************************************************
  FLOW PROCESS FROM NODE     50.00 TO NODE     60.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     42.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.899
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.059
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                  D        0.46      0.20     0.200    75    5.90
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
```

```
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =       0.84
  TOTAL AREA(ACRES) =       0.46   PEAK FLOW RATE(CFS) =       0.84

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     70.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   205.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     44.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.452
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.955
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.52      0.20     0.100    75    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       0.91
  TOTAL AREA(ACRES) =       0.52   PEAK FLOW RATE(CFS) =       0.91

****************************************************************************
  FLOW PROCESS FROM NODE     70.00 TO NODE     80.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    44.00  DOWNSTREAM(FEET) =    41.00
  FLOW LENGTH(FEET) =   260.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN   9.0 INCH PIPE IS   4.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.95
  ESTIMATED PIPE DIAMETER(INCH) =   9.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.91
  PIPE TRAVEL TIME(MIN.) =   1.10    Tc(MIN.) =    7.55
  LONGEST FLOWPATH FROM NODE     10.00 TO NODE     80.00 =     465.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE     80.00 TO NODE     80.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.55
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.787
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  APARTMENTS                  D        0.59      0.20     0.200    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA AREA(ACRES) =    0.59      SUBAREA RUNOFF(CFS) =    0.93
```

```
EFFECTIVE AREA(ACRES) =        1.11   AREA-AVERAGED Fm(INCH/HR) =  0.03
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.15
TOTAL AREA(ACRES) =          1.1        PEAK FLOW RATE(CFS) =        1.75
==========================================================================
END OF STUDY SUMMARY:
TOTAL AREA(ACRES)      =         1.1  TC(MIN.) =       7.55
EFFECTIVE AREA(ACRES) =        1.11  AREA-AVERAGED Fm(INCH/HR)=  0.03
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.153
PEAK FLOW RATE(CFS)    =        1.75
==========================================================================
==========================================================================
END OF RATIONAL METHOD ANALYSIS
```

```
****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
          (c) Copyright 1983-2013 Advanced Engineering Software (aes)
              Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                              Analysis prepared by:

                                Fuscoe Engineering
                              16795 Von Karman #100
                                 Irvine, CA 92606
                                  949-474-1960


 ************************** DESCRIPTION OF STUDY **************************
* AIRPORT GATEWAY APARTMENTS                                               *
* PROPOSED CONDITION HYDROLOGY                                             *
* 25 YEAR ANALYSIS                                                         *
 ***************************************************************************

  FILE NAME: AGPR25.DAT
  TIME/DATE OF STUDY: 07:37 07/31/2013
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                      --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  =====  ======  =====  =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     20.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
```

```
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   320.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     44.70

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.791
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.297
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                  D        1.18      0.20     0.200    75    9.79
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =       3.46
  TOTAL AREA(ACRES) =       1.18   PEAK FLOW RATE(CFS) =      3.46

******************************************************************************
  FLOW PROCESS FROM NODE     30.00 TO NODE     40.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   320.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     43.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.283
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.625
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                  D        1.40      0.20     0.200    75    8.28
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =       4.52
  TOTAL AREA(ACRES) =       1.40   PEAK FLOW RATE(CFS) =      4.52

******************************************************************************
  FLOW PROCESS FROM NODE     50.00 TO NODE     60.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     42.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.899
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.393
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                  D        0.46      0.20     0.200    75    5.90
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
```

```
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =       1.80
  TOTAL AREA(ACRES) =       0.46   PEAK FLOW RATE(CFS) =       1.80

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     70.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   205.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     44.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.452
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.175
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.52      0.20     0.100    75    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       1.94
  TOTAL AREA(ACRES) =       0.52   PEAK FLOW RATE(CFS) =       1.94

****************************************************************************
  FLOW PROCESS FROM NODE     70.00 TO NODE     80.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    44.00  DOWNSTREAM(FEET) =    41.00
  FLOW LENGTH(FEET) =   260.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   6.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.79
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =        1.94
  PIPE TRAVEL TIME(MIN.) =   0.90    Tc(MIN.) =    7.36
  LONGEST FLOWPATH FROM NODE     10.00 TO NODE     80.00 =     465.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE     80.00 TO NODE     80.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.36
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.877
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  APARTMENTS                  D        0.59      0.20     0.200    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA AREA(ACRES) =    0.59      SUBAREA RUNOFF(CFS) =    2.04
```

```
EFFECTIVE AREA(ACRES) =        1.11   AREA-AVERAGED Fm(INCH/HR) =  0.03
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.15
TOTAL AREA(ACRES) =          1.1        PEAK FLOW RATE(CFS) =       3.84
==============================================================================
END OF STUDY SUMMARY:
TOTAL AREA(ACRES)      =         1.1  TC(MIN.) =       7.36
EFFECTIVE AREA(ACRES) =        1.11  AREA-AVERAGED Fm(INCH/HR)=  0.03
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.153
PEAK FLOW RATE(CFS)    =        3.84
==============================================================================
==============================================================================
END OF RATIONAL METHOD ANALYSIS
```

```
****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                              Analysis prepared by:

                                 Fuscoe Engineering
                               16795 Von Karman #100
                                 Irvine, CA 92606
                                  949-474-1960

 ************************** DESCRIPTION OF STUDY **************************
* AIRPORT GATEWAY APARTMENTS                                               *
* PROPOSED CONDITION HYDROLOGY                                             *
* 100 YEAR ANALYSIS                                                        *
 ***************************************************************************

  FILE NAME: AGPR100.DAT
  TIME/DATE OF STUDY: 04:02 08/01/2013
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                      --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   4.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0   0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     20.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
```

```
INITIAL SUBAREA FLOW-LENGTH(FEET) =   320.00
ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     44.70

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.791
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.210
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
APARTMENTS                  D        1.18      0.20     0.200    75    9.79
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
SUBAREA RUNOFF(CFS) =       4.43
TOTAL AREA(ACRES) =       1.18   PEAK FLOW RATE(CFS) =      4.43

****************************************************************************
FLOW PROCESS FROM NODE     30.00 TO NODE     40.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   320.00
ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     43.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.283
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.633
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
APARTMENTS                  D        1.40      0.20     0.200    75    8.28
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
SUBAREA RUNOFF(CFS) =       5.79
TOTAL AREA(ACRES) =       1.40   PEAK FLOW RATE(CFS) =      5.79

****************************************************************************
FLOW PROCESS FROM NODE     50.00 TO NODE     60.00 IS CODE =  21
----------------------------------------------------------------------------
>>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
>>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     42.00

Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.899
* 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.628
SUBAREA Tc AND LOSS RATE DATA(AMC  II):
 DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
     LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
APARTMENTS                  D        0.46      0.20     0.200    75    5.90
SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
```

```
  SUBAREA RUNOFF(CFS) =       2.31
  TOTAL AREA(ACRES) =       0.46   PEAK FLOW RATE(CFS) =       2.31

****************************************************************************
  FLOW PROCESS FROM NODE     10.00 TO NODE     70.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   205.00
  ELEVATION DATA: UPSTREAM(FEET) =     46.00  DOWNSTREAM(FEET) =     44.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.452
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.346
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                  D        0.52      0.20     0.100    75    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =       2.49
  TOTAL AREA(ACRES) =       0.52   PEAK FLOW RATE(CFS) =       2.49

****************************************************************************
  FLOW PROCESS FROM NODE     70.00 TO NODE     80.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    44.00  DOWNSTREAM(FEET) =    41.00
  FLOW LENGTH(FEET) =   260.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.08
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.49
  PIPE TRAVEL TIME(MIN.) =   0.85    Tc(MIN.) =    7.31
  LONGEST FLOWPATH FROM NODE     10.00 TO NODE     80.00 =     465.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE     80.00 TO NODE     80.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.31
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.979
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  APARTMENTS                  D        0.59      0.20     0.200    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA AREA(ACRES) =    0.59      SUBAREA RUNOFF(CFS) =    2.62
  EFFECTIVE AREA(ACRES) =      1.11   AREA-AVERAGED Fm(INCH/HR) =  0.03
```

```
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.15
TOTAL AREA(ACRES) =        1.1       PEAK FLOW RATE(CFS) =       4.94
================================================================================
END OF STUDY SUMMARY:
TOTAL AREA(ACRES)      =        1.1  TC(MIN.) =      7.31
EFFECTIVE AREA(ACRES) =       1.11  AREA-AVERAGED Fm(INCH/HR)=  0.03
AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.153
PEAK FLOW RATE(CFS)    =       4.94
================================================================================
================================================================================
END OF RATIONAL METHOD ANALYSIS
```

APPENDIX 3

COUNTY OF ORANGE RAIN FALL DATA

TABLE B.1.

MAXIMUM PRECIPITATION FOR INDICATED DURATION D-DAYS (INCHES)

BELOW 2000' ELEVATION

Return Period In Yrs.	1D	2D	3D	4D	5D	6D	8D	10D	15D	20D	30D	60D	365D
2	2.05	2.76	3.08	3.21	3.36	3.61	3.94	4.24	4.73	5.21	6.20	8.44	13.60
5	3.03	4.24	4.79	5.01	5.23	5.59	6.05	6.47	7.20	7.83	9.18	12.69	19.13
10	3.68	5.23	5.92	6.22	6.50	6.94	7.44	7.94	8.79	9.49	11.07	15.48	22.56
20	4.31	6.17	6.99	7.38	7.71	8.22	8.74	9.31	10.26	11.02	12.80	18.08	25.69
25	4.49	6.46	7.33	7.75	8.09	8.63	9.15	9.74	10.72	11.49	13.34	18.90	26.66
40	4.89	7.06	8.03	8.50	8.88	9.47	9.98	10.62	10.95	12.46	14.44	20.58	28.63
50	5.07	7.35	8.35	8.86	9.25	9.86	10.38	11.03	12.11	12.91	14.95	21.37	29.55
100	5.63	8.22	9.35	9.95	10.38	11.07	11.57	12.29	13.45	14.28	16.51	23.77	32.32

ABOVE 2000' ELEVATION

Return Period In Yrs.	1D	2D	3D	4D	5D	6D	8D	10D	15D	20D	30D	60D	365D
2	3.81	5.33	5.89	6.22	6.66	7.17	7.88	8.38	8.97	9.62	11.29	15.91	26.05
5	5.71	8.25	9.23	9.75	10.40	11.12	12.17	12.81	13.72	14.51	16.73	23.74	36.88
10	7.05	10.26	11.58	12.23	12.98	13.80	15.02	15.71	16.83	17.66	20.17	28.69	43.86
20	8.36	12.20	13.85	14.63	15.45	16.35	17.72	18.42	19.74	20.59	23.33	33.25	50.33
25	8.76	12.81	14.58	15.40	16.24	17.16	18.57	19.27	20.65	21.50	24.31	34.66	52.35
40	9.62	14.08	16.08	16.99	17.87	18.82	20.32	21.02	22.53	21.95	26.32	37.56	53.33
50	10.02	14.68	16.79	17.74	18.63	19.61	21.14	21.84	23.41	24.25	27.25	38.91	58.43
100	11.27	16.52	18.98	20.05	20.99	22.01	23.65	24.33	26.09	26.91	30.09	42.99	64.30

APPENDIX 4

PRE & POST DEVELOPMENT LOSS RATES

```
****************************************************************************
          NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
                   AND LOW LOSS FRACTION ESTIMATIONS
============================================================================
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                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960

****************************************************************************
----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  EXISTING CONDITION LOSS RATE
  2 YEAR ANALYSIS
============================================================================
*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
    AND LOW LOSS FRACTION ESTIMATIONS FOR AMC II:

    TOTAL 24-HOUR DURATION RAINFALL DEPTH =     2.05 (inches)

    SOIL-COVER     AREA      PERCENT OF    SCS CURVE    LOSS RATE
       TYPE      (Acres)   PERVIOUS AREA    NUMBER    Fp(in./hr.)    YIELD
        1          4.15       10.00           75.        0.200       0.821

    TOTAL AREA (Acres) =      4.15

    AREA-AVERAGED LOSS RATE, Fm (in./hr.) =  0.020

    AREA-AVERAGED LOW LOSS FRACTION, Y = 0.179
============================================================================
```

```
*****************************************************************************
          NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
                   AND LOW LOSS FRACTION ESTIMATIONS
=============================================================================
        (C) Copyright 1989-2013 Advanced Engineering Software (aes)
            Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960


*****************************************************************************
-----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  EXISTING CONDITION LOSS RATE
  25 YEAR ANALYSIS
=============================================================================
*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
    AND LOW LOSS FRACTION ESTIMATIONS FOR AMC II:

    TOTAL 24-HOUR DURATION RAINFALL DEPTH =     4.49 (inches)

    SOIL-COVER     AREA      PERCENT OF    SCS CURVE    LOSS RATE
       TYPE      (Acres)   PERVIOUS AREA    NUMBER    Fp(in./hr.)     YIELD
        1          4.15       10.00           75.        0.200        0.898

    TOTAL AREA (Acres) =       4.15

    AREA-AVERAGED LOSS RATE, Fm (in./hr.) =  0.020

    AREA-AVERAGED LOW LOSS FRACTION, Y = 0.102
=============================================================================
```

```
****************************************************************************
          NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
                   AND LOW LOSS FRACTION ESTIMATIONS
============================================================================
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                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960

****************************************************************************
----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  EXISTING CONDITION LOSS RATE
  100 YEAR ANALYSIS
============================================================================
*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
    AND LOW LOSS FRACTION ESTIMATIONS FOR AMC II:

    TOTAL 24-HOUR DURATION RAINFALL DEPTH =     5.63 (inches)

    SOIL-COVER     AREA      PERCENT OF    SCS CURVE    LOSS RATE
       TYPE      (Acres)   PERVIOUS AREA    NUMBER    Fp(in./hr.)    YIELD
        1          4.15       10.00           75.        0.200       0.915

    TOTAL AREA (Acres) =      4.15

    AREA-AVERAGED LOSS RATE, Fm (in./hr.) =  0.020

    AREA-AVERAGED LOW LOSS FRACTION, Y = 0.085
============================================================================
```

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****************************************************************************
          NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
                   AND LOW LOSS FRACTION ESTIMATIONS
============================================================================
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                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960

****************************************************************************
----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  PROPOSED CONDITION LOSS RATE
  2 YEAR ANALYSIS
============================================================================
*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
    AND LOW LOSS FRACTION ESTIMATIONS FOR AMC II:

    TOTAL 24-HOUR DURATION RAINFALL DEPTH =     2.05 (inches)

    SOIL-COVER     AREA      PERCENT OF    SCS CURVE    LOSS RATE
       TYPE      (Acres)   PERVIOUS AREA    NUMBER    Fp(in./hr.)    YIELD
        1          4.15       20.00           75.        0.200       0.751

    TOTAL AREA (Acres) =      4.15

    AREA-AVERAGED LOSS RATE, Fm (in./hr.) =  0.040

    AREA-AVERAGED LOW LOSS FRACTION, Y = 0.249
============================================================================
```

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NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS

==========

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Analysis prepared by:

Fuscoe Engineering
16795 Von Karman #100
Irvine, CA 92606
949-474-1960

****

Problem Descriptions:
AIRPORT GATEWAY APARTMENTS
PROPOSED CONDITION LOSS RATE
25 YEAR ANALYSIS

==========

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
AND LOW LOSS FRACTION ESTIMATIONS FOR AMC II:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 4.49 (inches)

SOIL-COVER TYPE	AREA (Acres)	PERCENT OF PERVIOUS AREA	SCS CURVE NUMBER	LOSS RATE Fp(in./hr.)	YIELD
1	4.15	20.00	75.	0.200	0.849

TOTAL AREA (Acres) = 4.15

AREA-AVERAGED LOSS RATE, $\overline{Fm}$ (in./hr.) = 0.040

AREA-AVERAGED LOW LOSS FRACTION, $\overline{Y}$ = 0.151

==========

```
****************************************************************************
          NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
                   AND LOW LOSS FRACTION ESTIMATIONS
============================================================================
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                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960

****************************************************************************
----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  PROPOSED CONDITION LOSS RATE
  100 YEAR ANALYSIS
============================================================================
*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm)
    AND LOW LOSS FRACTION ESTIMATIONS FOR AMC II:

    TOTAL 24-HOUR DURATION RAINFALL DEPTH =     5.63 (inches)

    SOIL-COVER     AREA      PERCENT OF    SCS CURVE    LOSS RATE
       TYPE      (Acres)   PERVIOUS AREA    NUMBER    Fp(in./hr.)    YIELD
        1          4.15       20.00          75.        0.200       0.872

    TOTAL AREA (Acres) =      4.15

    AREA-AVERAGED LOSS RATE, Fm (in./hr.) =  0.040

    AREA-AVERAGED LOW LOSS FRACTION, Y = 0.128
============================================================================
```

APPENDIX 5

EXISTING CONDITION RUNOFF HYDROGRAPHS

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*****************************************************************************
                        SMALL AREA UNIT HYDROGRAPH MODEL
=============================================================================
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                              Analysis prepared by:

                                Fuscoe Engineering
                              16795 Von Karman #100
                                 Irvine, CA 92606
                                 949-474-1960

*****************************************************************************
-----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  EXISTING CONDITION HYDROGRAPH
  2 YEAR ANALYSIS
-----------------------------------------------------------------------------


    RATIONAL METHOD CALIBRATION COEFFICIENT = 0.89
    TOTAL CATCHMENT AREA(ACRES) =     4.15
    SOIL-LOSS RATE, Fm,(INCH/HR) =  0.020
    LOW LOSS FRACTION = 0.179
    TIME OF CONCENTRATION(MIN.) =  7.70
    SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
    ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
    RETURN FREQUENCY(YEARS) =   2
       5-MINUTE POINT RAINFALL VALUE(INCHES) =  0.19
      30-MINUTE POINT RAINFALL VALUE(INCHES) =  0.40
       1-HOUR   POINT RAINFALL VALUE(INCHES) =  0.53
       3-HOUR   POINT RAINFALL VALUE(INCHES) =  0.89
       6-HOUR   POINT RAINFALL VALUE(INCHES) =  1.22
      24-HOUR   POINT RAINFALL VALUE(INCHES) =  2.05

-----------------------------------------------------------------------------

    TOTAL CATCHMENT   RUNOFF  VOLUME(ACRE-FEET) =      0.55
    TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) =      0.16

*****************************************************************************
  TIME      VOLUME        Q     0.         2.5        5.0        7.5       10.0
 (HOURS)     (AF)       (CFS)
-----------------------------------------------------------------------------
  0.09      0.0005      0.10  Q          .          .          .          .
  0.22      0.0015      0.10  Q          .          .          .          .
  0.34      0.0026      0.10  Q          .          .          .          .
```

0.47	0.0036	0.10	Q	.	.	.	.
0.60	0.0047	0.10	Q	.	.	.	.
0.73	0.0057	0.10	Q	.	.	.	.
0.86	0.0068	0.10	Q	.	.	.	.
0.99	0.0078	0.10	Q	.	.	.	.
1.11	0.0089	0.10	Q	.	.	.	.
1.24	0.0100	0.10	Q	.	.	.	.
1.37	0.0111	0.10	Q	.	.	.	.
1.50	0.0121	0.10	Q	.	.	.	.
1.63	0.0132	0.10	Q	.	.	.	.
1.76	0.0143	0.10	Q	.	.	.	.
1.88	0.0154	0.10	Q	.	.	.	.
2.01	0.0165	0.11	Q	.	.	.	.
2.14	0.0177	0.11	Q	.	.	.	.
2.27	0.0188	0.11	Q	.	.	.	.
2.40	0.0199	0.11	Q	.	.	.	.
2.53	0.0211	0.11	Q	.	.	.	.
2.65	0.0222	0.11	Q	.	.	.	.
2.78	0.0233	0.11	Q	.	.	.	.
2.91	0.0245	0.11	Q	.	.	.	.
3.04	0.0257	0.11	Q	.	.	.	.
3.17	0.0268	0.11	Q	.	.	.	.
3.30	0.0280	0.11	Q	.	.	.	.
3.42	0.0292	0.11	Q	.	.	.	.
3.55	0.0304	0.11	Q	.	.	.	.
3.68	0.0316	0.11	Q	.	.	.	.
3.81	0.0328	0.11	Q	.	.	.	.
3.94	0.0340	0.11	Q	.	.	.	.
4.07	0.0352	0.12	Q	.	.	.	.
4.19	0.0365	0.12	Q	.	.	.	.
4.32	0.0377	0.12	Q	.	.	.	.
4.45	0.0390	0.12	Q	.	.	.	.
4.58	0.0402	0.12	Q	.	.	.	.
4.71	0.0415	0.12	Q	.	.	.	.
4.84	0.0428	0.12	Q	.	.	.	.
4.96	0.0441	0.12	Q	.	.	.	.
5.09	0.0453	0.12	Q	.	.	.	.
5.22	0.0467	0.12	Q	.	.	.	.
5.35	0.0480	0.12	Q	.	.	.	.
5.48	0.0493	0.13	Q	.	.	.	.
5.61	0.0506	0.13	Q	.	.	.	.
5.73	0.0520	0.13	Q	.	.	.	.
5.86	0.0533	0.13	Q	.	.	.	.
5.99	0.0547	0.13	Q	.	.	.	.
6.12	0.0561	0.13	Q	.	.	.	.
6.25	0.0574	0.13	Q	.	.	.	.
6.38	0.0588	0.13	Q	.	.	.	.
6.50	0.0603	0.13	Q	.	.	.	.
6.63	0.0617	0.13	Q	.	.	.	.
6.76	0.0631	0.14	Q	.	.	.	.
6.89	0.0646	0.14	Q	.	.	.	.
7.02	0.0660	0.14	Q	.	.	.	.

7.14	0.0675	0.14	Q	.	.	.	.
7.27	0.0690	0.14	Q	.	.	.	.
7.40	0.0705	0.14	Q	.	.	.	.
7.53	0.0720	0.14	Q	.	.	.	.
7.66	0.0735	0.14	Q	.	.	.	.
7.79	0.0750	0.15	Q	.	.	.	.
7.92	0.0766	0.15	Q	.	.	.	.
8.04	0.0782	0.15	Q	.	.	.	.
8.17	0.0798	0.15	Q	.	.	.	.
8.30	0.0814	0.15	Q	.	.	.	.
8.43	0.0830	0.15	Q	.	.	.	.
8.56	0.0846	0.15	Q	.	.	.	.
8.69	0.0863	0.16	Q	.	.	.	.
8.81	0.0879	0.16	Q	.	.	.	.
8.94	0.0896	0.16	Q	.	.	.	.
9.07	0.0913	0.16	Q	.	.	.	.
9.20	0.0931	0.16	Q	.	.	.	.
9.33	0.0948	0.17	Q	.	.	.	.
9.45	0.0966	0.17	Q	.	.	.	.
9.58	0.0984	0.17	Q	.	.	.	.
9.71	0.1002	0.17	Q	.	.	.	.
9.84	0.1020	0.17	Q	.	.	.	.
9.97	0.1039	0.18	Q	.	.	.	.
10.10	0.1058	0.18	Q	.	.	.	.
10.23	0.1077	0.18	Q	.	.	.	.
10.35	0.1096	0.18	Q	.	.	.	.
10.48	0.1116	0.19	Q	.	.	.	.
10.61	0.1136	0.19	Q	.	.	.	.
10.74	0.1156	0.19	Q	.	.	.	.
10.87	0.1177	0.19	Q	.	.	.	.
10.99	0.1197	0.20	Q	.	.	.	.
11.12	0.1219	0.20	Q	.	.	.	.
11.25	0.1240	0.21	Q	.	.	.	.
11.38	0.1262	0.21	Q	.	.	.	.
11.51	0.1284	0.21	Q	.	.	.	.
11.64	0.1307	0.21	Q	.	.	.	.
11.77	0.1330	0.22	Q	.	.	.	.
11.89	0.1353	0.22	Q	.	.	.	.
12.02	0.1377	0.23	Q	.	.	.	.
12.15	0.1404	0.27	.Q	.	.	.	.
12.28	0.1433	0.29	.Q	.	.	.	.
12.41	0.1464	0.29	.Q	.	.	.	.
12.53	0.1495	0.30	.Q	.	.	.	.
12.66	0.1527	0.30	.Q	.	.	.	.
12.79	0.1560	0.31	.Q	.	.	.	.
12.92	0.1593	0.32	.Q	.	.	.	.
13.05	0.1627	0.33	.Q	.	.	.	.
13.18	0.1662	0.33	.Q	.	.	.	.
13.30	0.1698	0.34	.Q	.	.	.	.
13.43	0.1735	0.35	.Q	.	.	.	.
13.56	0.1773	0.37	.Q	.	.	.	.
13.69	0.1812	0.37	.Q	.	.	.	.

13.82	0.1852	0.39	.Q . . . .
13.95	0.1894	0.40	.Q . . . .
14.07	0.1939	0.43	.Q . . . .
14.20	0.1985	0.45	.Q . . . .
14.33	0.2035	0.48	.Q . . . .
14.46	0.2087	0.50	.Q . . . .
14.59	0.2141	0.53	. Q . . . .
14.72	0.2198	0.55	. Q . . . .
14.85	0.2259	0.59	. Q . . . .
14.97	0.2323	0.62	. Q . . . .
15.10	0.2391	0.68	. Q . . . .
15.23	0.2465	0.72	. Q . . . .
15.36	0.2546	0.81	. Q . . . .
15.49	0.2630	0.77	. Q . . . .
15.62	0.2718	0.90	. Q . . . .
15.74	0.2821	1.03	. Q . . . .
15.87	0.2956	1.53	. Q . . . .
16.00	0.3149	2.11	. Q . . . .
16.13	0.3604	6.47	. . . Q . .
16.26	0.4013	1.23	. Q . . . .
16.39	0.4121	0.81	. Q . . . .
16.51	0.4204	0.76	. Q . . . .
16.64	0.4279	0.65	. Q . . . .
16.77	0.4343	0.57	. Q . . . .
16.90	0.4401	0.51	. Q . . . .
17.03	0.4452	0.47	.Q . . . .
17.16	0.4499	0.41	.Q . . . .
17.28	0.4541	0.38	.Q . . . .
17.41	0.4580	0.36	.Q . . . .
17.54	0.4617	0.34	.Q . . . .
17.67	0.4652	0.32	.Q . . . .
17.80	0.4685	0.31	.Q . . . .
17.92	0.4717	0.30	.Q . . . .
18.05	0.4748	0.28	.Q . . . .
18.18	0.4775	0.23	Q . . . .
18.31	0.4799	0.22	Q . . . .
18.44	0.4821	0.21	Q . . . .
18.57	0.4843	0.20	Q . . . .
18.69	0.4864	0.20	Q . . . .
18.82	0.4885	0.19	Q . . . .
18.95	0.4905	0.19	Q . . . .
19.08	0.4924	0.18	Q . . . .
19.21	0.4943	0.18	Q . . . .
19.34	0.4961	0.17	Q . . . .
19.47	0.4979	0.17	Q . . . .
19.59	0.4997	0.16	Q . . . .
19.72	0.5014	0.16	Q . . . .
19.85	0.5031	0.16	Q . . . .
19.98	0.5047	0.15	Q . . . .
20.11	0.5063	0.15	Q . . . .
20.23	0.5079	0.15	Q . . . .
20.36	0.5094	0.14	Q . . . .

20.49	0.5109	0.14	Q	.	.	.	.
20.62	0.5124	0.14	Q	.	.	.	.
20.75	0.5139	0.14	Q	.	.	.	.
20.88	0.5153	0.13	Q	.	.	.	.
21.01	0.5167	0.13	Q	.	.	.	.
21.13	0.5181	0.13	Q	.	.	.	.
21.26	0.5195	0.13	Q	.	.	.	.
21.39	0.5208	0.13	Q	.	.	.	.
21.52	0.5221	0.12	Q	.	.	.	.
21.65	0.5234	0.12	Q	.	.	.	.
21.77	0.5247	0.12	Q	.	.	.	.
21.90	0.5260	0.12	Q	.	.	.	.
22.03	0.5272	0.12	Q	.	.	.	.
22.16	0.5285	0.12	Q	.	.	.	.
22.29	0.5297	0.11	Q	.	.	.	.
22.42	0.5309	0.11	Q	.	.	.	.
22.55	0.5321	0.11	Q	.	.	.	.
22.67	0.5333	0.11	Q	.	.	.	.
22.80	0.5344	0.11	Q	.	.	.	.
22.93	0.5356	0.11	Q	.	.	.	.
23.06	0.5367	0.11	Q	.	.	.	.
23.19	0.5378	0.10	Q	.	.	.	.
23.32	0.5389	0.10	Q	.	.	.	.
23.44	0.5400	0.10	Q	.	.	.	.
23.57	0.5411	0.10	Q	.	.	.	.
23.70	0.5421	0.10	Q	.	.	.	.
23.83	0.5432	0.10	Q	.	.	.	.
23.96	0.5442	0.10	Q	.	.	.	.
24.08	0.5453	0.10	Q	.	.	.	.
24.21	0.5458	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1447.6
10%	92.4
20%	23.1
30%	15.4
40%	7.7
50%	7.7
60%	7.7
70%	7.7
80%	7.7
90%	7.7

```
*****************************************************************************
                        SMALL AREA UNIT HYDROGRAPH MODEL
=============================================================================
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                              Analysis prepared by:

                                Fuscoe Engineering
                              16795 Von Karman #100
                                 Irvine, CA 92606
                                  949-474-1960

*****************************************************************************
-----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  EXISTING CONDITION HYDROGRAPH
  25 YEAR ANALYSIS
-----------------------------------------------------------------------------


    RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
    TOTAL CATCHMENT AREA(ACRES) =     4.15
    SOIL-LOSS RATE, Fm,(INCH/HR) =  0.020
    LOW LOSS FRACTION = 0.102
    TIME OF CONCENTRATION(MIN.) =  7.70
    SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
    ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
    RETURN FREQUENCY(YEARS) =  25
       5-MINUTE POINT RAINFALL VALUE(INCHES) =  0.40
      30-MINUTE POINT RAINFALL VALUE(INCHES) =  0.87
       1-HOUR   POINT RAINFALL VALUE(INCHES) =  1.15
       3-HOUR   POINT RAINFALL VALUE(INCHES) =  1.94
       6-HOUR   POINT RAINFALL VALUE(INCHES) =  2.71
      24-HOUR   POINT RAINFALL VALUE(INCHES) =  4.49

-----------------------------------------------------------------------------

    TOTAL CATCHMENT   RUNOFF  VOLUME(ACRE-FEET) =      1.30
    TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) =      0.26

*****************************************************************************
  TIME      VOLUME        Q    0.        5.0       10.0       15.0       20.0
 (HOURS)     (AF)       (CFS)
-----------------------------------------------------------------------------
  0.09      0.0012      0.23  Q          .          .          .          .
  0.22      0.0036      0.23  Q          .          .          .          .
  0.34      0.0061      0.23  Q          .          .          .          .
```

0.47	0.0085	0.23	Q	.	.	.	.
0.60	0.0110	0.23	Q	.	.	.	.
0.73	0.0135	0.23	Q	.	.	.	.
0.86	0.0160	0.24	Q	.	.	.	.
0.99	0.0185	0.24	Q	.	.	.	.
1.11	0.0210	0.24	Q	.	.	.	.
1.24	0.0235	0.24	Q	.	.	.	.
1.37	0.0261	0.24	Q	.	.	.	.
1.50	0.0286	0.24	Q	.	.	.	.
1.63	0.0312	0.24	Q	.	.	.	.
1.76	0.0338	0.25	Q	.	.	.	.
1.88	0.0364	0.25	Q	.	.	.	.
2.01	0.0390	0.25	Q	.	.	.	.
2.14	0.0417	0.25	Q	.	.	.	.
2.27	0.0443	0.25	Q	.	.	.	.
2.40	0.0470	0.25	Q	.	.	.	.
2.53	0.0497	0.25	Q	.	.	.	.
2.65	0.0524	0.25	Q	.	.	.	.
2.78	0.0551	0.26	Q	.	.	.	.
2.91	0.0578	0.26	Q	.	.	.	.
3.04	0.0606	0.26	Q	.	.	.	.
3.17	0.0633	0.26	Q	.	.	.	.
3.30	0.0661	0.26	Q	.	.	.	.
3.42	0.0689	0.26	Q	.	.	.	.
3.55	0.0717	0.27	Q	.	.	.	.
3.68	0.0746	0.27	Q	.	.	.	.
3.81	0.0774	0.27	Q	.	.	.	.
3.94	0.0803	0.27	Q	.	.	.	.
4.07	0.0832	0.27	Q	.	.	.	.
4.19	0.0861	0.28	Q	.	.	.	.
4.32	0.0890	0.28	Q	.	.	.	.
4.45	0.0920	0.28	Q	.	.	.	.
4.58	0.0950	0.28	Q	.	.	.	.
4.71	0.0980	0.28	Q	.	.	.	.
4.84	0.1010	0.29	Q	.	.	.	.
4.96	0.1040	0.29	Q	.	.	.	.
5.09	0.1071	0.29	Q	.	.	.	.
5.22	0.1102	0.29	Q	.	.	.	.
5.35	0.1133	0.29	Q	.	.	.	.
5.48	0.1164	0.30	Q	.	.	.	.
5.61	0.1196	0.30	Q	.	.	.	.
5.73	0.1227	0.30	Q	.	.	.	.
5.86	0.1259	0.30	Q	.	.	.	.
5.99	0.1292	0.31	Q	.	.	.	.
6.12	0.1324	0.31	Q	.	.	.	.
6.25	0.1357	0.31	Q	.	.	.	.
6.38	0.1390	0.31	Q	.	.	.	.
6.50	0.1424	0.32	Q	.	.	.	.
6.63	0.1457	0.32	Q	.	.	.	.
6.76	0.1491	0.32	Q	.	.	.	.
6.89	0.1526	0.32	Q	.	.	.	.
7.02	0.1560	0.33	Q	.	.	.	.

7.14	0.1595	0.33	Q	.	.	.	.
7.27	0.1630	0.33	Q	.	.	.	.
7.40	0.1666	0.34	Q	.	.	.	.
7.53	0.1702	0.34	Q	.	.	.	.
7.66	0.1738	0.34	Q	.	.	.	.
7.79	0.1774	0.35	Q	.	.	.	.
7.92	0.1811	0.35	Q	.	.	.	.
8.04	0.1849	0.35	Q	.	.	.	.
8.17	0.1886	0.36	Q	.	.	.	.
8.30	0.1924	0.36	Q	.	.	.	.
8.43	0.1963	0.37	Q	.	.	.	.
8.56	0.2002	0.37	Q	.	.	.	.
8.69	0.2041	0.37	Q	.	.	.	.
8.81	0.2081	0.38	Q	.	.	.	.
8.94	0.2121	0.38	Q	.	.	.	.
9.07	0.2161	0.38	Q	.	.	.	.
9.20	0.2203	0.39	Q	.	.	.	.
9.33	0.2244	0.39	Q	.	.	.	.
9.45	0.2286	0.40	Q	.	.	.	.
9.58	0.2329	0.40	Q	.	.	.	.
9.71	0.2372	0.41	Q	.	.	.	.
9.84	0.2416	0.41	Q	.	.	.	.
9.97	0.2460	0.42	Q	.	.	.	.
10.10	0.2505	0.42	Q	.	.	.	.
10.23	0.2550	0.43	Q	.	.	.	.
10.35	0.2596	0.44	Q	.	.	.	.
10.48	0.2643	0.45	Q	.	.	.	.
10.61	0.2691	0.45	Q	.	.	.	.
10.74	0.2739	0.46	Q	.	.	.	.
10.87	0.2788	0.46	Q	.	.	.	.
10.99	0.2837	0.47	Q	.	.	.	.
11.12	0.2888	0.48	Q	.	.	.	.
11.25	0.2939	0.49	Q	.	.	.	.
11.38	0.2991	0.49	Q	.	.	.	.
11.51	0.3044	0.51	.Q	.	.	.	.
11.64	0.3099	0.51	.Q	.	.	.	.
11.77	0.3154	0.53	.Q	.	.	.	.
11.89	0.3210	0.53	.Q	.	.	.	.
12.02	0.3267	0.55	.Q	.	.	.	.
12.15	0.3332	0.69	.Q	.	.	.	.
12.28	0.3409	0.76	.Q	.	.	.	.
12.41	0.3491	0.77	.Q	.	.	.	.
12.53	0.3573	0.79	.Q	.	.	.	.
12.66	0.3658	0.80	.Q	.	.	.	.
12.79	0.3744	0.82	.Q	.	.	.	.
12.92	0.3832	0.84	.Q	.	.	.	.
13.05	0.3922	0.86	.Q	.	.	.	.
13.18	0.4015	0.88	.Q	.	.	.	.
13.30	0.4109	0.91	.Q	.	.	.	.
13.43	0.4206	0.92	.Q	.	.	.	.
13.56	0.4306	0.96	.Q	.	.	.	.
13.69	0.4409	0.98	.Q	.	.	.	.

13.82	0.4515	1.02	. Q . . . .
13.95	0.4624	1.04	. Q . . . .
14.07	0.4736	1.08	. Q . . . .
14.20	0.4852	1.10	. Q . . . .
14.33	0.4971	1.16	. Q . . . .
14.46	0.5096	1.19	. Q . . . .
14.59	0.5226	1.26	. Q . . . .
14.72	0.5362	1.31	. Q . . . .
14.85	0.5505	1.40	. Q . . . .
14.97	0.5657	1.46	. Q . . . .
15.10	0.5819	1.59	. Q . . . .
15.23	0.5992	1.67	. Q . . . .
15.36	0.6181	1.88	. Q . . . .
15.49	0.6374	1.76	. Q . . . .
15.62	0.6576	2.06	. Q . . . .
15.74	0.6809	2.33	. Q . . . .
15.87	0.7122	3.57	. Q . . . .
16.00	0.7568	4.85	. Q. . . .
16.13	0.8566	13.96	. . . Q . .
16.26	0.9461	2.91	. Q . . . .
16.39	0.9713	1.85	. Q . . . .
16.51	0.9905	1.77	. Q . . . .
16.64	1.0080	1.52	. Q . . . .
16.77	1.0232	1.35	. Q . . . .
16.90	1.0369	1.23	. Q . . . .
17.03	1.0494	1.13	. Q . . . .
17.16	1.0610	1.06	. Q . . . .
17.28	1.0719	1.00	.Q . . . .
17.41	1.0821	0.94	.Q . . . .
17.54	1.0919	0.89	.Q . . . .
17.67	1.1011	0.85	.Q . . . .
17.80	1.1099	0.81	.Q . . . .
17.92	1.1184	0.78	.Q . . . .
18.05	1.1265	0.75	.Q . . . .
18.18	1.1333	0.54	.Q . . . .
18.31	1.1389	0.52	.Q . . . .
18.44	1.1443	0.50	.Q . . . .
18.57	1.1496	0.48	Q . . . .
18.69	1.1546	0.47	Q . . . .
18.82	1.1595	0.45	Q . . . .
18.95	1.1642	0.44	Q . . . .
19.08	1.1689	0.43	Q . . . .
19.21	1.1733	0.42	Q . . . .
19.34	1.1777	0.41	Q . . . .
19.47	1.1820	0.40	Q . . . .
19.59	1.1861	0.39	Q . . . .
19.72	1.1902	0.38	Q . . . .
19.85	1.1942	0.37	Q . . . .
19.98	1.1981	0.36	Q . . . .
20.11	1.2019	0.36	Q . . . .
20.23	1.2056	0.35	Q . . . .
20.36	1.2093	0.34	Q . . . .

20.49	1.2128	0.33	Q	.	.	.	.
20.62	1.2164	0.33	Q	.	.	.	.
20.75	1.2198	0.32	Q	.	.	.	.
20.88	1.2232	0.32	Q	.	.	.	.
21.01	1.2266	0.31	Q	.	.	.	.
21.13	1.2298	0.31	Q	.	.	.	.
21.26	1.2331	0.30	Q	.	.	.	.
21.39	1.2363	0.30	Q	.	.	.	.
21.52	1.2394	0.29	Q	.	.	.	.
21.65	1.2425	0.29	Q	.	.	.	.
21.77	1.2455	0.28	Q	.	.	.	.
21.90	1.2485	0.28	Q	.	.	.	.
22.03	1.2515	0.28	Q	.	.	.	.
22.16	1.2544	0.27	Q	.	.	.	.
22.29	1.2572	0.27	Q	.	.	.	.
22.42	1.2601	0.27	Q	.	.	.	.
22.55	1.2629	0.26	Q	.	.	.	.
22.67	1.2656	0.26	Q	.	.	.	.
22.80	1.2684	0.26	Q	.	.	.	.
22.93	1.2711	0.25	Q	.	.	.	.
23.06	1.2737	0.25	Q	.	.	.	.
23.19	1.2764	0.25	Q	.	.	.	.
23.32	1.2790	0.24	Q	.	.	.	.
23.44	1.2816	0.24	Q	.	.	.	.
23.57	1.2841	0.24	Q	.	.	.	.
23.70	1.2866	0.24	Q	.	.	.	.
23.83	1.2891	0.23	Q	.	.	.	.
23.96	1.2916	0.23	Q	.	.	.	.
24.08	1.2940	0.23	Q	.	.	.	.
24.21	1.2952	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1447.6
10%	115.5
20%	30.8
30%	15.4
40%	7.7
50%	7.7
60%	7.7
70%	7.7
80%	7.7
90%	7.7

```
****************************************************************************
                    SMALL AREA UNIT HYDROGRAPH MODEL
============================================================================
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            Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960

****************************************************************************
----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  EXISTING CONDITION HYDROGRAPH
  100 YEAR ANALYSIS
----------------------------------------------------------------------------


    RATIONAL METHOD CALIBRATION COEFFICIENT = 0.89
    TOTAL CATCHMENT AREA(ACRES) =     4.15
    SOIL-LOSS RATE, Fm,(INCH/HR) =  0.020
    LOW LOSS FRACTION = 0.085
    TIME OF CONCENTRATION(MIN.) =  7.70
    SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
    ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
    RETURN FREQUENCY(YEARS) = 100
       5-MINUTE POINT RAINFALL VALUE(INCHES) =  0.52
      30-MINUTE POINT RAINFALL VALUE(INCHES) =  1.09
       1-HOUR   POINT RAINFALL VALUE(INCHES) =  1.45
       3-HOUR   POINT RAINFALL VALUE(INCHES) =  2.43
       6-HOUR   POINT RAINFALL VALUE(INCHES) =  3.36
      24-HOUR   POINT RAINFALL VALUE(INCHES) =  5.63

----------------------------------------------------------------------------

    TOTAL CATCHMENT   RUNOFF  VOLUME(ACRE-FEET) =      1.63
    TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) =      0.32

****************************************************************************
  TIME      VOLUME       Q    0.        5.0       10.0      15.0      20.0
 (HOURS)     (AF)      (CFS)
----------------------------------------------------------------------------
  0.09      0.0016      0.30  Q         .         .         .         .
  0.22      0.0047      0.30  Q         .         .         .         .
  0.34      0.0079      0.30  Q         .         .         .         .
```

0.47	0.0111	0.30	Q	.	.	.	.
0.60	0.0143	0.30	Q	.	.	.	.
0.73	0.0175	0.30	Q	.	.	.	.
0.86	0.0207	0.30	Q	.	.	.	.
0.99	0.0239	0.31	Q	.	.	.	.
1.11	0.0272	0.31	Q	.	.	.	.
1.24	0.0305	0.31	Q	.	.	.	.
1.37	0.0338	0.31	Q	.	.	.	.
1.50	0.0371	0.31	Q	.	.	.	.
1.63	0.0404	0.31	Q	.	.	.	.
1.76	0.0438	0.32	Q	.	.	.	.
1.88	0.0471	0.32	Q	.	.	.	.
2.01	0.0505	0.32	Q	.	.	.	.
2.14	0.0539	0.32	Q	.	.	.	.
2.27	0.0573	0.32	Q	.	.	.	.
2.40	0.0608	0.33	Q	.	.	.	.
2.53	0.0643	0.33	Q	.	.	.	.
2.65	0.0677	0.33	Q	.	.	.	.
2.78	0.0713	0.33	Q	.	.	.	.
2.91	0.0748	0.33	Q	.	.	.	.
3.04	0.0783	0.34	Q	.	.	.	.
3.17	0.0819	0.34	Q	.	.	.	.
3.30	0.0855	0.34	Q	.	.	.	.
3.42	0.0891	0.34	Q	.	.	.	.
3.55	0.0928	0.34	Q	.	.	.	.
3.68	0.0964	0.35	Q	.	.	.	.
3.81	0.1001	0.35	Q	.	.	.	.
3.94	0.1038	0.35	Q	.	.	.	.
4.07	0.1076	0.35	Q	.	.	.	.
4.19	0.1113	0.36	Q	.	.	.	.
4.32	0.1151	0.36	Q	.	.	.	.
4.45	0.1189	0.36	Q	.	.	.	.
4.58	0.1228	0.36	Q	.	.	.	.
4.71	0.1266	0.37	Q	.	.	.	.
4.84	0.1305	0.37	Q	.	.	.	.
4.96	0.1345	0.37	Q	.	.	.	.
5.09	0.1384	0.37	Q	.	.	.	.
5.22	0.1424	0.38	Q	.	.	.	.
5.35	0.1464	0.38	Q	.	.	.	.
5.48	0.1505	0.38	Q	.	.	.	.
5.61	0.1545	0.39	Q	.	.	.	.
5.73	0.1586	0.39	Q	.	.	.	.
5.86	0.1628	0.39	Q	.	.	.	.
5.99	0.1669	0.39	Q	.	.	.	.
6.12	0.1711	0.40	Q	.	.	.	.
6.25	0.1754	0.40	Q	.	.	.	.
6.38	0.1796	0.40	Q	.	.	.	.
6.50	0.1839	0.41	Q	.	.	.	.
6.63	0.1883	0.41	Q	.	.	.	.
6.76	0.1927	0.41	Q	.	.	.	.
6.89	0.1971	0.42	Q	.	.	.	.
7.02	0.2015	0.42	Q	.	.	.	.

7.14	0.2060	0.43	Q	.	.	.	.
7.27	0.2106	0.43	Q	.	.	.	.
7.40	0.2151	0.43	Q	.	.	.	.
7.53	0.2198	0.44	Q	.	.	.	.
7.66	0.2244	0.44	Q	.	.	.	.
7.79	0.2291	0.45	Q	.	.	.	.
7.92	0.2339	0.45	Q	.	.	.	.
8.04	0.2387	0.45	Q	.	.	.	.
8.17	0.2435	0.46	Q	.	.	.	.
8.30	0.2484	0.46	Q	.	.	.	.
8.43	0.2534	0.47	Q	.	.	.	.
8.56	0.2584	0.47	Q	.	.	.	.
8.69	0.2634	0.48	Q	.	.	.	.
8.81	0.2685	0.48	Q	.	.	.	.
8.94	0.2737	0.49	Q	.	.	.	.
9.07	0.2789	0.49	Q	.	.	.	.
9.20	0.2842	0.50	.Q	.	.	.	.
9.33	0.2896	0.51	.Q	.	.	.	.
9.45	0.2950	0.51	.Q	.	.	.	.
9.58	0.3005	0.52	.Q	.	.	.	.
9.71	0.3060	0.53	.Q	.	.	.	.
9.84	0.3116	0.53	.Q	.	.	.	.
9.97	0.3173	0.54	.Q	.	.	.	.
10.10	0.3231	0.55	.Q	.	.	.	.
10.23	0.3289	0.56	.Q	.	.	.	.
10.35	0.3348	0.56	.Q	.	.	.	.
10.48	0.3408	0.57	.Q	.	.	.	.
10.61	0.3469	0.58	.Q	.	.	.	.
10.74	0.3531	0.59	.Q	.	.	.	.
10.87	0.3594	0.59	.Q	.	.	.	.
10.99	0.3658	0.61	.Q	.	.	.	.
11.12	0.3722	0.61	.Q	.	.	.	.
11.25	0.3788	0.63	.Q	.	.	.	.
11.38	0.3855	0.63	.Q	.	.	.	.
11.51	0.3923	0.65	.Q	.	.	.	.
11.64	0.3992	0.66	.Q	.	.	.	.
11.77	0.4063	0.67	.Q	.	.	.	.
11.89	0.4135	0.68	.Q	.	.	.	.
12.02	0.4208	0.70	.Q	.	.	.	.
12.15	0.4290	0.85	.Q	.	.	.	.
12.28	0.4384	0.92	.Q	.	.	.	.
12.41	0.4482	0.93	.Q	.	.	.	.
12.53	0.4582	0.96	.Q	.	.	.	.
12.66	0.4685	0.97	.Q	.	.	.	.
12.79	0.4789	1.00	. Q	.	.	.	.
12.92	0.4896	1.02	. Q	.	.	.	.
13.05	0.5006	1.05	. Q	.	.	.	.
13.18	0.5118	1.07	. Q	.	.	.	.
13.30	0.5233	1.10	. Q	.	.	.	.
13.43	0.5351	1.12	. Q	.	.	.	.
13.56	0.5472	1.16	. Q	.	.	.	.
13.69	0.5597	1.19	. Q	.	.	.	.

13.82	0.5725	1.24	. Q . . . .
13.95	0.5858	1.26	. Q . . . .
14.07	0.5995	1.33	. Q . . . .
14.20	0.6138	1.36	. Q . . . .
14.33	0.6287	1.44	. Q . . . .
14.46	0.6441	1.48	. Q . . . .
14.59	0.6603	1.57	. Q . . . .
14.72	0.6772	1.62	. Q . . . .
14.85	0.6950	1.74	. Q . . . .
14.97	0.7139	1.81	. Q . . . .
15.10	0.7340	1.98	. Q . . . .
15.23	0.7555	2.08	. Q . . . .
15.36	0.7789	2.34	. Q . . . .
15.49	0.8032	2.25	. Q . . . .
15.62	0.8292	2.64	. Q . . . .
15.74	0.8590	2.98	. Q . . . .
15.87	0.8976	4.28	. Q . . . .
16.00	0.9514	5.87	. .Q . . . .
16.13	1.0772	17.85	. . . . Q .
16.26	1.1903	3.49	. Q . . . .
16.39	1.2215	2.39	. Q . . . .
16.51	1.2458	2.20	. Q . . . .
16.64	1.2675	1.89	. Q . . . .
16.77	1.2864	1.68	. Q . . . .
16.90	1.3034	1.52	. Q . . . .
17.03	1.3189	1.40	. Q . . . .
17.16	1.3331	1.29	. Q . . . .
17.28	1.3464	1.21	. Q . . . .
17.41	1.3589	1.14	. Q . . . .
17.54	1.3707	1.08	. Q . . . .
17.67	1.3819	1.03	. Q . . . .
17.80	1.3926	0.99	.Q . . . .
17.92	1.4029	0.95	.Q . . . .
18.05	1.4127	0.91	.Q . . . .
18.18	1.4212	0.69	.Q . . . .
18.31	1.4284	0.66	.Q . . . .
18.44	1.4353	0.64	.Q . . . .
18.57	1.4420	0.62	.Q . . . .
18.69	1.4485	0.60	.Q . . . .
18.82	1.4547	0.58	.Q . . . .
18.95	1.4608	0.57	.Q . . . .
19.08	1.4668	0.55	.Q . . . .
19.21	1.4725	0.54	.Q . . . .
19.34	1.4781	0.52	.Q . . . .
19.47	1.4836	0.51	.Q . . . .
19.59	1.4890	0.50	Q . . . .
19.72	1.4942	0.49	Q . . . .
19.85	1.4993	0.48	Q . . . .
19.98	1.5043	0.47	Q . . . .
20.11	1.5092	0.46	Q . . . .
20.23	1.5140	0.45	Q . . . .
20.36	1.5187	0.44	Q . . . .

20.49	1.5233	0.43	Q	.	.	.	.
20.62	1.5279	0.42	Q	.	.	.	.
20.75	1.5323	0.42	Q	.	.	.	.
20.88	1.5367	0.41	Q	.	.	.	.
21.01	1.5410	0.40	Q	.	.	.	.
21.13	1.5452	0.40	Q	.	.	.	.
21.26	1.5494	0.39	Q	.	.	.	.
21.39	1.5535	0.38	Q	.	.	.	.
21.52	1.5576	0.38	Q	.	.	.	.
21.65	1.5615	0.37	Q	.	.	.	.
21.77	1.5655	0.37	Q	.	.	.	.
21.90	1.5693	0.36	Q	.	.	.	.
22.03	1.5731	0.36	Q	.	.	.	.
22.16	1.5769	0.35	Q	.	.	.	.
22.29	1.5806	0.35	Q	.	.	.	.
22.42	1.5843	0.34	Q	.	.	.	.
22.55	1.5879	0.34	Q	.	.	.	.
22.67	1.5915	0.33	Q	.	.	.	.
22.80	1.5950	0.33	Q	.	.	.	.
22.93	1.5985	0.33	Q	.	.	.	.
23.06	1.6019	0.32	Q	.	.	.	.
23.19	1.6053	0.32	Q	.	.	.	.
23.32	1.6087	0.32	Q	.	.	.	.
23.44	1.6120	0.31	Q	.	.	.	.
23.57	1.6153	0.31	Q	.	.	.	.
23.70	1.6186	0.31	Q	.	.	.	.
23.83	1.6218	0.30	Q	.	.	.	.
23.96	1.6250	0.30	Q	.	.	.	.
24.08	1.6282	0.30	Q	.	.	.	.
24.21	1.6297	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1447.6
10%	107.8
20%	23.1
30%	15.4
40%	7.7
50%	7.7
60%	7.7
70%	7.7
80%	7.7
90%	7.7

APPENDIX 6

PROPOSED CONDITION RUNOFF HYDROGRAPHS

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*****************************************************************************
                        SMALL AREA UNIT HYDROGRAPH MODEL
=============================================================================
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                              Analysis prepared by:

                                Fuscoe Engineering
                              16795 Von Karman #100
                                 Irvine, CA 92606
                                 949-474-1960

*****************************************************************************
-----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  PROPOSED CONDITION HYDROGRAPH
  2 YEAR ANALYSIS
-----------------------------------------------------------------------------


    RATIONAL METHOD CALIBRATION COEFFICIENT = 0.88
    TOTAL CATCHMENT AREA(ACRES) =    4.15
    SOIL-LOSS RATE, Fm,(INCH/HR) =  0.040
    LOW LOSS FRACTION = 0.249
    TIME OF CONCENTRATION(MIN.) =  7.60
    SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
    ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
    RETURN FREQUENCY(YEARS) =   2
       5-MINUTE POINT RAINFALL VALUE(INCHES) =  0.19
      30-MINUTE POINT RAINFALL VALUE(INCHES) =  0.40
       1-HOUR   POINT RAINFALL VALUE(INCHES) =  0.53
       3-HOUR   POINT RAINFALL VALUE(INCHES) =  0.89
       6-HOUR   POINT RAINFALL VALUE(INCHES) =  1.22
      24-HOUR   POINT RAINFALL VALUE(INCHES) =  2.05

-----------------------------------------------------------------------------

    TOTAL CATCHMENT   RUNOFF  VOLUME(ACRE-FEET) =     0.49
    TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) =     0.21

*****************************************************************************
  TIME      VOLUME        Q    0.        2.5       5.0       7.5      10.0
 (HOURS)     (AF)       (CFS)
-----------------------------------------------------------------------------
  0.04      0.0000      0.00  Q          .         .         .         .
  0.17      0.0005      0.09  Q          .         .         .         .
  0.29      0.0014      0.09  Q          .         .         .         .
```

0.42	0.0023	0.09	Q	.	.	.	.
0.55	0.0032	0.09	Q	.	.	.	.
0.67	0.0042	0.09	Q	.	.	.	.
0.80	0.0051	0.09	Q	.	.	.	.
0.93	0.0060	0.09	Q	.	.	.	.
1.05	0.0070	0.09	Q	.	.	.	.
1.18	0.0079	0.09	Q	.	.	.	.
1.31	0.0089	0.09	Q	.	.	.	.
1.43	0.0099	0.09	Q	.	.	.	.
1.56	0.0108	0.09	Q	.	.	.	.
1.69	0.0118	0.09	Q	.	.	.	.
1.81	0.0128	0.09	Q	.	.	.	.
1.94	0.0138	0.09	Q	.	.	.	.
2.07	0.0147	0.09	Q	.	.	.	.
2.19	0.0157	0.10	Q	.	.	.	.
2.32	0.0167	0.10	Q	.	.	.	.
2.45	0.0178	0.10	Q	.	.	.	.
2.57	0.0188	0.10	Q	.	.	.	.
2.70	0.0198	0.10	Q	.	.	.	.
2.83	0.0208	0.10	Q	.	.	.	.
2.95	0.0218	0.10	Q	.	.	.	.
3.08	0.0229	0.10	Q	.	.	.	.
3.21	0.0239	0.10	Q	.	.	.	.
3.33	0.0250	0.10	Q	.	.	.	.
3.46	0.0260	0.10	Q	.	.	.	.
3.59	0.0271	0.10	Q	.	.	.	.
3.71	0.0281	0.10	Q	.	.	.	.
3.84	0.0292	0.10	Q	.	.	.	.
3.97	0.0303	0.10	Q	.	.	.	.
4.09	0.0314	0.10	Q	.	.	.	.
4.22	0.0325	0.11	Q	.	.	.	.
4.35	0.0336	0.11	Q	.	.	.	.
4.47	0.0347	0.11	Q	.	.	.	.
4.60	0.0358	0.11	Q	.	.	.	.
4.73	0.0370	0.11	Q	.	.	.	.
4.85	0.0381	0.11	Q	.	.	.	.
4.98	0.0392	0.11	Q	.	.	.	.
5.11	0.0404	0.11	Q	.	.	.	.
5.23	0.0415	0.11	Q	.	.	.	.
5.36	0.0427	0.11	Q	.	.	.	.
5.49	0.0439	0.11	Q	.	.	.	.
5.61	0.0451	0.11	Q	.	.	.	.
5.74	0.0463	0.11	Q	.	.	.	.
5.87	0.0475	0.12	Q	.	.	.	.
5.99	0.0487	0.12	Q	.	.	.	.
6.12	0.0499	0.12	Q	.	.	.	.
6.25	0.0511	0.12	Q	.	.	.	.
6.37	0.0524	0.12	Q	.	.	.	.
6.50	0.0536	0.12	Q	.	.	.	.
6.63	0.0549	0.12	Q	.	.	.	.
6.75	0.0562	0.12	Q	.	.	.	.
6.88	0.0575	0.12	Q	.	.	.	.

7.01	0.0588	0.12	Q	.	.	.	.
7.13	0.0601	0.13	Q	.	.	.	.
7.26	0.0614	0.13	Q	.	.	.	.
7.39	0.0627	0.13	Q	.	.	.	.
7.51	0.0641	0.13	Q	.	.	.	.
7.64	0.0654	0.13	Q	.	.	.	.
7.77	0.0668	0.13	Q	.	.	.	.
7.89	0.0682	0.13	Q	.	.	.	.
8.02	0.0695	0.13	Q	.	.	.	.
8.15	0.0710	0.13	Q	.	.	.	.
8.27	0.0724	0.14	Q	.	.	.	.
8.40	0.0738	0.14	Q	.	.	.	.
8.53	0.0753	0.14	Q	.	.	.	.
8.65	0.0767	0.14	Q	.	.	.	.
8.78	0.0782	0.14	Q	.	.	.	.
8.91	0.0797	0.14	Q	.	.	.	.
9.03	0.0812	0.15	Q	.	.	.	.
9.16	0.0828	0.15	Q	.	.	.	.
9.29	0.0843	0.15	Q	.	.	.	.
9.41	0.0859	0.15	Q	.	.	.	.
9.54	0.0875	0.15	Q	.	.	.	.
9.67	0.0891	0.15	Q	.	.	.	.
9.79	0.0907	0.16	Q	.	.	.	.
9.92	0.0923	0.16	Q	.	.	.	.
10.05	0.0940	0.16	Q	.	.	.	.
10.17	0.0957	0.16	Q	.	.	.	.
10.30	0.0974	0.16	Q	.	.	.	.
10.43	0.0991	0.17	Q	.	.	.	.
10.55	0.1009	0.17	Q	.	.	.	.
10.68	0.1027	0.17	Q	.	.	.	.
10.81	0.1045	0.17	Q	.	.	.	.
10.93	0.1063	0.18	Q	.	.	.	.
11.06	0.1082	0.18	Q	.	.	.	.
11.19	0.1101	0.18	Q	.	.	.	.
11.31	0.1120	0.19	Q	.	.	.	.
11.44	0.1140	0.19	Q	.	.	.	.
11.57	0.1160	0.19	Q	.	.	.	.
11.69	0.1180	0.19	Q	.	.	.	.
11.82	0.1201	0.20	Q	.	.	.	.
11.95	0.1222	0.20	Q	.	.	.	.
12.07	0.1244	0.22	Q	.	.	.	.
12.20	0.1269	0.26	.Q	.	.	.	.
12.33	0.1296	0.26	.Q	.	.	.	.
12.45	0.1324	0.26	.Q	.	.	.	.
12.58	0.1352	0.27	.Q	.	.	.	.
12.71	0.1380	0.28	.Q	.	.	.	.
12.83	0.1410	0.28	.Q	.	.	.	.
12.96	0.1439	0.29	.Q	.	.	.	.
13.09	0.1470	0.30	.Q	.	.	.	.
13.21	0.1501	0.30	.Q	.	.	.	.
13.34	0.1533	0.31	.Q	.	.	.	.
13.47	0.1566	0.32	.Q	.	.	.	.

13.59	0.1599	0.33	.Q . . . .
13.72	0.1634	0.33	.Q . . . .
13.85	0.1670	0.35	.Q . . . .
13.97	0.1706	0.35	.Q . . . .
14.10	0.1745	0.38	.Q . . . .
14.23	0.1785	0.39	.Q . . . .
14.35	0.1827	0.41	.Q . . . .
14.48	0.1871	0.42	.Q . . . .
14.61	0.1917	0.45	.Q . . . .
14.73	0.1965	0.47	.Q . . . .
14.86	0.2017	0.51	. Q . . . .
14.99	0.2072	0.54	. Q . . . .
15.11	0.2131	0.60	. Q . . . .
15.24	0.2196	0.64	. Q . . . .
15.37	0.2268	0.73	. Q . . . .
15.49	0.2341	0.67	. Q . . . .
15.62	0.2420	0.83	. Q . . . .
15.75	0.2512	0.95	. Q . . . .
15.87	0.2638	1.44	. Q . . . .
16.00	0.2819	2.02	. Q . . . .
16.13	0.3257	6.34	. . . Q . .
16.25	0.3649	1.15	. Q . . . .
16.38	0.3748	0.73	. Q . . . .
16.51	0.3822	0.68	. Q . . . .
16.63	0.3887	0.57	. Q . . . .
16.76	0.3943	0.49	.Q . . . .
16.89	0.3991	0.44	.Q . . . .
17.01	0.4035	0.40	.Q . . . .
17.14	0.4075	0.36	.Q . . . .
17.27	0.4112	0.34	.Q . . . .
17.39	0.4146	0.32	.Q . . . .
17.52	0.4179	0.31	.Q . . . .
17.65	0.4210	0.29	.Q . . . .
17.77	0.4240	0.28	.Q . . . .
17.90	0.4269	0.27	.Q . . . .
18.03	0.4296	0.26	.Q . . . .
18.15	0.4320	0.20	Q . . . .
18.28	0.4341	0.20	Q . . . .
18.41	0.4362	0.19	Q . . . .
18.53	0.4381	0.18	Q . . . .
18.66	0.4400	0.18	Q . . . .
18.79	0.4419	0.17	Q . . . .
18.91	0.4437	0.17	Q . . . .
19.04	0.4454	0.16	Q . . . .
19.17	0.4471	0.16	Q . . . .
19.29	0.4487	0.16	Q . . . .
19.42	0.4503	0.15	Q . . . .
19.55	0.4519	0.15	Q . . . .
19.67	0.4534	0.14	Q . . . .
19.80	0.4549	0.14	Q . . . .
19.93	0.4564	0.14	Q . . . .
20.05	0.4578	0.14	Q . . . .

20.18	0.4592	0.13	Q	.	.	.	.
20.31	0.4606	0.13	Q	.	.	.	.
20.43	0.4620	0.13	Q	.	.	.	.
20.56	0.4633	0.13	Q	.	.	.	.
20.69	0.4646	0.12	Q	.	.	.	.
20.81	0.4659	0.12	Q	.	.	.	.
20.94	0.4672	0.12	Q	.	.	.	.
21.07	0.4684	0.12	Q	.	.	.	.
21.19	0.4696	0.12	Q	.	.	.	.
21.32	0.4708	0.11	Q	.	.	.	.
21.45	0.4720	0.11	Q	.	.	.	.
21.57	0.4732	0.11	Q	.	.	.	.
21.70	0.4743	0.11	Q	.	.	.	.
21.83	0.4755	0.11	Q	.	.	.	.
21.95	0.4766	0.11	Q	.	.	.	.
22.08	0.4777	0.10	Q	.	.	.	.
22.21	0.4788	0.10	Q	.	.	.	.
22.33	0.4799	0.10	Q	.	.	.	.
22.46	0.4809	0.10	Q	.	.	.	.
22.59	0.4820	0.10	Q	.	.	.	.
22.71	0.4830	0.10	Q	.	.	.	.
22.84	0.4840	0.10	Q	.	.	.	.
22.97	0.4850	0.10	Q	.	.	.	.
23.09	0.4860	0.10	Q	.	.	.	.
23.22	0.4870	0.09	Q	.	.	.	.
23.35	0.4880	0.09	Q	.	.	.	.
23.47	0.4890	0.09	Q	.	.	.	.
23.60	0.4899	0.09	Q	.	.	.	.
23.73	0.4909	0.09	Q	.	.	.	.
23.85	0.4918	0.09	Q	.	.	.	.
23.98	0.4928	0.09	Q	.	.	.	.
24.11	0.4937	0.09	Q	.	.	.	.
24.23	0.4941	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1444.0
10%	83.6
20%	22.8
30%	15.2
40%	7.6
50%	7.6
60%	7.6
70%	7.6
80%	7.6

```
*****************************************************************************
                        SMALL AREA UNIT HYDROGRAPH MODEL
=============================================================================
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                              Analysis prepared by:

                                Fuscoe Engineering
                              16795 Von Karman #100
                                 Irvine, CA 92606
                                  949-474-1960

*****************************************************************************
-----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  PROPOSED CONDITION HYDROGRAPH
  25 YEAR ANALYSIS
-----------------------------------------------------------------------------


    RATIONAL METHOD CALIBRATION COEFFICIENT = 0.88
    TOTAL CATCHMENT AREA(ACRES) =     4.15
    SOIL-LOSS RATE, Fm,(INCH/HR) =  0.040
    LOW LOSS FRACTION = 0.151
    TIME OF CONCENTRATION(MIN.) =  7.60
    SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
    ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
    RETURN FREQUENCY(YEARS) =  25
       5-MINUTE POINT RAINFALL VALUE(INCHES) =  0.40
      30-MINUTE POINT RAINFALL VALUE(INCHES) =  0.87
       1-HOUR   POINT RAINFALL VALUE(INCHES) =  1.15
       3-HOUR   POINT RAINFALL VALUE(INCHES) =  1.94
       6-HOUR   POINT RAINFALL VALUE(INCHES) =  2.71
      24-HOUR   POINT RAINFALL VALUE(INCHES) =  4.49

-----------------------------------------------------------------------------

    TOTAL CATCHMENT   RUNOFF  VOLUME(ACRE-FEET) =      1.21
    TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) =      0.34

*****************************************************************************
  TIME      VOLUME        Q    0.        5.0       10.0      15.0      20.0
 (HOURS)     (AF)       (CFS)
-----------------------------------------------------------------------------
  0.04      0.0000      0.00  Q          .         .         .         .
  0.17      0.0011      0.21  Q          .         .         .         .
  0.29      0.0034      0.21  Q          .         .         .         .
```

0.42	0.0056	0.22	Q	.	.	.	.
0.55	0.0079	0.22	Q	.	.	.	.
0.67	0.0101	0.22	Q	.	.	.	.
0.80	0.0124	0.22	Q	.	.	.	.
0.93	0.0147	0.22	Q	.	.	.	.
1.05	0.0170	0.22	Q	.	.	.	.
1.18	0.0193	0.22	Q	.	.	.	.
1.31	0.0217	0.22	Q	.	.	.	.
1.43	0.0240	0.22	Q	.	.	.	.
1.56	0.0264	0.23	Q	.	.	.	.
1.69	0.0287	0.23	Q	.	.	.	.
1.81	0.0311	0.23	Q	.	.	.	.
1.94	0.0335	0.23	Q	.	.	.	.
2.07	0.0359	0.23	Q	.	.	.	.
2.19	0.0383	0.23	Q	.	.	.	.
2.32	0.0408	0.23	Q	.	.	.	.
2.45	0.0432	0.24	Q	.	.	.	.
2.57	0.0457	0.24	Q	.	.	.	.
2.70	0.0482	0.24	Q	.	.	.	.
2.83	0.0507	0.24	Q	.	.	.	.
2.95	0.0532	0.24	Q	.	.	.	.
3.08	0.0557	0.24	Q	.	.	.	.
3.21	0.0583	0.24	Q	.	.	.	.
3.33	0.0608	0.24	Q	.	.	.	.
3.46	0.0634	0.25	Q	.	.	.	.
3.59	0.0660	0.25	Q	.	.	.	.
3.71	0.0686	0.25	Q	.	.	.	.
3.84	0.0712	0.25	Q	.	.	.	.
3.97	0.0739	0.25	Q	.	.	.	.
4.09	0.0765	0.25	Q	.	.	.	.
4.22	0.0792	0.26	Q	.	.	.	.
4.35	0.0819	0.26	Q	.	.	.	.
4.47	0.0846	0.26	Q	.	.	.	.
4.60	0.0873	0.26	Q	.	.	.	.
4.73	0.0901	0.26	Q	.	.	.	.
4.85	0.0929	0.27	Q	.	.	.	.
4.98	0.0957	0.27	Q	.	.	.	.
5.11	0.0985	0.27	Q	.	.	.	.
5.23	0.1013	0.27	Q	.	.	.	.
5.36	0.1042	0.27	Q	.	.	.	.
5.49	0.1070	0.28	Q	.	.	.	.
5.61	0.1099	0.28	Q	.	.	.	.
5.74	0.1128	0.28	Q	.	.	.	.
5.87	0.1158	0.28	Q	.	.	.	.
5.99	0.1188	0.28	Q	.	.	.	.
6.12	0.1217	0.29	Q	.	.	.	.
6.25	0.1248	0.29	Q	.	.	.	.
6.37	0.1278	0.29	Q	.	.	.	.
6.50	0.1309	0.29	Q	.	.	.	.
6.63	0.1340	0.30	Q	.	.	.	.
6.75	0.1371	0.30	Q	.	.	.	.
6.88	0.1402	0.30	Q	.	.	.	.

7.01	0.1434	0.30	Q	.	.	.	.
7.13	0.1466	0.31	Q	.	.	.	.
7.26	0.1498	0.31	Q	.	.	.	.
7.39	0.1531	0.31	Q	.	.	.	.
7.51	0.1564	0.32	Q	.	.	.	.
7.64	0.1597	0.32	Q	.	.	.	.
7.77	0.1630	0.32	Q	.	.	.	.
7.89	0.1664	0.32	Q	.	.	.	.
8.02	0.1698	0.33	Q	.	.	.	.
8.15	0.1733	0.33	Q	.	.	.	.
8.27	0.1768	0.34	Q	.	.	.	.
8.40	0.1803	0.34	Q	.	.	.	.
8.53	0.1838	0.34	Q	.	.	.	.
8.65	0.1874	0.34	Q	.	.	.	.
8.78	0.1911	0.35	Q	.	.	.	.
8.91	0.1947	0.35	Q	.	.	.	.
9.03	0.1985	0.36	Q	.	.	.	.
9.16	0.2022	0.36	Q	.	.	.	.
9.29	0.2060	0.37	Q	.	.	.	.
9.41	0.2099	0.37	Q	.	.	.	.
9.54	0.2138	0.38	Q	.	.	.	.
9.67	0.2177	0.38	Q	.	.	.	.
9.79	0.2217	0.38	Q	.	.	.	.
9.92	0.2257	0.39	Q	.	.	.	.
10.05	0.2298	0.39	Q	.	.	.	.
10.17	0.2340	0.40	Q	.	.	.	.
10.30	0.2382	0.41	Q	.	.	.	.
10.43	0.2425	0.41	Q	.	.	.	.
10.55	0.2468	0.42	Q	.	.	.	.
10.68	0.2512	0.42	Q	.	.	.	.
10.81	0.2556	0.43	Q	.	.	.	.
10.93	0.2602	0.43	Q	.	.	.	.
11.06	0.2648	0.44	Q	.	.	.	.
11.19	0.2694	0.45	Q	.	.	.	.
11.31	0.2742	0.46	Q	.	.	.	.
11.44	0.2790	0.46	Q	.	.	.	.
11.57	0.2839	0.47	Q	.	.	.	.
11.69	0.2889	0.48	Q	.	.	.	.
11.82	0.2940	0.49	Q	.	.	.	.
11.95	0.2992	0.50	Q	.	.	.	.
12.07	0.3048	0.57	.Q	.	.	.	.
12.20	0.3114	0.69	.Q	.	.	.	.
12.33	0.3187	0.70	.Q	.	.	.	.
12.45	0.3261	0.71	.Q	.	.	.	.
12.58	0.3336	0.73	.Q	.	.	.	.
12.71	0.3412	0.74	.Q	.	.	.	.
12.83	0.3490	0.76	.Q	.	.	.	.
12.96	0.3570	0.77	.Q	.	.	.	.
13.09	0.3652	0.79	.Q	.	.	.	.
13.21	0.3735	0.80	.Q	.	.	.	.
13.34	0.3820	0.83	.Q	.	.	.	.
13.47	0.3907	0.84	.Q	.	.	.	.

13.59	0.3997	0.88	.Q . . . .
13.72	0.4090	0.89	.Q . . . .
13.85	0.4185	0.93	.Q . . . .
13.97	0.4284	0.96	.Q . . . .
14.10	0.4386	0.99	.Q . . . .
14.23	0.4491	1.01	. Q . . . .
14.35	0.4600	1.07	. Q . . . .
14.48	0.4714	1.10	. Q . . . .
14.61	0.4834	1.18	. Q . . . .
14.73	0.4959	1.22	. Q . . . .
14.86	0.5092	1.32	. Q . . . .
14.99	0.5233	1.37	. Q . . . .
15.11	0.5383	1.50	. Q . . . .
15.24	0.5545	1.58	. Q . . . .
15.37	0.5721	1.79	. Q . . . .
15.49	0.5901	1.64	. Q . . . .
15.62	0.6090	1.97	. Q . . . .
15.75	0.6309	2.24	. Q . . . .
15.87	0.6608	3.46	. Q . . . .
16.00	0.7037	4.73	. Q. . . .
16.13	0.8005	13.76	. . . Q . .
16.25	0.8872	2.82	. Q . . . .
16.38	0.9112	1.76	. Q . . . .
16.51	0.9292	1.68	. Q . . . .
16.63	0.9455	1.43	. Q . . . .
16.76	0.9597	1.27	. Q . . . .
16.89	0.9722	1.14	. Q . . . .
17.01	0.9837	1.04	. Q . . . .
17.14	0.9942	0.98	.Q . . . .
17.27	1.0042	0.91	.Q . . . .
17.39	1.0134	0.86	.Q . . . .
17.52	1.0222	0.81	.Q . . . .
17.65	1.0305	0.78	.Q . . . .
17.77	1.0385	0.75	.Q . . . .
17.90	1.0461	0.72	.Q . . . .
18.03	1.0535	0.69	.Q . . . .
18.15	1.0598	0.51	.Q . . . .
18.28	1.0650	0.49	Q . . . .
18.41	1.0700	0.47	Q . . . .
18.53	1.0748	0.45	Q . . . .
18.66	1.0795	0.44	Q . . . .
18.79	1.0840	0.43	Q . . . .
18.91	1.0884	0.41	Q . . . .
19.04	1.0927	0.40	Q . . . .
19.17	1.0968	0.39	Q . . . .
19.29	1.1009	0.38	Q . . . .
19.42	1.1048	0.37	Q . . . .
19.55	1.1087	0.36	Q . . . .
19.67	1.1124	0.36	Q . . . .
19.80	1.1161	0.35	Q . . . .
19.93	1.1197	0.34	Q . . . .
20.05	1.1232	0.33	Q . . . .

20.18	1.1267	0.33	Q	.	.	.	.
20.31	1.1300	0.32	Q	.	.	.	.
20.43	1.1334	0.31	Q	.	.	.	.
20.56	1.1366	0.31	Q	.	.	.	.
20.69	1.1398	0.30	Q	.	.	.	.
20.81	1.1430	0.30	Q	.	.	.	.
20.94	1.1461	0.29	Q	.	.	.	.
21.07	1.1491	0.29	Q	.	.	.	.
21.19	1.1521	0.28	Q	.	.	.	.
21.32	1.1550	0.28	Q	.	.	.	.
21.45	1.1579	0.27	Q	.	.	.	.
21.57	1.1608	0.27	Q	.	.	.	.
21.70	1.1636	0.27	Q	.	.	.	.
21.83	1.1664	0.26	Q	.	.	.	.
21.95	1.1691	0.26	Q	.	.	.	.
22.08	1.1718	0.26	Q	.	.	.	.
22.21	1.1745	0.25	Q	.	.	.	.
22.33	1.1771	0.25	Q	.	.	.	.
22.46	1.1797	0.25	Q	.	.	.	.
22.59	1.1822	0.24	Q	.	.	.	.
22.71	1.1848	0.24	Q	.	.	.	.
22.84	1.1873	0.24	Q	.	.	.	.
22.97	1.1897	0.23	Q	.	.	.	.
23.09	1.1922	0.23	Q	.	.	.	.
23.22	1.1946	0.23	Q	.	.	.	.
23.35	1.1969	0.23	Q	.	.	.	.
23.47	1.1993	0.22	Q	.	.	.	.
23.60	1.2016	0.22	Q	.	.	.	.
23.73	1.2039	0.22	Q	.	.	.	.
23.85	1.2062	0.22	Q	.	.	.	.
23.98	1.2085	0.21	Q	.	.	.	.
24.11	1.2107	0.21	Q	.	.	.	.
24.23	1.2118	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1444.0
10%	98.8
20%	30.4
30%	15.2
40%	7.6
50%	7.6
60%	7.6
70%	7.6
80%	7.6

```
****************************************************************************
                    SMALL AREA UNIT HYDROGRAPH MODEL
============================================================================
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            Ver. 20.0  Release Date: 06/01/2013  License ID 1654

                          Analysis prepared by:

                            Fuscoe Engineering
                          16795 Von Karman #100
                             Irvine, CA 92606
                              949-474-1960

****************************************************************************
----------------------------------------------------------------------------

 Problem Descriptions:
  AIRPORT GATEWAY APARTMENTS
  PROPOSED CONDITION HYDROGRAPH
  100 YEAR ANALYSIS
----------------------------------------------------------------------------


    RATIONAL METHOD CALIBRATION COEFFICIENT = 0.88
    TOTAL CATCHMENT AREA(ACRES) =     4.15
    SOIL-LOSS RATE, Fm,(INCH/HR) =  0.040
    LOW LOSS FRACTION = 0.128
    TIME OF CONCENTRATION(MIN.) =  7.60
    SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
    ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
    RETURN FREQUENCY(YEARS) = 100
       5-MINUTE POINT RAINFALL VALUE(INCHES) =  0.52
      30-MINUTE POINT RAINFALL VALUE(INCHES) =  1.09
       1-HOUR   POINT RAINFALL VALUE(INCHES) =  1.45
       3-HOUR   POINT RAINFALL VALUE(INCHES) =  2.43
       6-HOUR   POINT RAINFALL VALUE(INCHES) =  3.36
      24-HOUR   POINT RAINFALL VALUE(INCHES) =  5.63

----------------------------------------------------------------------------

    TOTAL CATCHMENT   RUNOFF  VOLUME(ACRE-FEET) =      1.54
    TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) =      0.41

****************************************************************************
  TIME      VOLUME        Q    0.        5.0       10.0      15.0      20.0
 (HOURS)     (AF)       (CFS)
----------------------------------------------------------------------------
  0.04      0.0000      0.00  Q          .         .         .         .
  0.17      0.0015      0.28  Q          .         .         .         .
  0.29      0.0044      0.28  Q          .         .         .         .
```

0.42	0.0073	0.28	Q	.	.	.	.
0.55	0.0103	0.28	Q	.	.	.	.
0.67	0.0132	0.28	Q	.	.	.	.
0.80	0.0162	0.29	Q	.	.	.	.
0.93	0.0192	0.29	Q	.	.	.	.
1.05	0.0222	0.29	Q	.	.	.	.
1.18	0.0252	0.29	Q	.	.	.	.
1.31	0.0283	0.29	Q	.	.	.	.
1.43	0.0313	0.29	Q	.	.	.	.
1.56	0.0344	0.29	Q	.	.	.	.
1.69	0.0375	0.30	Q	.	.	.	.
1.81	0.0406	0.30	Q	.	.	.	.
1.94	0.0437	0.30	Q	.	.	.	.
2.07	0.0469	0.30	Q	.	.	.	.
2.19	0.0501	0.30	Q	.	.	.	.
2.32	0.0532	0.30	Q	.	.	.	.
2.45	0.0564	0.31	Q	.	.	.	.
2.57	0.0596	0.31	Q	.	.	.	.
2.70	0.0629	0.31	Q	.	.	.	.
2.83	0.0661	0.31	Q	.	.	.	.
2.95	0.0694	0.31	Q	.	.	.	.
3.08	0.0727	0.32	Q	.	.	.	.
3.21	0.0760	0.32	Q	.	.	.	.
3.33	0.0794	0.32	Q	.	.	.	.
3.46	0.0827	0.32	Q	.	.	.	.
3.59	0.0861	0.32	Q	.	.	.	.
3.71	0.0895	0.33	Q	.	.	.	.
3.84	0.0929	0.33	Q	.	.	.	.
3.97	0.0964	0.33	Q	.	.	.	.
4.09	0.0998	0.33	Q	.	.	.	.
4.22	0.1033	0.33	Q	.	.	.	.
4.35	0.1068	0.34	Q	.	.	.	.
4.47	0.1104	0.34	Q	.	.	.	.
4.60	0.1139	0.34	Q	.	.	.	.
4.73	0.1175	0.34	Q	.	.	.	.
4.85	0.1211	0.35	Q	.	.	.	.
4.98	0.1248	0.35	Q	.	.	.	.
5.11	0.1284	0.35	Q	.	.	.	.
5.23	0.1321	0.35	Q	.	.	.	.
5.36	0.1358	0.36	Q	.	.	.	.
5.49	0.1396	0.36	Q	.	.	.	.
5.61	0.1433	0.36	Q	.	.	.	.
5.74	0.1471	0.36	Q	.	.	.	.
5.87	0.1510	0.37	Q	.	.	.	.
5.99	0.1548	0.37	Q	.	.	.	.
6.12	0.1587	0.37	Q	.	.	.	.
6.25	0.1627	0.38	Q	.	.	.	.
6.37	0.1666	0.38	Q	.	.	.	.
6.50	0.1706	0.38	Q	.	.	.	.
6.63	0.1746	0.38	Q	.	.	.	.
6.75	0.1787	0.39	Q	.	.	.	.
6.88	0.1827	0.39	Q	.	.	.	.

7.01	0.1869	0.40	Q	.	.	.	.
7.13	0.1910	0.40	Q	.	.	.	.
7.26	0.1952	0.40	Q	.	.	.	.
7.39	0.1995	0.41	Q	.	.	.	.
7.51	0.2037	0.41	Q	.	.	.	.
7.64	0.2080	0.41	Q	.	.	.	.
7.77	0.2124	0.42	Q	.	.	.	.
7.89	0.2168	0.42	Q	.	.	.	.
8.02	0.2212	0.43	Q	.	.	.	.
8.15	0.2257	0.43	Q	.	.	.	.
8.27	0.2302	0.44	Q	.	.	.	.
8.40	0.2348	0.44	Q	.	.	.	.
8.53	0.2394	0.44	Q	.	.	.	.
8.65	0.2441	0.45	Q	.	.	.	.
8.78	0.2488	0.45	Q	.	.	.	.
8.91	0.2536	0.46	Q	.	.	.	.
9.03	0.2584	0.46	Q	.	.	.	.
9.16	0.2633	0.47	Q	.	.	.	.
9.29	0.2682	0.47	Q	.	.	.	.
9.41	0.2732	0.48	Q	.	.	.	.
9.54	0.2783	0.49	Q	.	.	.	.
9.67	0.2834	0.49	Q	.	.	.	.
9.79	0.2885	0.50	Q	.	.	.	.
9.92	0.2938	0.50	.Q	.	.	.	.
10.05	0.2991	0.51	.Q	.	.	.	.
10.17	0.3045	0.52	.Q	.	.	.	.
10.30	0.3099	0.53	.Q	.	.	.	.
10.43	0.3155	0.53	.Q	.	.	.	.
10.55	0.3211	0.54	.Q	.	.	.	.
10.68	0.3267	0.55	.Q	.	.	.	.
10.81	0.3325	0.56	.Q	.	.	.	.
10.93	0.3384	0.56	.Q	.	.	.	.
11.06	0.3443	0.57	.Q	.	.	.	.
11.19	0.3504	0.58	.Q	.	.	.	.
11.31	0.3565	0.59	.Q	.	.	.	.
11.44	0.3628	0.60	.Q	.	.	.	.
11.57	0.3691	0.61	.Q	.	.	.	.
11.69	0.3756	0.62	.Q	.	.	.	.
11.82	0.3822	0.64	.Q	.	.	.	.
11.95	0.3889	0.64	.Q	.	.	.	.
12.07	0.3960	0.72	.Q	.	.	.	.
12.20	0.4042	0.84	.Q	.	.	.	.
12.33	0.4131	0.86	.Q	.	.	.	.
12.45	0.4222	0.87	.Q	.	.	.	.
12.58	0.4314	0.89	.Q	.	.	.	.
12.71	0.4408	0.90	.Q	.	.	.	.
12.83	0.4504	0.93	.Q	.	.	.	.
12.96	0.4602	0.94	.Q	.	.	.	.
13.09	0.4702	0.97	.Q	.	.	.	.
13.21	0.4804	0.98	.Q	.	.	.	.
13.34	0.4909	1.02	. Q	.	.	.	.
13.47	0.5017	1.04	. Q	.	.	.	.

13.59	0.5128	1.08	. Q . . . .
13.72	0.5242	1.10	. Q . . . .
13.85	0.5361	1.15	. Q . . . .
13.97	0.5483	1.18	. Q . . . .
14.10	0.5610	1.24	. Q . . . .
14.23	0.5742	1.28	. Q . . . .
14.35	0.5880	1.35	. Q . . . .
14.48	0.6023	1.39	. Q . . . .
14.61	0.6174	1.48	. Q . . . .
14.73	0.6332	1.53	. Q . . . .
14.86	0.6499	1.65	. Q . . . .
14.99	0.6675	1.72	. Q . . . .
15.11	0.6864	1.89	. Q . . . .
15.24	0.7067	1.99	. Q . . . .
15.37	0.7289	2.24	. Q . . . .
15.49	0.7518	2.13	. Q . . . .
15.62	0.7763	2.55	. Q . . . .
15.75	0.8047	2.89	. Q . . . .
15.87	0.8417	4.17	. Q . . . .
16.00	0.8936	5.75	. .Q . . .
16.13	1.0160	17.64	. . . . Q .
16.25	1.1260	3.39	. Q . . . .
16.38	1.1558	2.30	. Q . . . .
16.51	1.1788	2.11	. Q . . . .
16.63	1.1993	1.80	. Q . . . .
16.76	1.2170	1.59	. Q . . . .
16.89	1.2329	1.44	. Q . . . .
17.01	1.2473	1.31	. Q . . . .
17.14	1.2605	1.21	. Q . . . .
17.27	1.2727	1.13	. Q . . . .
17.39	1.2842	1.06	. Q . . . .
17.52	1.2950	1.00	. Q . . . .
17.65	1.3052	0.96	.Q . . . .
17.77	1.3150	0.92	.Q . . . .
17.90	1.3244	0.88	.Q . . . .
18.03	1.3335	0.85	.Q . . . .
18.15	1.3413	0.65	.Q . . . .
18.28	1.3480	0.63	.Q . . . .
18.41	1.3545	0.61	.Q . . . .
18.53	1.3608	0.59	.Q . . . .
18.66	1.3668	0.57	.Q . . . .
18.79	1.3727	0.55	.Q . . . .
18.91	1.3783	0.54	.Q . . . .
19.04	1.3839	0.52	.Q . . . .
19.17	1.3893	0.51	.Q . . . .
19.29	1.3945	0.49	Q . . . .
19.42	1.3996	0.48	Q . . . .
19.55	1.4046	0.47	Q . . . .
19.67	1.4095	0.46	Q . . . .
19.80	1.4143	0.45	Q . . . .
19.93	1.4189	0.44	Q . . . .
20.05	1.4235	0.43	Q . . . .

20.18	1.4280	0.42	Q	.	.	.	.
20.31	1.4324	0.42	Q	.	.	.	.
20.43	1.4367	0.41	Q	.	.	.	.
20.56	1.4409	0.40	Q	.	.	.	.
20.69	1.4451	0.39	Q	.	.	.	.
20.81	1.4492	0.39	Q	.	.	.	.
20.94	1.4532	0.38	Q	.	.	.	.
21.07	1.4571	0.37	Q	.	.	.	.
21.19	1.4610	0.37	Q	.	.	.	.
21.32	1.4649	0.36	Q	.	.	.	.
21.45	1.4686	0.36	Q	.	.	.	.
21.57	1.4723	0.35	Q	.	.	.	.
21.70	1.4760	0.35	Q	.	.	.	.
21.83	1.4796	0.34	Q	.	.	.	.
21.95	1.4832	0.34	Q	.	.	.	.
22.08	1.4867	0.33	Q	.	.	.	.
22.21	1.4902	0.33	Q	.	.	.	.
22.33	1.4936	0.32	Q	.	.	.	.
22.46	1.4970	0.32	Q	.	.	.	.
22.59	1.5003	0.32	Q	.	.	.	.
22.71	1.5036	0.31	Q	.	.	.	.
22.84	1.5068	0.31	Q	.	.	.	.
22.97	1.5101	0.31	Q	.	.	.	.
23.09	1.5132	0.30	Q	.	.	.	.
23.22	1.5164	0.30	Q	.	.	.	.
23.35	1.5195	0.30	Q	.	.	.	.
23.47	1.5226	0.29	Q	.	.	.	.
23.60	1.5256	0.29	Q	.	.	.	.
23.73	1.5286	0.29	Q	.	.	.	.
23.85	1.5316	0.28	Q	.	.	.	.
23.98	1.5346	0.28	Q	.	.	.	.
24.11	1.5375	0.28	Q	.	.	.	.
24.23	1.5389	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1444.0
10%	98.8
20%	22.8
30%	15.2
40%	7.6
50%	7.6
60%	7.6
70%	7.6
80%	7.6

APPENDIX 7

HYDROLOGIC DATA

Airport Gateway Apartments
Hydrologic Data Summary

Existing Tc (min)

Area	Event Year 2	25	100
A1	5.8	5.8	5.8
A2	7.5	7.5	7.5
A3	7.5	7.5	7.5
A4	6.0	6.0	6.0
A5	12.6	12.6	12.6
A6	7.0	7.0	7.0
A7	6.4	6.4	6.4
A8	9.0	9.0	9.0
A9	7.2	7.2	7.2
Average	7.7	7.7	7.7

Proposed Tc (min)

Area	Event Year 2	25	100
A1	7.6	7.4	7.3
A2	6.5	6.5	6.5
A3	9.8	9.8	9.8
A4	5.9	5.9	5.9
A5	8.3	8.3	8.3
Average	7.6	7.6	7.6

Existing Discharge (cfs)

Area	Event Year 2	25	100
A1	0.26	0.56	0.72
A2	0.59	1.27	1.62
A3	1.00	2.16	2.76
A4	0.94	2.03	2.60
A5	1.19	2.58	3.29
A6	1.24	2.67	3.42
A7	1.05	2.26	2.90
A8	0.09	0.18	0.23
A9	0.11	0.25	0.32
Total	6.47	13.96	17.86

Proposed Discharge (cfs)

Area	Event Year 2	25	100
A1	0.93	2.04	2.62
A2	0.91	1.94	2.49
A3	1.59	3.46	4.43
A4	0.84	1.80	2.31
A5	2.08	4.52	5.79
Total	6.35	13.76	17.64

Existing Volume (ac-ft)

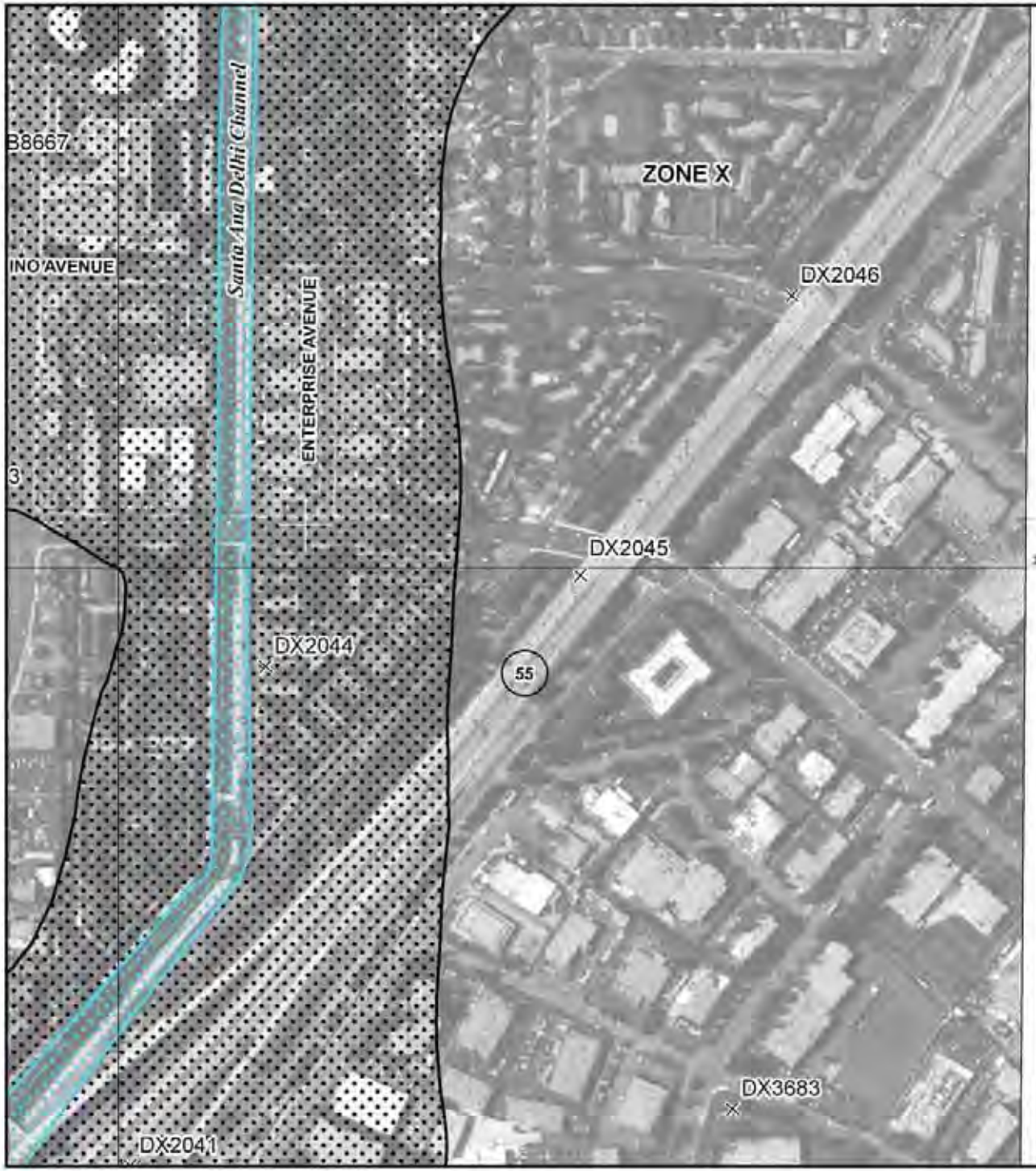
Area	Event Year 2	25	100
Site	0.55	1.30	1.63

Proposed Volume (ac-ft)

Area	Event Year 2	25	100
Site	0.49	1.21	1.54

APPENDIX 8

FIRM MAP



ional Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

50 0 500 1000 FEET

METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0267J

FIRM

FLOOD INSURANCE RATE MAP

ORANGE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 267 OF 539

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
COSTA MESA, CITY OF	060216	0267	J
NEWPORT BEACH, CITY OF	060227	0267	J
ORANGE COUNTY	060212	0267	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06059C0267J

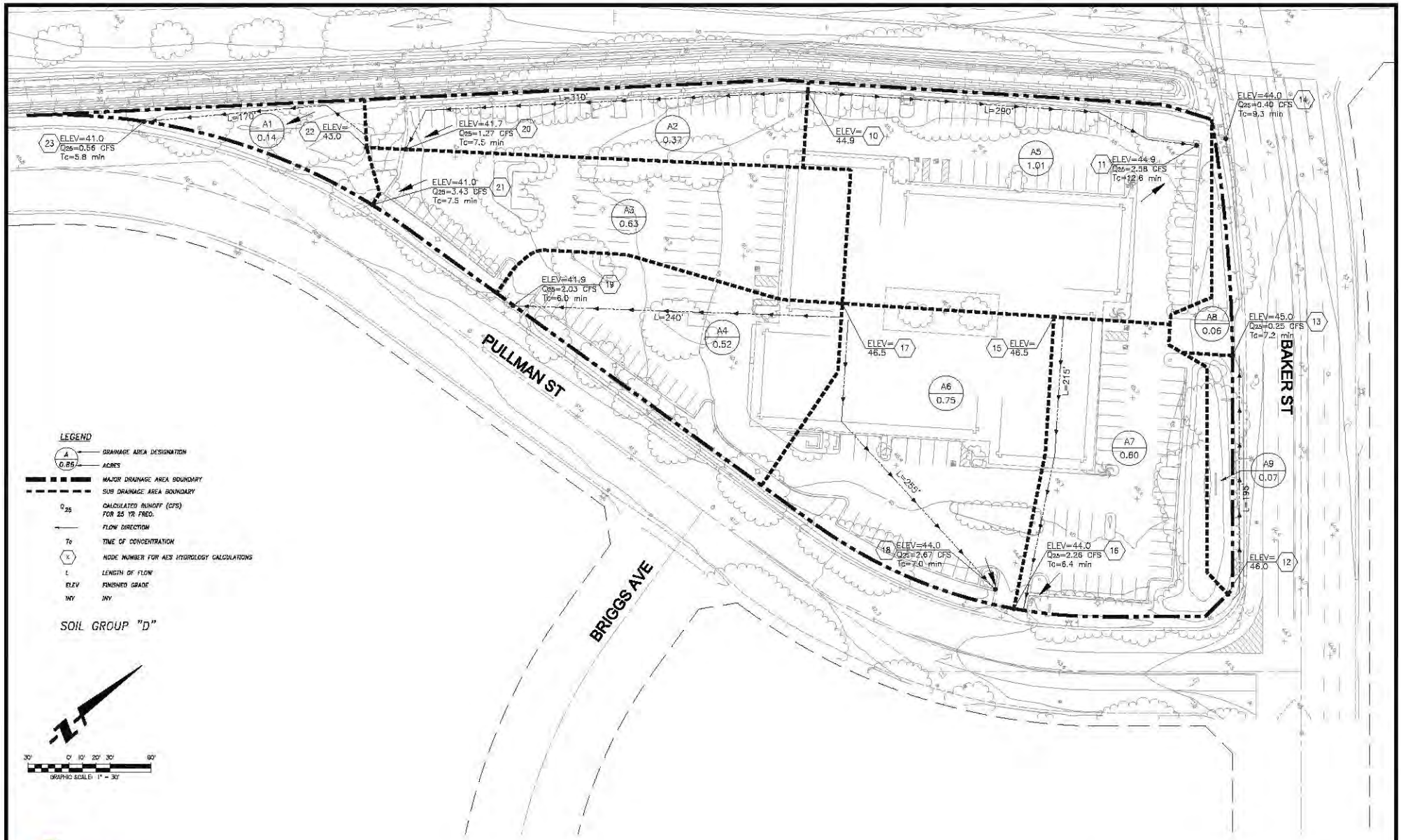
MAP REVISED
DECEMBER 3, 2009

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX 9

EXISTING HYDROLOGY MAP



FUSCOE ENGINEERING
16795 Von Karman, Suite 100
Irvine, California 92606
tel 949.474.1960 • fax 949.474.5315
www.fuscoe.com

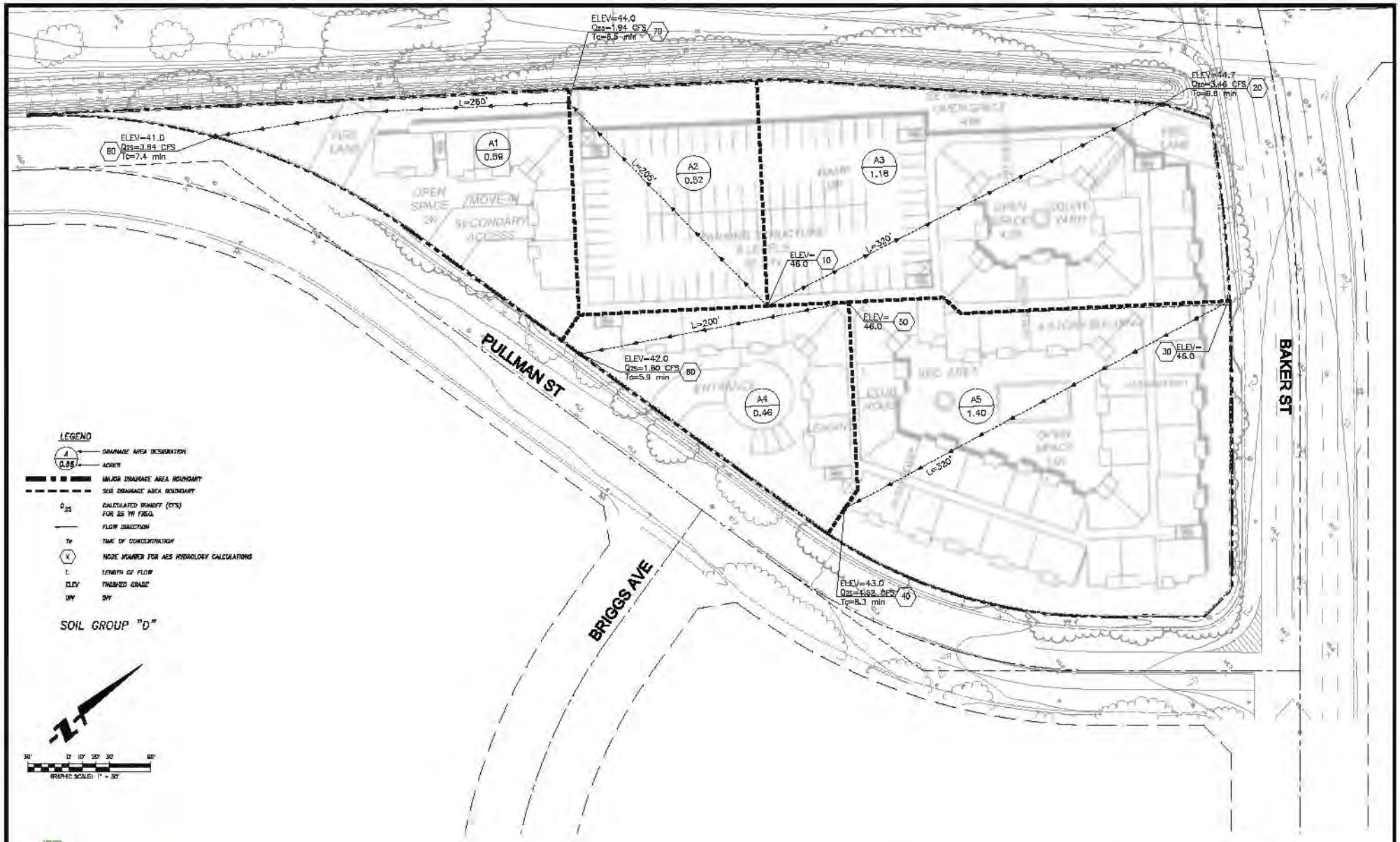
NO.	DATE	REVISION
FEI REFERENCE:		

BAKER STREET APARTMENTS
RED OAK INVESTMENTS
EXISTING CONDITION
HYDROLOGY MAP

SHEET
1 OF 1

APPENDIX 10

PROPOSED HYDROLOGY MAP



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ENGINEERING
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tel 949.474.1960 * fax 949.474.5315
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NO.	DATE	REVISION
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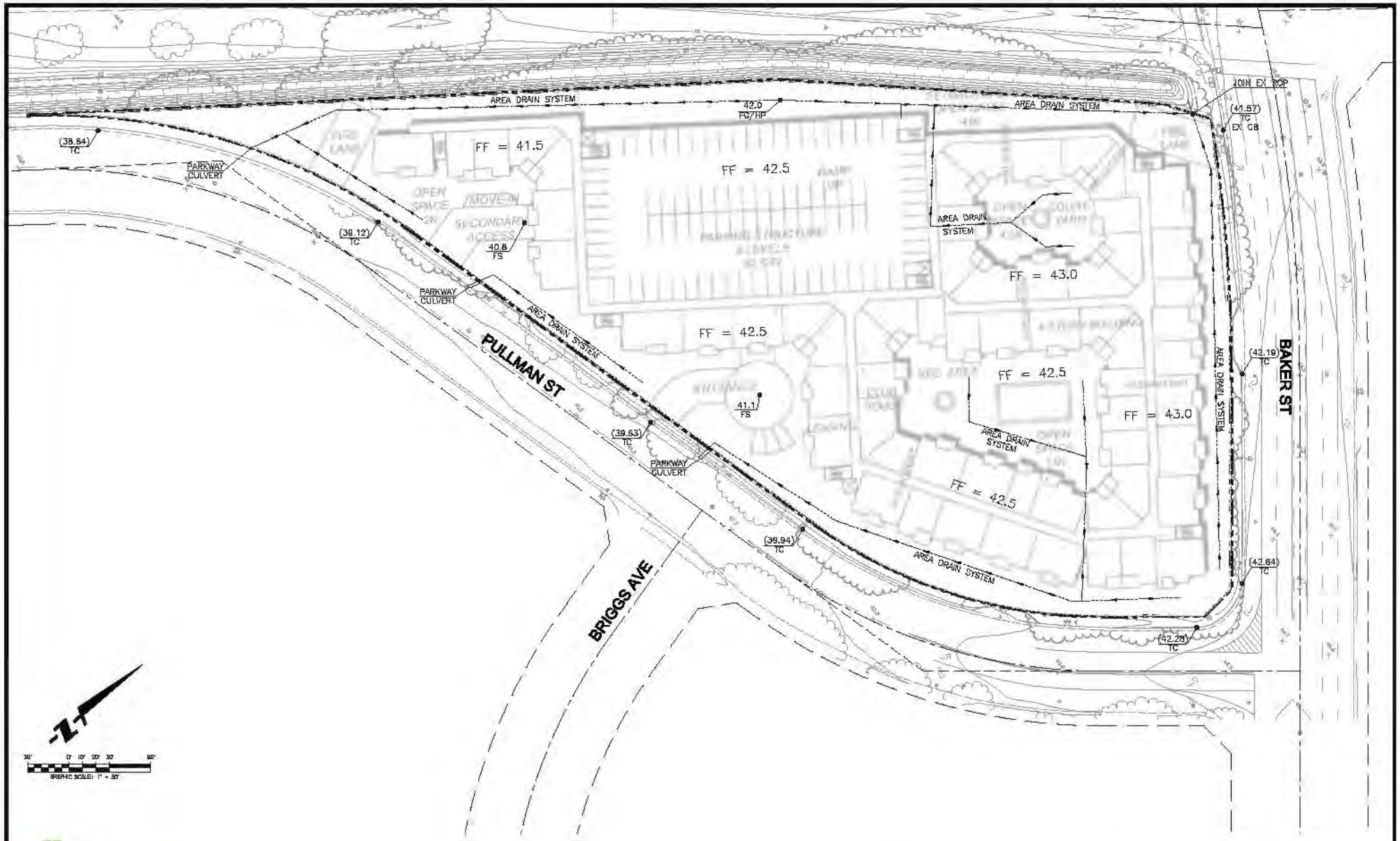
BAKER STREET APARTMENTS
RED OAK INVESTMENTS
PROPOSED CONDITION
HYDROLOGY MAP

SHEET
1 OF 1

APPENDIX 10

PROPOSED CONCEPT GRADING PLAN



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FEI REFERENCE:		

BAKER STREET APARTMENTS
RED OAK INVESTMENTS
CONCEPTUAL GRADING

SHEET
1 OF 1

Appendix F Sewer Capacity Report

FUSCOE
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SEWER ANALYSIS REPORT

Baker Street Apartments

Costa Mesa, California

Red Oak Investments

Prepared By:

Fuscoe Engineering, Inc.
16795 Von Karman, Suite 100
Irvine, California 92606
949.474.1960
www.fuscoe.com

Project Manager:
John Olivier, P.E.

Date Prepared: May 15, 2012

Job Number: 774.02.01

REGISTERED PROFESSIONAL ENGINEER
JOHN C. OLIVIER
No. 044568
Exp. 03/31/13
CIVIL
STATE OF CALIFORNIA

full circle thinking™

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I. Introduction

1.1 Purpose of the Study

The purpose of this analysis is to compare and calculate the existing vs. proposed sanitary sewer flows for the proposed Baker Street Apartments in the City of Costa Mesa, California.

In addition, future build-out of adjoining parcels to high density residential use similar to the Project was analyzed to determine if future sewer improvements will be needed.

1.2 Site Description

The proposed project is located at the southwest corner of Baker Street and Pullman Street. It is bounded by the 55 freeway on the northwest, Baker Street on the north, and Pullman Street on the west and south.

1.3 Proposed Development

The Proposed project development consists of a four story residential structure with 236 apartment units that wrap around a five level parking structure. (See Appendix 1)

The proposed apartment mix is:

Studios – 12 units

One Bedroom – 124 units

Two Bedroom – 100 units

Figure 1 - Vicinity Map

II. Methodology

The existing sewer flow calculations were based on the existing development tributary to the sewer lines that serve the project site. The proposed sewer flow calculations were based on the proposed development provided by Red Oak Development and Architects Orange. Existing and proposed sewer flow generation calculations were based on Generation Factors provided by the Costa Mesa Sanitary District (CMSD). These generation factors provide the average daily flow for various uses within the development area. To obtain the peak flow rate, the average daily flow was multiplied by a peaking factor equation ($Q_{Peak}=Q_{avg}^{0.92} \times 1.84$) as recommended by the Costa Mesa Sanitary District. In addition to the average daily flow of 3,500 gpd/ac for industrial development, inflow & infiltration was added to the existing flow at the rate of 800 gpd/ac. (See Appendix 3 for existing and proposed flow calculations)

At the request of the CMSD, future development of adjoining parcels was analyzed using high density residential development similar to the Baker Street Apartments. Flow rates for these parcels were calculated and added to the Project flows.

The Hydraulic Elements I program by AES Software was used to calculate the sewer flow depth for the existing, proposed and future conditions. A Manning's friction factor of 0.013 was used for the existing VCP. Slopes of existing sewer lines were determined using invert elevations shown on the sewer atlas sheet for the area. (See Appendix 2)

III. Existing Sewer System

The existing public sewer mains for the site are located in Baker Street and Pullman Street which border the project. There is an existing 8" line in Baker Street and an existing 8" line in Pullman Street. The slope of the Baker Street line is relatively steep at approximately 1.2%. The slope of the Pullman Street line is approximately 0.43%. (Appendix 2)

IV. Proposed Sewer Improvements

The Proposed project development consists of 236 new residential units, as well as club house, gym and spa facilities.

Existing sewer laterals may be used in Baker Street and Pullman Street to serve the site if site configuration allows.

V. Conclusions

5.1 Project Conclusion

Sewer Laterals

The proposed project sewer flow is 0.134 cfs. This flow will be divided with portions going to the line in Baker Street and the line in Pullman Street.

Public Sewer Lines

An analysis was also done to verify that the project will not have an adverse effect on the public sewer lines adjacent to the site. This analysis was preformed on the existing 8″ line in Baker Street and the existing 8″ line in Pullman Street. Capacity of these lines was based on their slope and a maximum desirable depth of D/d = 0.5 as recommended by the Costa Mesa Sanitary District

The following table summarizes the results of this analysis.

Public Sewer Line Flow Table

Public Sewer Line	Existing Slope	Ex. Pipe Dia	Existing Pipe Flow (cfs)	Exist D/d	Additional Flow From Project (cfs)	Proposed Flow (cfs)	Proposed D/d
Baker Street	.012	8″ VCP	0.053	0.14	0.067	0.120	0.20
Pullman Street	.0043	8″ VCP	0.296	0.42	0.067	0.363	0.47

As shown in the table above, the increase in sewer flows due to the proposed project is minor and no adverse conditions are anticipated in the public sewer system as a result of the project. The Project flow was assumed to be divided equally between Baker Street and Pullman Street. As shown in the table, it may be desirable to increase the flow to Baker and decrease the flow to Pullman to balance the capacity of the existing systems.

5.2 Future Build-Out of Adjoining Parcels

The following table shows the results of a future build-out of adjoining parcels on the existing sewer system. These calculations include 75% of the Baker Street Apartment Project contributing to Baker Street and the remaining 25% contributing to Pullman Street. (See Appendix 3 for calculations)

Public Sewer Line Ultimate Build-Out Flow Table

Public Sewer Line	Existing Slope	Ex. Pipe Dia	Ultimate Flow From Projects (cfs)	Ultimate D/d
Baker Street	.012	8″ VCP	0.202	0.27
Pullman Street	.0043	8″ VCP	0.628	0.67

As shown in the table above, the increase in sewer flows due to a future build-out exceeds the recommended D/d value of 0.5 in Pullman Street. Further sensitivity analysis of the Pullman line may be required in the future if adjoining parcels are proposed for development.

5.3 Contact List

- Costa Mesa Sanitary District
  Robin Hamers, District Engineer
  (714) 293-2727

VI. Appendices

Appendix 1 – Proposed Project Exhibit

Appendix 2 – Existing Sewer Information

Appendix 3 – Existing & Proposed Sewer Flow Analysis

4-STORY BUILDING/ TYPE V:

1. STUDIO (600 S.F.) :	12 UNITS (5%)
1 BR (770 S.F.) :	124 UNITS (53%)
2 BR (1060 S.F.):	100 UNITS (42%)
TOTAL:	236 UNITS
2, TOTAL LIVABLE:	208,680 SF
3. TOTAL ACRES:	+/- 4.17 ACRES
4. DENSITY:	56.6 DU/AC
5. PARKING REQUIRED:	532 STALLS
STUDIO:	12X1.5=18 STALLS
1 BR:	124X1.75=217 STALLS
2 BR:	100X2.25=225 STALLS
GUEST:	50X0.5=25 STALLS
	186X0.25=47 STALLS

CONCEPTUAL SITE PLAN

OPTION "H"

0 10' 30' 60' 120'

SCALE: 1"=60'-0"

NORTH

2012-0XX DECEMBER 16, 2012

BAKER STREET APARTMENTS

COSTA MESA, CALIFORNIA

RED OAK INVESTMENTS

ARCHITECTS ORANGE

144 NORTH ORANGE ST., ORANGE, CALIFORNIA 92866 (714) 639-9860

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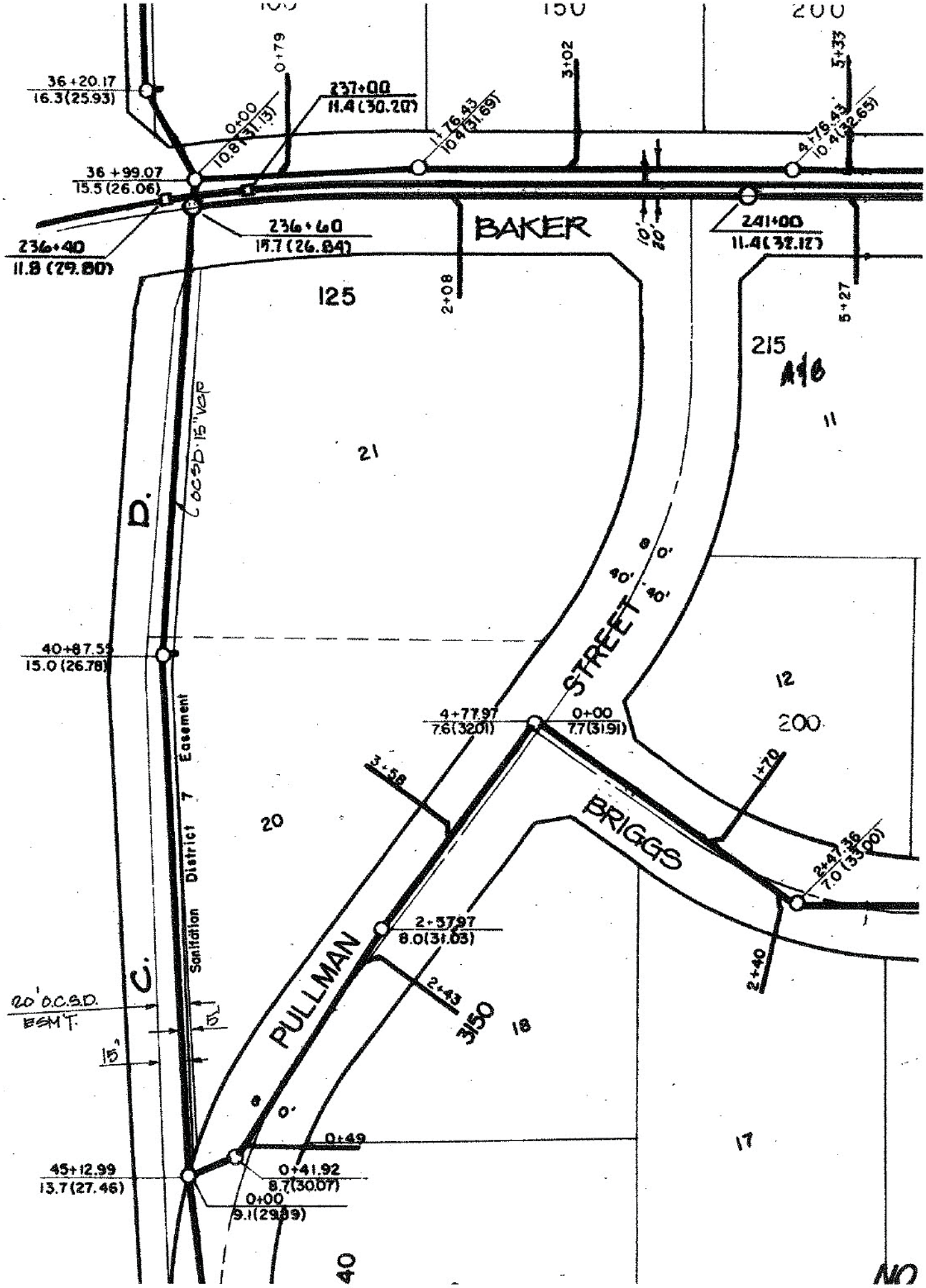
SEE SHEET 165-C
PAULARINO AVENUE EAST
TRACT 5769
FREEWAY
AVENUE
BAKER STREET
TRACT
STREET
PRIVADA
AVENUE
PULLMAN
NO 5769
TRACT NO. 5935
NEWPORT
STREET
EISENHOWER AVENUE
NO 5935
NO 6956
AVENUE
165-B
SEE SHEET 165-A

165-B


150
200
36+20.17
16.3(25.93)
0+79
237+00
11.4(30.20)
0+00
10.8(31.13)
1+76.43
10.4(31.69)
3+02
4+76.43
10.4(32.65)
5+33
36+99.07
15.5(26.06)
236+40
11.8(29.80)
236+60
19.7(26.84)
BAKER
10'
20'
241+00
11.4(32.12)
2+08
5+27
125
215
A16
11
21
D.
OCSD 15" VCP
40+87.55
15.0(26.78)
40'
40'
STREET
12
200
4+77.97
7.6(32.01)
0+00
7.7(31.91)
3+58
1+70
20
BRIGGS
2+47.36
7.0(33.00)
Sanitation District 7 Easement
2+57.97
8.0(31.03)
PULLMAN
2+43
2+40
C.
20' O.C.S.D. ESM'T.
15'
15'
3150
18
0+49
17
45+12.99
13.7(27.46)
0+41.92
8.7(30.07)
0+00
9.1(29.89)
40
NO

Baker Street Apartments
Costa Mesa CA

Sewer Flow Generation
Residential Units

Unit Type	Number Of DUs	Persons Per DU *	Generation (gal/cap/day)	Average Flow (gpd/du)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)
Studio	12	1.3	85	111	1,326	0.00205	0.00619	0.00133	0.00415
One Bed Room	124	1.6	85	136	16,864	0.02609	0.06426	0.01686	0.04302
Two Bed Room	100	2.2	85	187	18,700	0.02893	0.07067	0.01870	0.04731
Totals					36,890	0.05707	0.13204	0.03689	0.08838

* Based on 500 SF Per Person
** Peak Flow = $(MGD)^{0.92}$ x 1.84
Note: Generation Factors Per Costa Mesa Sanitary District

Flow Generation
Project -Other Amenities

Amenity	Size (sf)	Tributary To Line (ac)	Unit Flow Factor (gal/day/ac)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)
Club Room	1,450	0.0333	3,500	117	0.00018	0.00066	0.000116506	0.00044
Fitness Center	1,565	0.0359	3,500	126	0.00019	0.00071	0.000125746	0.00047
Kitchenette	300	0.0069	3,500	24	0.00004	0.00016	2.41047E-05	0.00010
Storage	400	0.0092	3,500	32	0.00005	0.00020	3.21396E-05	0.00014
Pool Restrooms	450	0.0103	3,500	36	0.00006	0.00023	3.6157E-05	0.00015
Pool Showers	150	0.0034	3,500	12	0.00002	0.00008	1.20523E-05	0.00005
Storage	60	0.0014	3,500	5	0.00001	0.00004	4.82094E-06	0.00002
Amenity Total					0.00054	0.00207	0.000352	0.00122

Total Peak Flow	
0.13411	**CFS**
0.08961	**MGD**

Existing Sewer System Flow
Based On Industrial Uses

Existing Line	Tributary To Line (ac)	Unit Flow Factor (gal/day/ac)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)	I/I Included CFS *	I/I Included MGD *
Baker Street	3.2	3,500	11,200	0.017	0.044	0.0112	0.030	0.0481	0.0321
Pullman Street	20.6	3,500	72,100	0.112	0.245	0.0721	0.164	0.2701	0.1802

* Includes 800 gal/day/ac Inflow and Infiltration Added To Peak Flow

Buildout Of Adjoining Parcels To Similar Density As Baker Street Apartments
Costa Mesa CA

Baker Street Sewer System

Sewer Flow Generation (3.2 AC Development)
Residential Units

Unit Type	Number Of Dus*	Persons Per DU **	Generation (gal/cap/day)	Average Flow (gpd/du)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)***
Studio	10	1.3	85	111	1,105	0.00171	0.00524	0.00111	0.00351
One Bed Room	95	1.6	85	136	12,920	0.01999	0.05029	0.01292	0.03367
Two Bed Room	77	2.2	85	187	14,399	0.02228	0.05557	0.01440	0.03719
Totals					28,424	0.04397	0.10388	0.02842	0.06954

* 56.6 Du's Per Acre - Same Distribution As Baker Street Apartments
** Based on 500 SF Per Person
*** Peak Flow = $(MGD)^{0.92}$ x 1.84
Note: Generation Factors Per Costa Mesa Sanitary District

Flow Generation
Project -Other Amenities

Amenity	Size (sf)	Tributary To Line (ac)	Unit Flow Factor (gal/day/ac)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)
Club Room	1,450	0.0333	3,500	117	0.00018	0.00066	0.000116506	0.00044
Fitness Center	1,565	0.0359	3,500	126	0.00019	0.00071	0.000125746	0.00047
Kitchenette	300	0.0069	3,500	24	0.00004	0.00016	2.41047E-05	0.00010
Storage	400	0.0092	3,500	32	0.00005	0.00020	3.21396E-05	0.00014
Pool Restrooms	450	0.0103	3,500	36	0.00006	0.00023	3.6157E-05	0.00015
Pool Showers	150	0.0034	3,500	12	0.00002	0.00008	1.20523E-05	0.00005
Storage	60	0.0014	3,500	5	0.00001	0.00004	4.82094E-06	0.00002
Amenity Total					0.00054	0.00207	0.000352	0.00122

Total Peak Flow	
0.10595	**CFS**
0.07076	**MGD**

Buildout Of Adjoining Parcels At Similar Density As Baker Street Apartments
Costa Mesa CA

Pullman Street Sewer System

Sewer Flow Generation (20.6 AC Development)
Residential Units

Unit Type	Number Of Dus*	Persons Per DU **	Generation (gal/cap/day)	Average Flow (gpd/du)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)***
Studio	60	1.3	85	111	6,630	0.01026	0.02722	0.00663	0.01822
One Bed Room	613	1.6	85	136	83,368	0.12897	0.27956	0.08337	0.18713
Two Bed Room	494	2.2	85	187	92,378	0.14291	0.30724	0.09238	0.20566
Totals					182,376	0.28214	0.57443	0.18238	0.38451

* 56.6 Du's Per Acre - Same Distribution As Baker Street Apartments
** Based on 500 SF Per Person
*** Peak Flow = $(MGD)^{0.92}$ x 1.84
Note: Generation Factors Per Costa Mesa Sanitary District

Flow Generation
Project -Other Amenities

Amenity	Size (sf)	Tributary To Line (ac)	Unit Flow Factor (gal/day/ac)	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)
Club Room	7,250	0.1664	3,500	583	0.00090	0.00291	0.00058253	0.00194
Fitness Center	7,825	0.1796	3,500	629	0.00097	0.00312	0.00062873	0.00209
Kitchenette	1,500	0.0344	3,500	121	0.00019	0.00068	0.000120523	0.00046
Storage	2,000	0.0459	3,500	161	0.00025	0.00089	0.000160698	0.00059
Pool Restrooms	2,250	0.0517	3,500	181	0.00028	0.00099	0.000180785	0.00066
Pool Showers	750	0.0172	3,500	60	0.00009	0.00036	6.02617E-05	0.00024
Storage	300	0.0069	3,500	24	0.00004	0.00016	2.41047E-05	0.00010
Amenity Total					0.00272	0.00910	0.001758	0.00537

Total Peak Flow	
0.58353	**CFS**
0.38988	**MGD**

Buildout Of Adjoining Parcels At Similar Density As Baker Street Apartments
Costa Mesa CA

Summary

Sewer System Flows
Buildout Based On High Density Residential Uses

Existing Line	Tributary To Line (ac)*	Total Dus*	Average Flow Q_{avg} (gal/day)	Average Flow Q_{avg} (cfs)	Peak Flow Q_{peak} (cfs)	Average Flow Q_{avg} (MGD)	Peak Flow Q_{peak} (MGD)	I/I Included CFS **	I/I Included MGD **
Baker Street	6.3	359	56,092	0.087	0.194	0.056092	0.130	0.2019	0.1350
Pullman Street	21.7	1,226	191,600	0.296	0.601	0.1916	0.402	0.6280	0.4197

* Assume 75% of Baker Street Apartments Flow To Baker, 25% To Pullman
* *Includes 800 gal/day/ac Inflow and Infiltration Added To Peak Flow

AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY
3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.5178

September 16, 2013

REC'D SEP 18 2013

Ms. Claire Flynn, Assistant Development Services Director
City of Costa Mesa/Development Services Department
77 Fair Drive
Costa Mesa, CA 92628

Subject: 125 East Baker Street Apartment Project

Dear Ms. Flynn:

Thank you for the opportunity to review the initial study for the 125 East Baker Street Apartment Project in the context of the Airport Land Use Commission's *Airport Environs Land Use Plan for John Wayne Airport (JWA AELUP)* and the *AELUP for Heliports.* The proposed project includes replacing an existing office building and surface parking areas with an apartment building and parking structure. The project will consist of a five-story 240 unit residential apartment building (63 feet overall height) that wraps around a six-story parking structure (57 feet overall height) with 465 parking spaces in the structure and four outdoor on-grade parking spaces.

The proposed project is within the Federal Aviation Regulation (FAR) Part 77 Imaginary Surfaces obstruction area for JWA and is in the FAR Part 77 Notification Area for JWA as noted in the initial study. The proposed Draft Environmental Impact Report (DEIR) should address these imaginary surfaces given the close proximity of the proposed project to JWA (within a one mile radius). Additionally, we recommend that the DEIR include the City's maximum allowable building height for the proposed project area as permitted through the City's General Plan or Zoning Code.

The initial study states that the proposed project would not exceed 150 feet in height. The proposed project site is located within the horizontal surface for JWA. The Airport Land Use Commission continues to recommend that buildings be kept to a height not greater than 206 feet [using North American Vertical Datum 1988 (NAVD88)] and has strongly discouraged buildings in the vicinity of JWA that penetrate this imaginary horizontal surface. We suggest that the DEIR discuss maximum building heights and ground elevation to address whether that the proposed project remains below the imaginary surfaces for JWA.

Portions of the proposed project fall within the 60 dbA CNEL noise contour for JWA. According to the initial study, noise will be fully examined in the DEIR. Per the *AELUP for JWA*, residential development located within the 60 dBA CNEL noise contour should be sound attenuated to ensure that the interior CNEL does not exceed 45 dB.

Because of the project's proximity to a noise impacted area, any prospective resident should be notified of the presence of aircraft overflight. We recommend that the DEIR include a mitigation measure stating that any residential development in the JWA airport influence area would be notified of potential aircraft overflight as follows:

"NOTICE OF AIRPORT IN VICINITY:

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."

In addition, the Draft EIR should identify if the project will be impacted by helicopter overflight due to the close proximity of helicopter arrival and departure operations at JWA and if the project allows for heliports as defined in the Orange County *AELUP for Heliports*. Should the development of heliports occur within your jurisdiction, proposals to develop new heliports must be submitted through the City to the ALUC for review and action pursuant to Public Utilities Code Section 21661.5. Proposed heliport projects must comply fully with the state permit procedure provided by law and with all conditions of approval imposed or recommended by FAA, by the ALUC for Orange County and by Caltrans/Division of Aeronautics.

As noted in your initial study, because this project falls within the *JWA AELUP* planning areas and requires a General Plan Amendment, it is recommended that the project be referred to the Airport Land Use Commission (ALUC) for a Consistency determination with the *JWA AELUP*. In this regard, the Commission suggests such referrals be submitted to the ALUC for a determination between the Local Agency's expected Planning Commission and City Council hearings. Since the ALUC meets on the third Thursday afternoon of each month, submittals must be received in the ALUC office by the first of the month to ensure sufficient time for review, analysis, and agendizing.

Thank you again for the opportunity to comment on the initial study. Please contact Lea Choum at (949) 252-5123 or via email at lchoum@ocair.com should you have any questions related to the future referral of your project.

Sincerely,

Kari A. Rigoni
Executive Officer

To: Claire Flynn AICP
City of Costa Mesa Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, CA 92628
Claire.Flynn@costamesaca.gov

Received
City of Costa Mesa
Development Services Department
SEP 13 2013

From: Briggs Enterprises
200 Briggs Ave
Costa Mesa, CA. 92626

Re: 125 East Baker Street Apartment Project – Comments

Ms. Flynn:

Pursuant to the City's Notice of Preparation (NOP) for the above-referenced proposed project (project), we are submitting the following comments. In short, we are very concerned about the negative impacts the proposed project will inevitably have on our community, the environment and our businesses. These impacts will not only be felt by our business, but also by other neighbors. Accordingly, we request that the City require full evaluation and justification for these impacts in the Environmental Impact Report (EIR).

Comments/Objections to proposed project:

1. Traffic will gridlock during peak periods.
2. The project will result in a substantial increase in daily traffic to the number of 870 additional daily trips, totaling a 219% increase in daily traffic. This is according to the projections of the developer itself, as included in the General Plan Screening Request.
3. The additional traffic will include residents, which will increase 1) pollution, 2) use of fossil fuels, 3) noise, 4) blight, 5) traffic incidents, and 6) danger to those families and the drivers of the neighboring businesses.
4. Pedestrian traffic (children, joggers, pets) will be present and disruptive in the industrial zone during peak business operating hours, and an additional danger will be created to these residential pedestrians.
5. Large delivery trucks will perilously utilize a single narrow lane (against opposing traffic) shared with parked cars, bicyclists, baby strollers and the main ingress/egress to the tenement. Due to the density and limited egress, it is questionable as to what aid can be expected in the event of a broad emergency.
6. Pedestrian presence will be heightened during weekends and holidays when businesses are closed, inviting unwanted looky-loos, vandalism and theft.
7. There will be the perpetual presence of strangers relocating in and out of the neighborhood.
8. Apartment residents will opt to park on the street (rather than navigate through the 6 story parking structure) and occupy space that normally is available to the industrial locale.
9. Pet owners have nowhere else to relieve their pets but across the street into the industrial park, in particular those directly facing the tenement.

10. With the addition of a traffic light on Baker /Pullman, vehicles will be motivated when exiting the tenement apron to drive straight (east) or turn right (south) making egress through the industrial park.
11. There are no general public use facilities i.e. restaurants, parks, shopping, gas stations, recreation... east of the freeway through to the airport.
12. Disruption caused by construction and the consequent tenement inhabitance will force our business to relocate.
13. Parking is already impacted in the area and will be additionally reduced with the addition of such high-density residential development.
14. Rezoning pursuant to the proposed project will substantially deprive our business and property of its value, and could eliminate the financial value of the business and property, resulting in an effective condemnation of our business and property by the City, whether now or in the future.
15. The proposed project will include impermissible isolated rezoning of a singular property, i.e., spot zoning.
16. There are no or insufficient readily accessible, nearby services to accommodate the proposed project's residents.
17. The proposed project is not "walkable" and is incongruent with legislative efforts in reducing trips per project. In fact, this proposed project will increase daily trips by at least 219%.

Additional Objections:

1. The amount of units (240) chosen was not because this number is an ecological or acceptable living standard rather the number was chosen to maximize profit.
2. The location choice was not because it is an ideal or a practical safe residential site rather the existing property is financial prey, susceptible to this kind of re-zone profiteering.
3. High density mixed-use zoning will choke the surrounding existing industrial properties scope and function, reducing their overall value as industrial properties.
4. Due to the high density, limited space, close proximity and inevitable congestion there remains the almost certain probability of perceived incongruent rights between residents and existing locale.
5. Due to the high density, limited space, close proximity and inevitable congestion there remains the almost certain probability of recurring serious incidents involving injury and subsequent litigation.
6. The likelihood of catastrophic occurrences increases when highly dense residences are planned in close proximity to busy flight and traffic areas.
7. By granting the re-zone, the Council will be choosing the developments gain at the expense of the existing industrial manufacturers.

8. The developers compare this to the Jamboree/Mac Arthur area, which is rectangular and eight lane access.

9. The Baker St. tenement property is triangular with a single narrow industrial two way road as the one practical point of ingress/egress.
10. Very compact high density living.
11. There is no private space.
12. Traffic will be gridlocked during peak hours, daily.
13. Restricted automobile facility ingress/egress
14. In the event of a catastrophic emergency, earthquake, fire, egress could prove a deadly challenge.
15. The inadequate tenement amenities are to be shared by as many as 660 people and their guests.
16. This tenement will be at the foot of a freeway, inside an industrial park adjoining a busy commercial airport.
17. Air traffic and freeway noise are constant 24/7.
18. With as many as 6 tiers to navigate down and up again, or a contest for street parking, a quick drive to the store can prove to be a challenge.

Additional Factors to Consider:
Should the Council elect to allow for the rezoning and completion of this tenement, they must recognize there is a strong likelihood of future liability complaints, claims and lawsuits.

The Council understands that this tenement structure and consequent new residents will forever negatively alter the industrial park business environment and ultimate manufacturing usage. They must also recognize this tenement is intrusive, disrupting, "an accident waiting to happen", an unwelcome liability being forced upon the existing industrial locale, necessitating the relocation of our business.

Also recognize any gain realized by this tenement is at the expense of the existing locals, which are businesses that have operated in this City for a long time, and which employ many people. As a result of the inevitable devaluation of, and impact on, our businesses if this proposed project is approved, these businesses likely will have to downsize, relocate out of the City or shut down entirely. This will cost the City tax revenue and this industrial base.

<u>In Conclusion:</u>
Should the Council elect to allow for the rezoning, as our only financial recourse we petition this property (200 Briggs) be permitted the same/similar compatible re-zone to help (me) the individual property owner mitigate the negative impact of this gross intrusion to our businesses and our lives. The City should also require consideration of the impacts referenced in this letter as part of the EIR that is being prepared.

Garry Lukas
Briggs Enterprises
200 Briggs
Costa Mesa

FREEWAY INDUSTRIAL AIRPORT

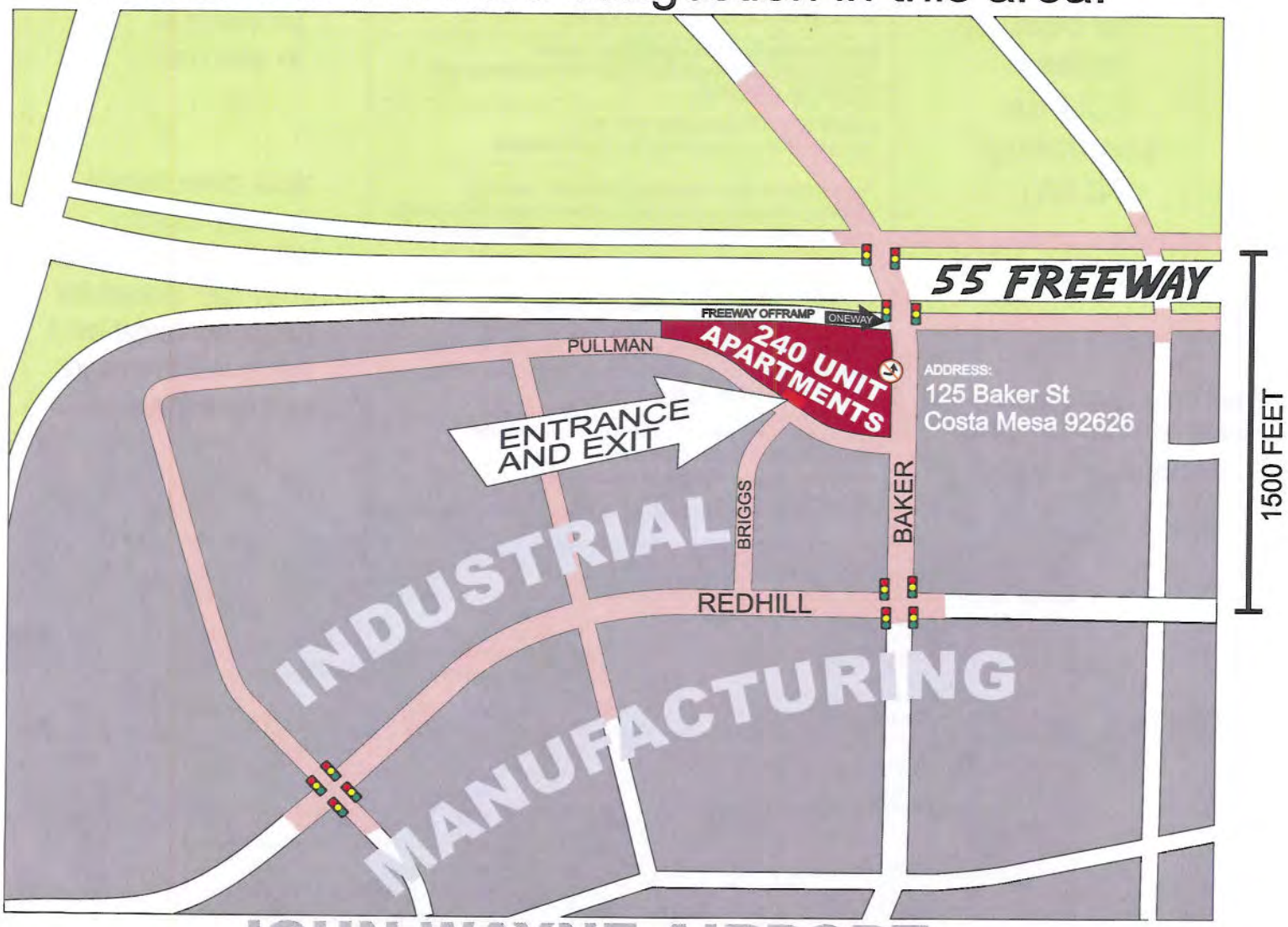
240 APARTMENT UNITS

Your quality of life is being attacked!

Developers make quick $$$
We live with the traffic and congestion forever!

PULLMAN STREET

The Proposed **240 Unit** High Density **4 Story Apartment** Complex will forever increase congestion in this area.



JOHN WAYNE AIRPORT

VITAL CONTACT INFORMATION ON BACK

PERMANENTLY INCREASED TRAFFIC AREAS

Your Costa Mesa City Council Needs to Know!

Why this is a BAD idea!

Let them know by sending an quick email, letter, voice mail or drop a note off at City Hall.

714 754 5285

77 Fair Drive
Costa Mesa, CA. 92626

Mayor Jim Righeimer	jim.righeimer@costamesaca.gov
Mayor Pro Tem Steve Mensinger	stephen.mensinger@costamesaca.gov
Councilwoman Wendy Leece	wendy.leece@costamesaca.gov
Councilwoman Sandra Genis	sandra.genis@costamesaca.gov
Councilman Gary Monahan	gary.monahan@costamesaca.gov

This WILL be built unless YOU do something NOW!

Facts to Consider:
Area congestion will increase dramatically.
Service, delivery and employee vehicles will be delayed.
Jeopardizes existing local evacuation safety in the event of a serious emergency.
Mixed zoning is bad for property values. The industrial atmosphere of gainful commerce will forever be disrupted.
Industrial and Residential don't mix, it is zoned separately now for good reasons.
The presence of pedestrians, children, pets and general domestic activities increases everyone's liability exposure and has no place in an industrial environment.
Estimated 4 year construction time will be disruptive to traffic, utilities and real estate transactions in the area.
Developers do not have a long term interest in mind, they will move on to other projects and leave behind the added gridlock and problems.
The developers cannot offer one single benefit to the existing local commerce, however they bring with them a swarm of future problems.

Plans have been made, property is in escrow!

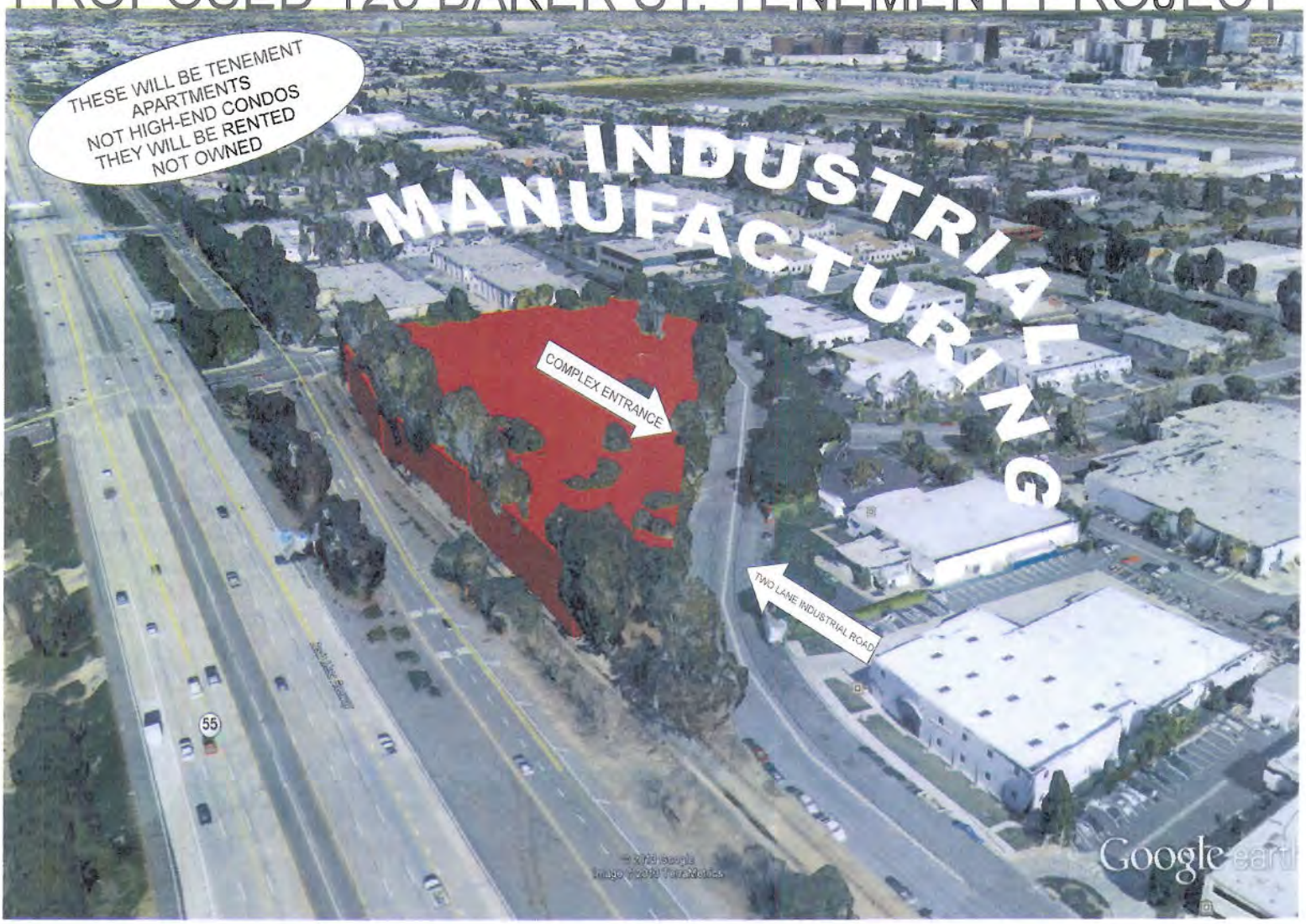
Your new rental neighbors will not appreciate your old industrial neighborhood and there will be more of them than us.

Want to be on the update list?
Please email contact info to:

garry@azmfginc.com

The developers would have you believe:	The reality:
Street traffic will increase only 250%, Street parking will not increase dramatically. The daily migration flow will be opposing the current in-out flow.	These are optimistic guesses, in the end no one will know until it's too late.
This is good for real estate values.	Mixed zoned property is less desirable to current and future investments by owners.
Pedestrain traffic will not be a problem	As many as 600 people will be living there everyday.
Residents are fine in an industrial zone.	The increased presence of more individuals not part of the local commerce invites trouble. Consider Santa Ana's mixed Industrial as an example.
This is good for Costa Mesa in 20 years.	Compare this to other high density 20 year old Apartments along side a freeway overlooking an industrial park next to an airport if you can find one.

PROPOSED 125 BAKER ST. TENEMENT PROJECT



NORMAL HIGH DENSITY HOUSING 20 UNITS PER ACRE OR 50 PERSONS PER ACRE
125 BAKER WOULD BE 67 UNITS PER ACRE UP TO 188 PERSONS PER ACRE

THERE ARE NO RESIDENCES, RESTAURANTS OR SHOPS
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ONE SMALL POOL/REC AREA TO SERVICE 600+ PEOPLE

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LOCATED BETWEEN A FREEWAY
AND AN INDUSTRIAL PARK?

THIS IS NOT A PRESTIGIOUS RESIDENCE

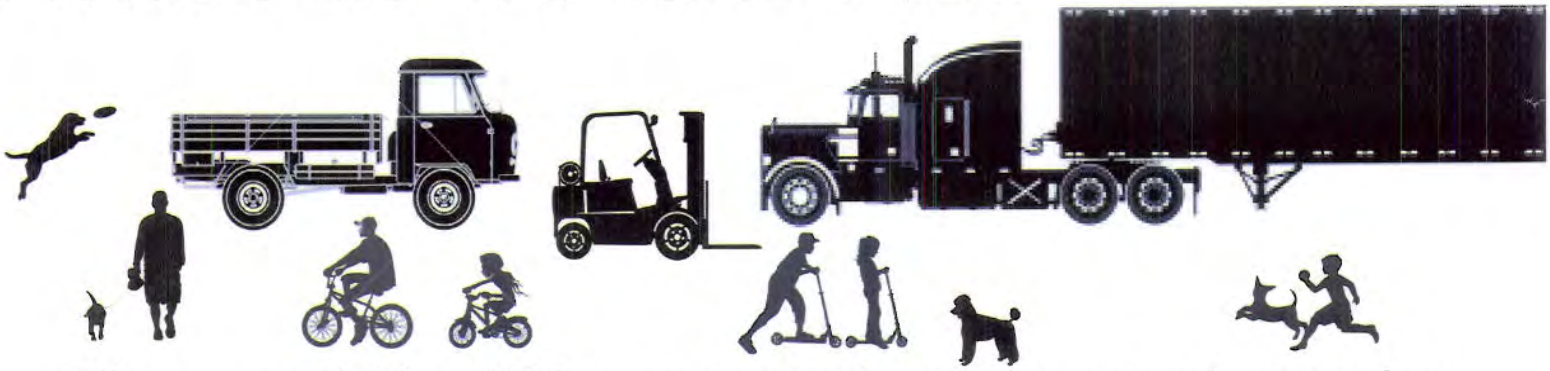
CONSTANT TRAFFIC & AIRPORT NOISE

JUST HOW CLOSE TO THE AIRPORT SHOULD PEOPLE BE FORCED TO LIVE?

55
© 2013 Google
© 2013 INEGI
Image © 2013 TerraMetrics
Google earth

Costa Mesa Freeway
Costa Mesa Fwy
© 2013 Google
Data LDEO-Columbia, NSF, NOAA
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Google earth

Where do we take Fido for a walk?



There could be 200 pet animals, many need exercise,
children that want to play, ride bikes,
people want to take short walks, or leisure.

There may be more than 600 people.

Where do they go?

The only place they can go.

Across the street into the industrial area.

Because there is very little
room in this tenement to do anything.

There is no where else to go!

Re: 125 Baker St re-zoning
Garry Lukas AZ Mfg Inc. 714 444 4446
garry@azmfginc.com

Let's go to the store!

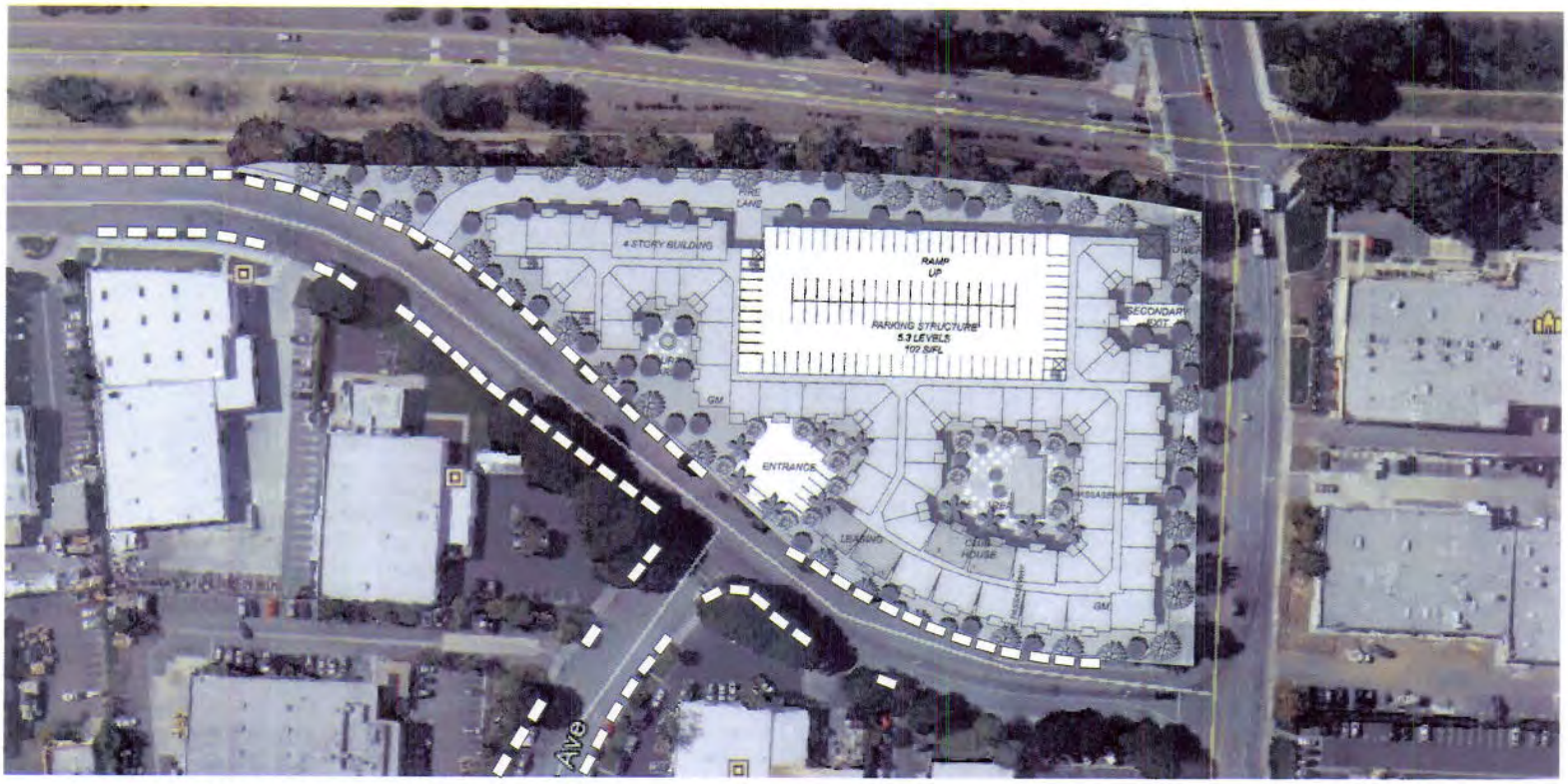
A Turn left and wait for three traffic signals.

B Go straight and drive through the industrial park.

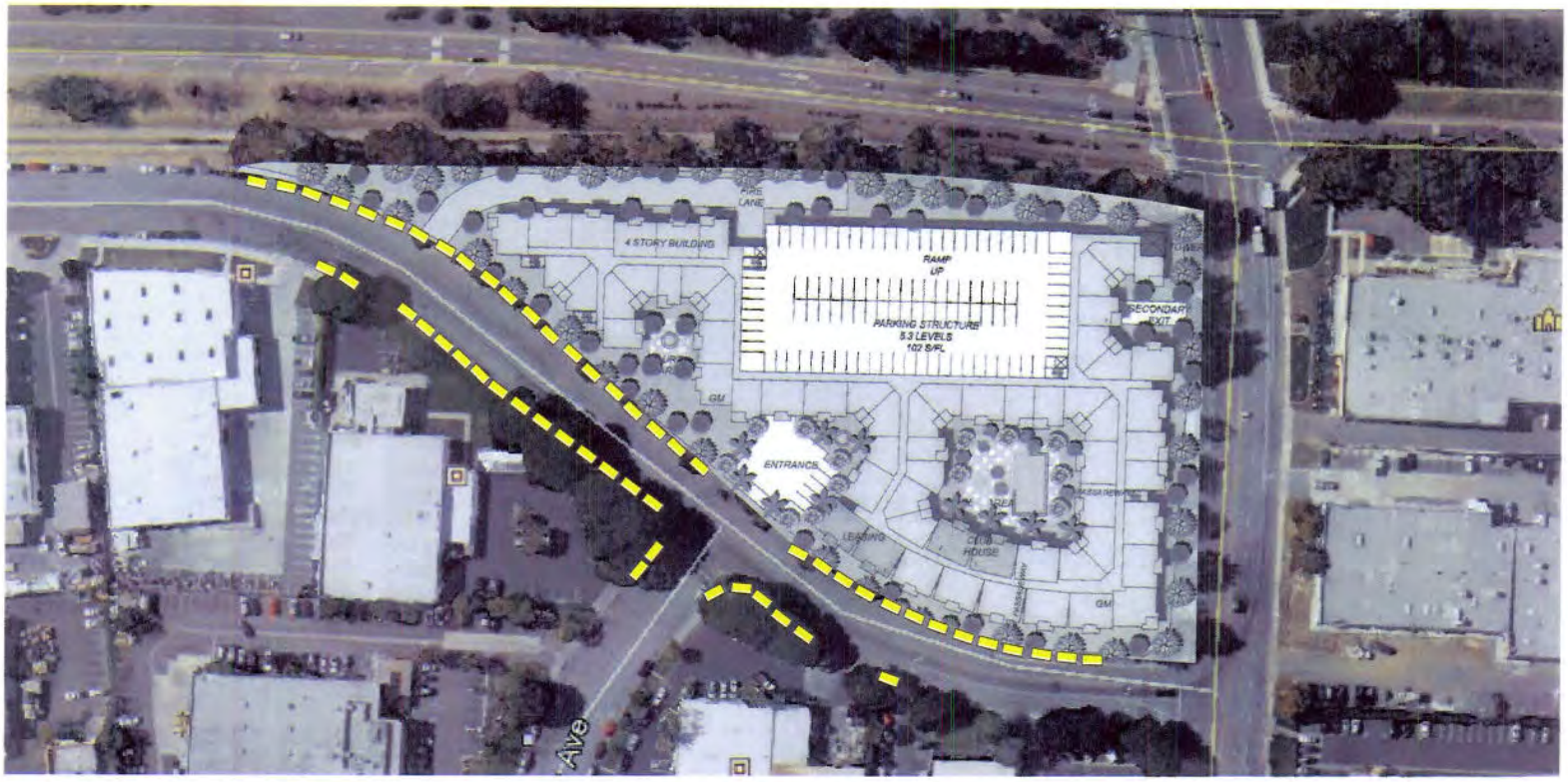
C Turn right and drive through the industrial park.

D Turn right here and go through the industrial park.

Re: 125 Baker St re-zoning
Garry Lukas AZ Mfg Inc. 714 444 4446
garry@azmfginc.com



WHITE RECTANGLES REPRESENT CURRENT DAILY INDUSTRIAL PARKING UTILIZATION.



YELLOW RECTANGLES REPRESENT LOGICAL PARKING CHOICES FOR THE NEW APARTMENT RESIDENCE

WHEN THE WHITE RECTANGLES COME TO WORK IN THE MORNING,
WHERE WILL THEY PARK?

ANOTHER #%!*? TRAFFIC LIGHT?!?!!

4 controlled intersections,
(3 with left hand turn lights)

within 1500 feet = daily GRIDLOCK

In an already heavily traveled Industrial area!

This congested area will motivate the tenement residence to commute through the industrial park!

Re:125 Baker St don't rezone! Garry Lukas AZ Mfg Inc. 714 444 4446 garry@azmfginc.com

Why does the builder call it an Apartment Condominium?

What exactly is an Apartment Condominium?

con·do·min·i·um

/ˌkändəˈminēəm/

A building or complex of buildings containing a number of individually owned apartment or houses.

a·part·ment

/əˈpärtmənt/

A suite of rooms forming one residence, typically in a building containing a number of these.

Could this be the developers euphenism for

ten·e·ment

/ˈtenəmənt/

A room or a set of rooms forming a separate residence within a house or block of apartments esp. high density

Reference to 125 Baker St re-zoning project.

Garry Lukas AZ Mfg Inc. 714 444 4446
garry@azmfginc.com

Community Development

www.cityofirvine.org

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, CA 92623-9575 (949) 724-6000

Received
City of Costa Mesa
Development Services Department
SEP 17 2013

September 13, 2013

Ms. Claire Flynn, AICP, Assistant Development Services Director
Planning Division/Development Services Department
City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92628

Subject: Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for a 240 Apartment Project

Dear Ms. Flynn:

City of Irvine staff has reviewed the NOP and initial study pertaining to the above referenced project, and has the following comment.

Please ensure that the traffic analysis will identify any potential significant impacts in both an interim-year analysis as well as a build-out year analysis. Additionally, please include the following intersections located within Irvine in the project study area:

- Red Hill Avenue & Main Street
- Red Hill Avenue & MacArthur Boulevard
- SR-55 North Bound ramps & MacArthur Boulevard

City staff can provide the City of Irvine ITAM traffic modeling data for these locations. Please contact Sun-Sun Murillo, Supervising Transportation Analyst, at 949-724-6262 to obtain data for these locations.

Thank you for the opportunity to review the proposed document. City staff looks forward to receiving the draft EIR once the document is available for public review. If you have any questions, I can be reached at 949-724-6314 or by email at dlaw@cityofirvine.org.

Sincerely,

David R. Law, AICP
Senior Planner

cc: Bill Jacobs, Principal Planner
Sun-Sun Murillo, Supervising Transportation Analyst

PRINTED ON RECYCLED PAPER

Capata, Julian F

From: LEE, MEL [MEL.LEE@costamesaca.gov]
Sent: Thursday, August 22, 2013 3:32 PM
To: Joe Flanagan; Capata, Julian F
Subject: FW: 125 Baker St

Here is the second public comment.

Mel Lee, AICP
Senior Planner
City of Costa Mesa
77 Fair Drive, Costa Mesa, 92628
Ph. (714) 754-5611 Fax. (714) 754-4856
mel.lee@costamesaca.gov

From: Garry Lukas [mailto:garry@azmfginc.com]
Sent: Monday, August 19, 2013 1:58 PM
To: FLYNN, CLAIRE
Subject: 125 Baker St

To Claire Flynn
I am the business owner directly across the street from the proposed tenements on 125 Baker St.
After reviewing the "Notice of Preparation" I have noticed it mentions 5 stories?
The initial blight was only supposed to be 4 stories high?
Has this been readjusted because it is so obvious there is not enough room or is this just another error regarding this project.

Sincerely
Garry Lukas
AZ Mfg Inc.

The IS team in Atkins has scanned this email and any attachments for viruses and other threats; however no technology can be guaranteed to detect all threats. Always exercise caution before acting on the content of an email and before opening attachments or following links contained within the email.

To: Claire Flynn AICP
City of Costa Mesa Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, CA 92628
Claire.Flynn@costamesaca.gov

Received
City of Costa Mesa
Development Services Department
SEP 13 2013

From: Briggs Enterprises
200 Briggs Ave
Costa Mesa, CA. 92626

Re: 125 East Baker Street Apartment Project – Comments

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Garry Lukas
Briggs Enterprises
200 Briggs
Costa Mesa

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Your quality of life is being attacked!

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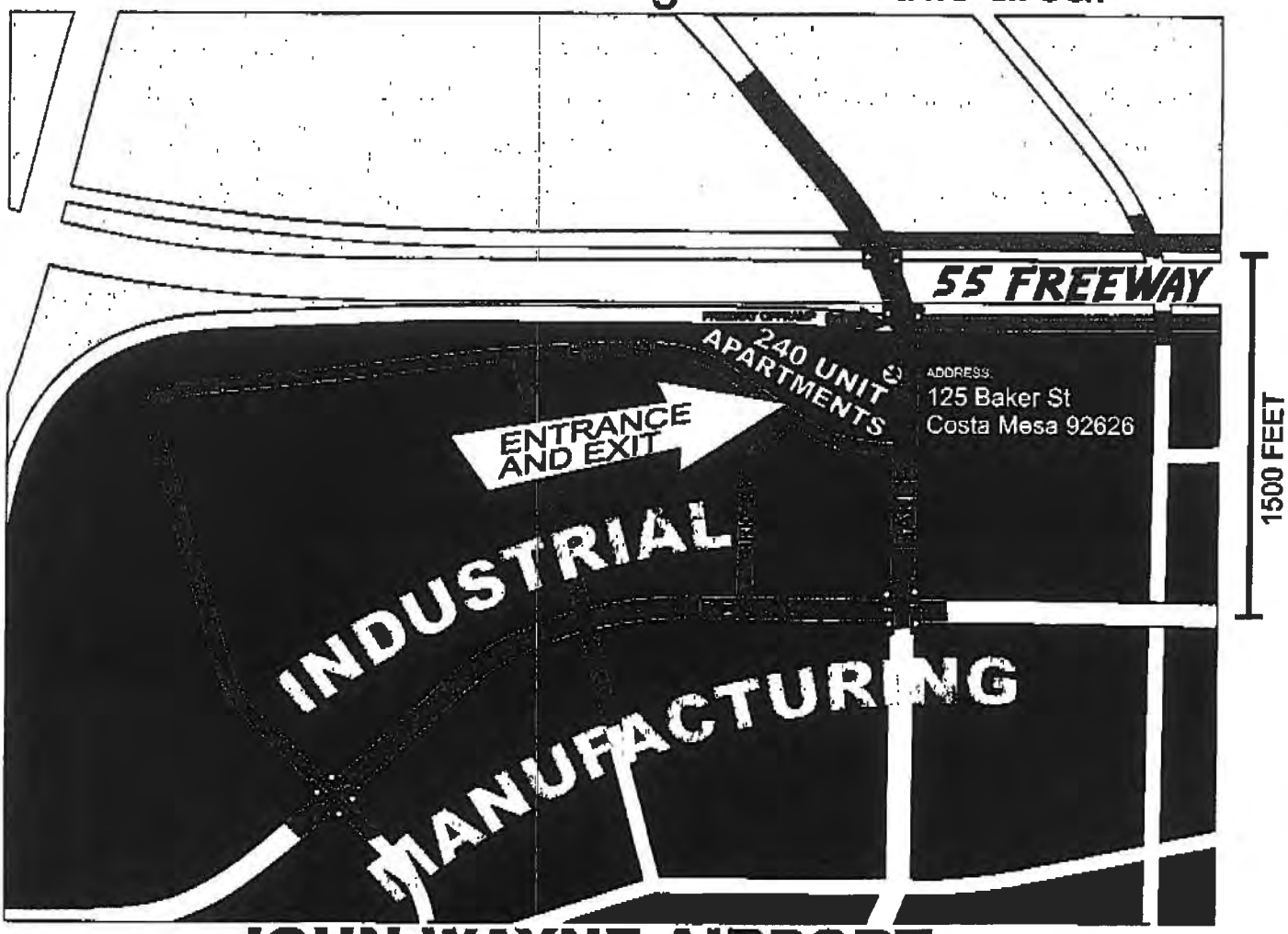
We live with the traffic
and congestion forever!

PULLMAN STREET

The Proposed **240 Unit** High Density **4 Story Apartment** Complex will forever increase congestion in this area.

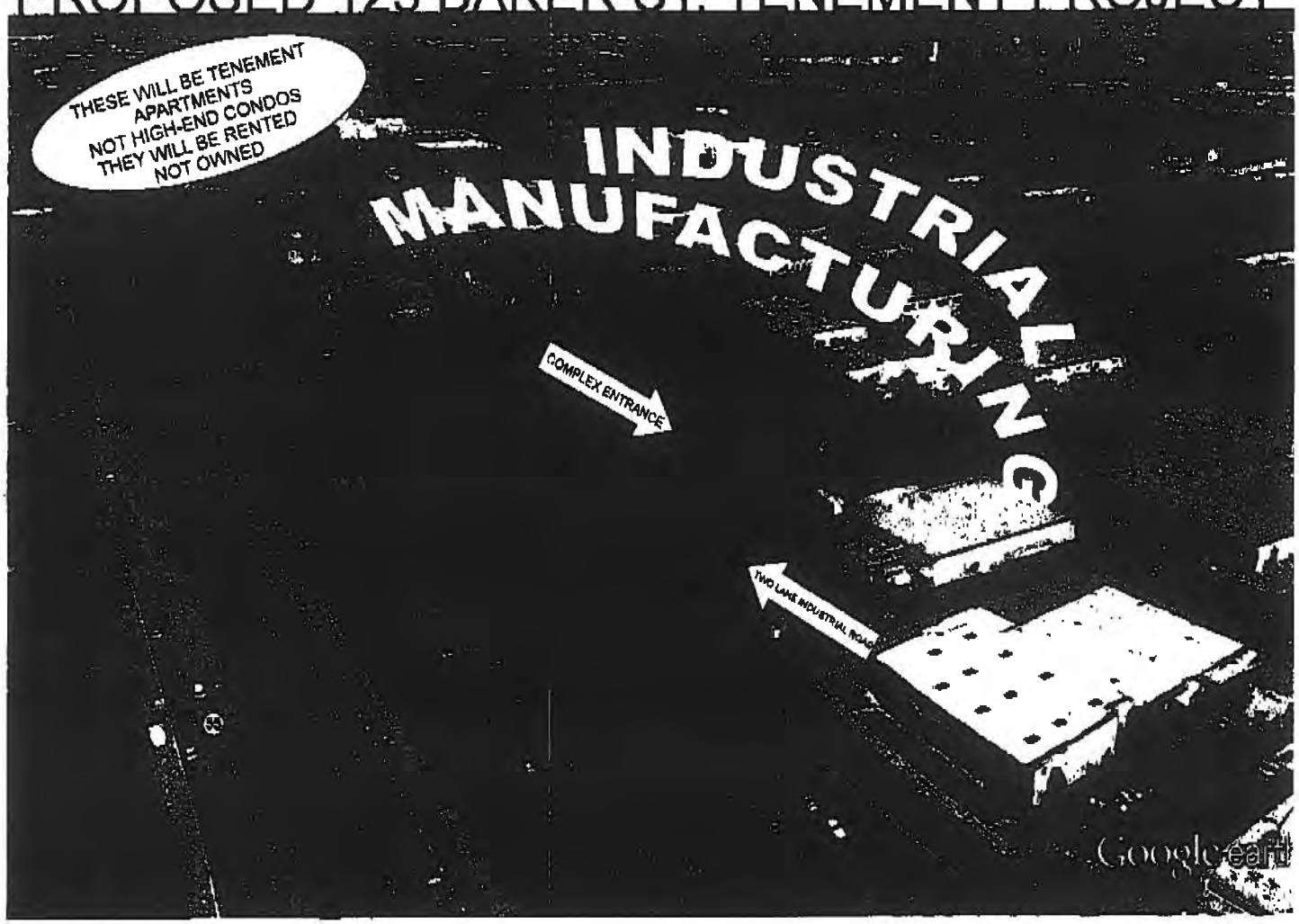


JOHN WAYNE AIRPORT

VITAL CONTACT INFORMATION ON BACK

PERMANENTLY INCREASED TRAFFIC AREAS

PROPOSED 125 BAKER ST. TENEMENT PROJECT



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ON WORK DAYS RESIDENTS WILL WAIT IN LINE TO EXIT THE GARAGE

RESIDENTS WILL NOT APPRECIATE THE INDUSTRIAL COMMUNITY, AND VISA VERSA

WHO ***CHOOSES*** TO LIVE IN A HIGH-DENSITY TENEMENT BUILDING LOCATED BETWEEN A FREEWAY AND AN INDUSTRIAL PARK?

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CONSTANT TRAFFIC & AIRPORT NOISE

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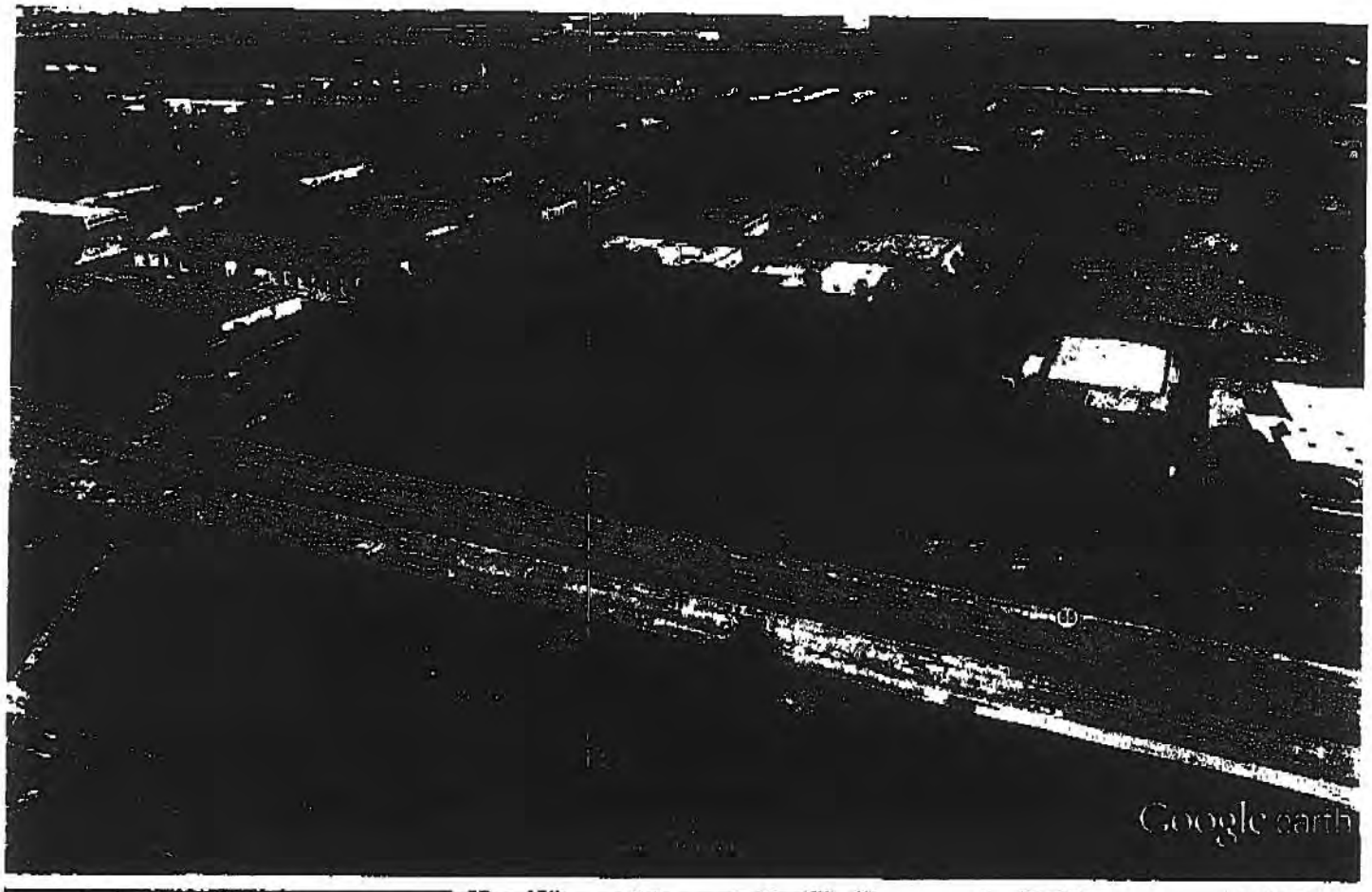
Google earth

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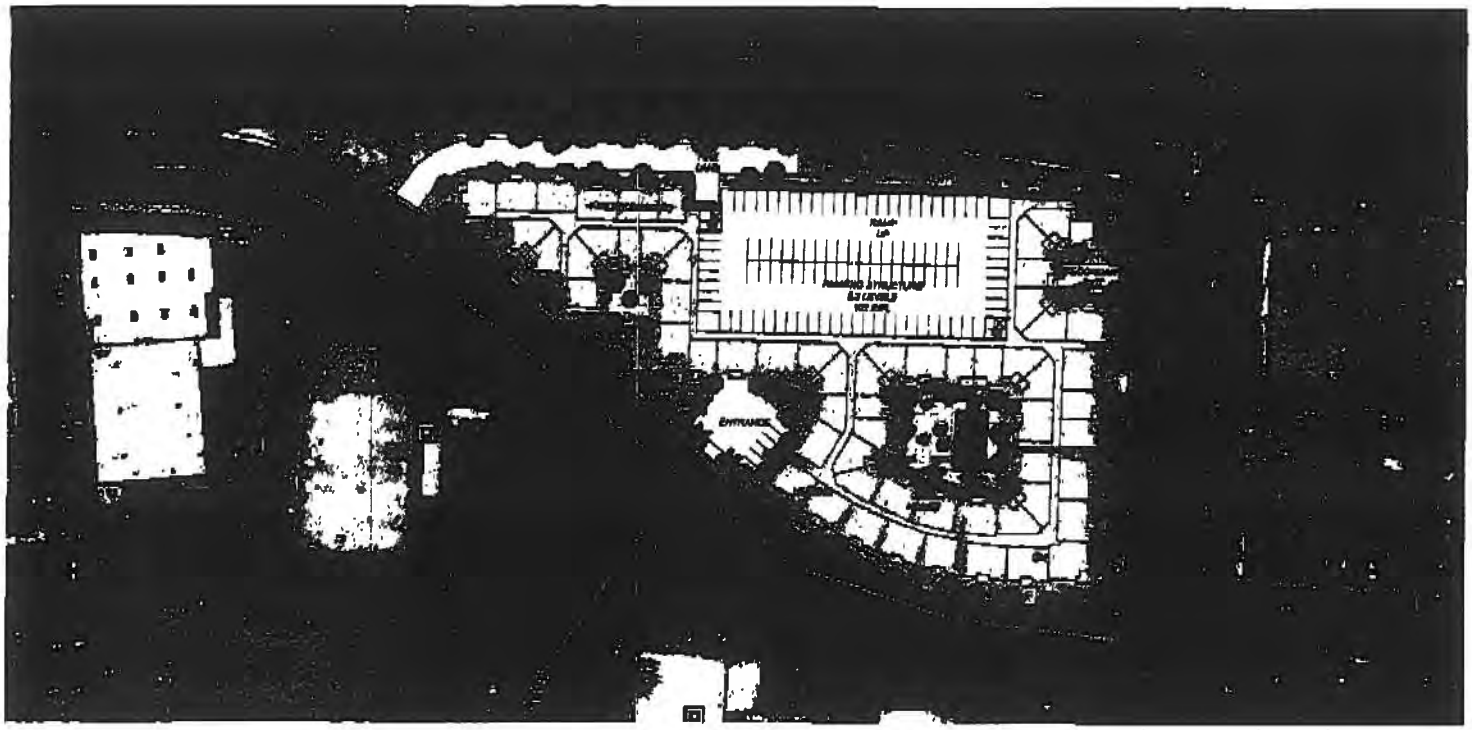

Where do we take Fido for a walk?

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Across the street into the industrial area.

Because there is very little
room in this tenement to do anything.

There is no where else to go!

Re: 125 Baker St re-zoning
Garry Lukas AZ Mfg Inc. 714 444 4446
garry@azmfginc.com

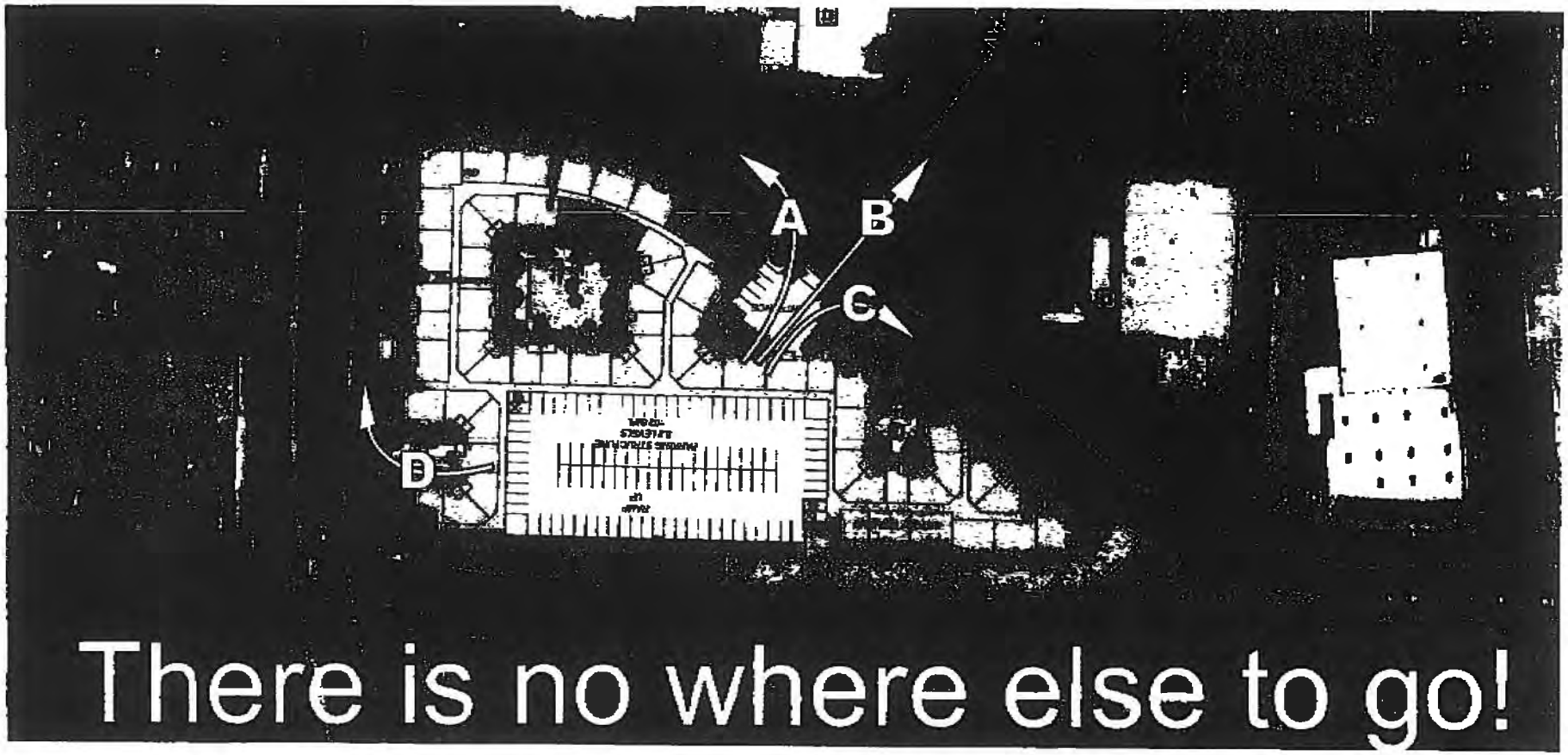
Let's go to the store!

A Turn left and wait for three traffic signals.

B Go straight and drive through the industrial park.

C Turn right and drive through the industrial park.

D Turn right here and go through the industrial park.



Re: 125 Baker St re-zoning
Garry Lukas AZ Mfg Inc. 714 444 4446
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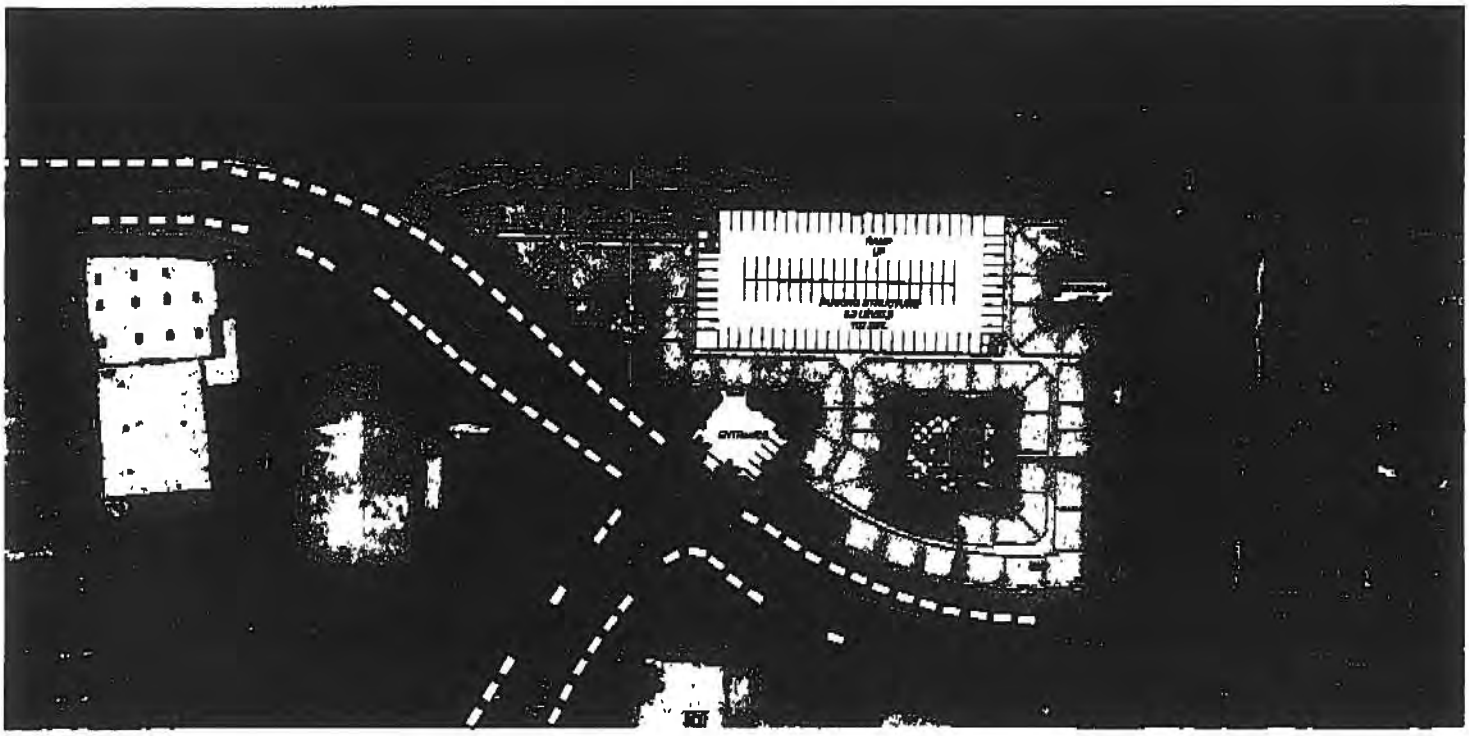
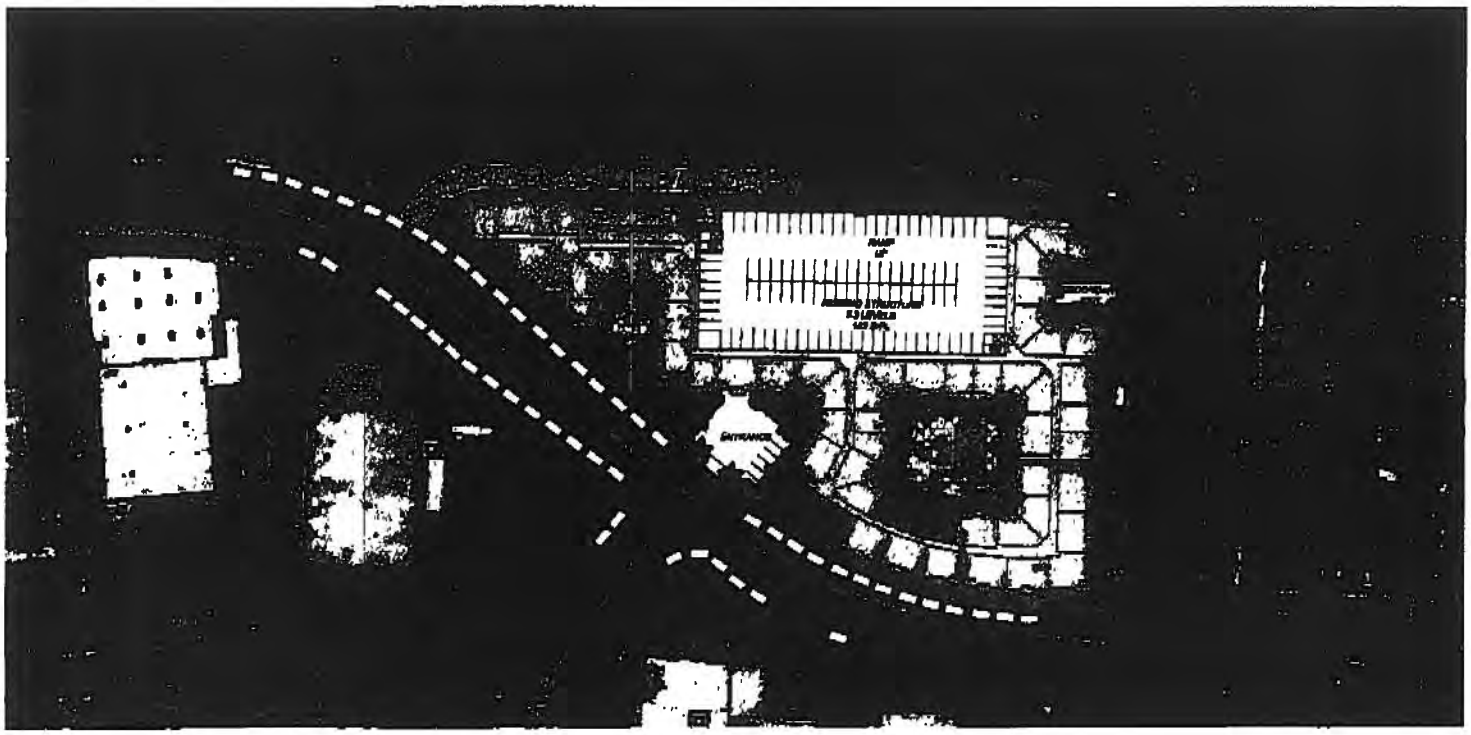


WHITE RECTANGLES REPRESENT CURRENT DAILY INDUSTRIAL PARKING UTILIZATION.



YELLOW RECTANGLES REPRESENT LOGICAL PARKING CHOICES FOR THE NEW APARTMENT RESIDENCE

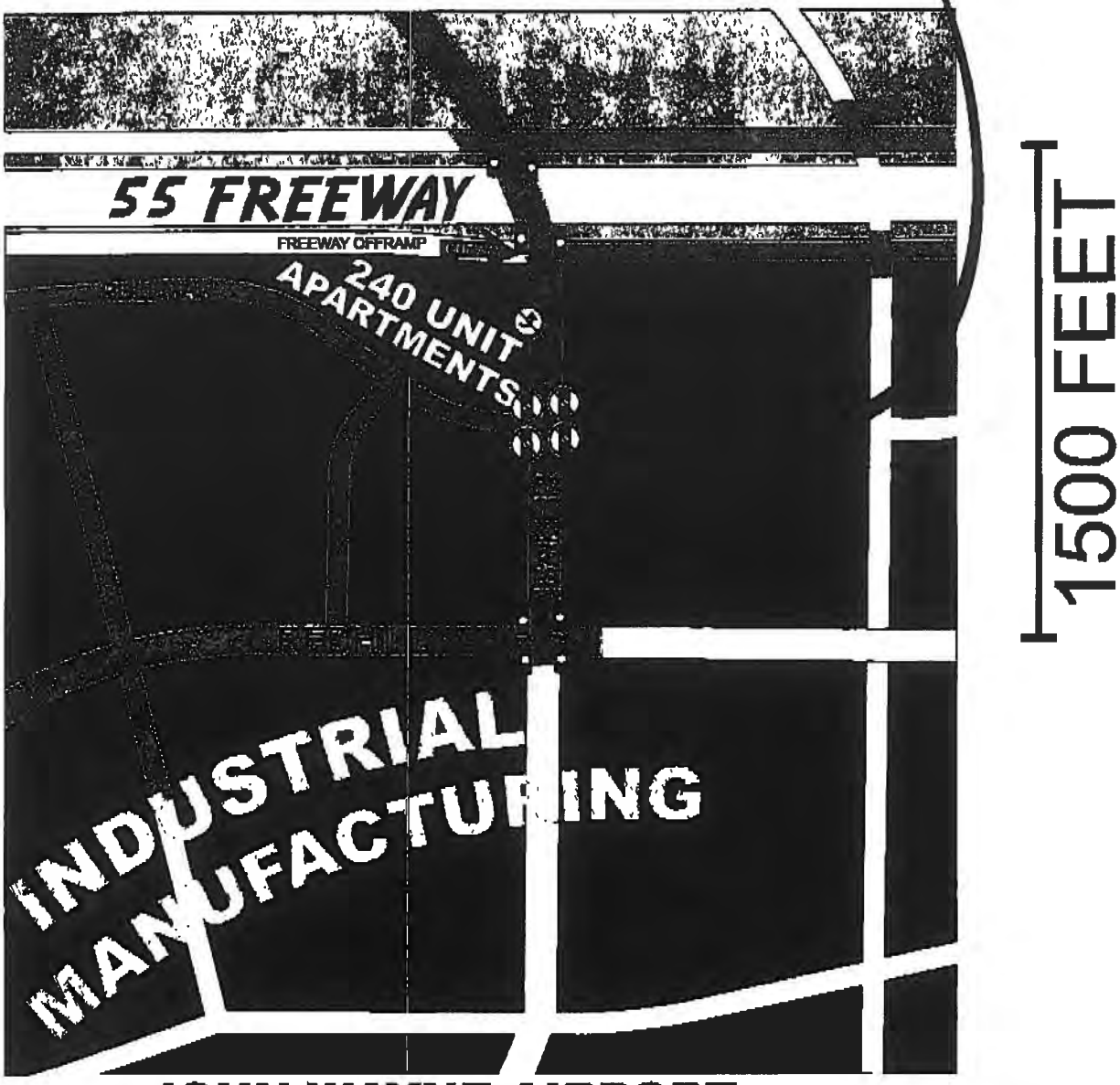
WHEN THE WHITE RECTANGLES COME TO WORK IN THE MORNING, WHERE WILL THEY PARK?

ANOTHER #%!*? TRAFFIC LIGHT?!?!!

4 controlled intersections,
(3 with left hand turn lights)

within 1500 feet = daily GRIDLOCK

In an already heavily traveled Industrial area!



JOHN WAYNE AIRPORT

This congested area will motivate the tenement residence to commute through the industrial park!

Re:125 Baker St don't rezone! Garry Lukas AZ Mfg Inc. 714 444 4446 garry@azmfginc.com

Why does the builder call it an Apartment Condominium?

What exactly is an Apartment Condominium?

con·do·min·i·um

/ˌkändəˈminēəm/

A building or complex of buildings containing a number of individually owned apartment or houses.

a·part·ment

/əˈpärtmənt/

A suite of rooms forming one residence, typically in a building containing a number of these.

Could this be the developers euphenism for

ten·e·ment

/ˈtenəmənt/

A room or a set of rooms forming a separate residence within a house or block of apartments esp. high density

Reference to 125 Baker St re-zoning project.

Garry Lukas AZ Mfg Inc. 714 444 4446
garry@azmfginc.com

Capata, Julian F

From: LEE, MEL [MEL.LEE@costamesaca.gov]
Sent: Thursday, August 22, 2013 3:32 PM
To: Joe Flanagan; Capata, Julian F
Subject: FW: 125 E. Baker apartment project

Here is the first public comment.

Mel Lee, AICP
Senior Planner
City of Costa Mesa
77 Fair Drive, Costa Mesa, 92628
Ph. (714) 754-5611 Fax. (714) 754-4856
mel.lee@costamesaca.gov

From: JHorian@aol.com [mailto:JHorian@aol.com]
Sent: Monday, August 19, 2013 1:47 PM
To: FLYNN, CLAIRE
Cc: Garry@azmfginc.com
Subject: 125 E. Baker apartment project

Dear Claire,
I was under the impression that the City was trying to shove a **4 story** apartment structure down our throat .
Now, according to a recent letter from you, NOTICE OF PREPERATION, it appears that it changed to a **5 story** structure.
If this is correct, please advise where I could locate and review the most recent plans. I will likely have to relocate my business and employees as a result of this project, but I feel it honorable to share the cities plan with the next owner of my property.
Regards,
Jim Horian
Metro Bay Products, Inc
3150 Pullman Street
Costa Mesa, Ca 92626
714 454-0432

The IS team in Atkins has scanned this email and any attachments for viruses and other threats; however no technology can be guaranteed to detect all threats. Always exercise caution before acting on the content of an email and before opening attachments or following links contained within the email.

OC Public Works
Integrity, Accountability, Service, Trust

Ignacio G. Ochoa, P.E., Interim Director
300 N. Flower Street
Santa Ana, CA 92703

P.O. Box 4048
Santa Ana, CA 92702-4048

Telephone: (714) 667-8800
Fax: (714) 967-0896

REC'D SEP 23 2013

NCL-13-042

September 19, 2013

Ms. Clair Flynn, AICP
City of Costa Mesa
Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, California 92628

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a) and 15375 of the California Administrative Code for 125 East Baker Street Apartment Project

Dear Ms. Flynn:

The County of Orange has reviewed the Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a) and 15375 of the California Administrative Code for 125 East Baker Street Apartment Project.

Environmental Resources:

Water Quality compliance has reviewed the document. On the basis of the information provided in the Initial Study, we cannot concur with the decision presented in the Notice of Preparation that water quality impacts need not be addressed in the EIR. Pages 39-44 of the Initial Study make no mention of whether the project can, through adherence to other regulations, policies or plans, cause no significant long-term water quality impacts to the Newport Bay watershed. The Initial Study merely addresses the potential impacts during construction, but ignores the long-term potential impacts after construction is completed.

It is recommended the following be addressed in the EIR:

1. Development will be subject to project-level requirements of Section 7, New Development/ Significant Redevelopment, of the Orange County Drainage Area Management Plan (DAMP), which should be considered when evaluating the potential surface water quality impacts of the proposed project. Implementation of post-construction Best Management Practices should be required for Priority Projects such as this, including preparation of a preliminary project Water Quality Management Plan prior to certification of the EIR.

2. Potential water quality impacts of the project should be further evaluated in accordance with the provisions outlined in Section 7 of the DAMP. At a minimum, the following information should be provided:

   - Description of project characteristics with respect to water quality issues, such as project site location in a given watershed, site acreage, known ground contamination, known groundwater contamination, and anticipated change in percent impervious surface area.

   - Identification of receiving waters. The EIR should identify all downstream receiving waters that may receive contributory runoff from the project site.

   - Description of the sensitivity of the receiving waters. In particular the EIR should identify Areas of Special Biological Significance, water bodies with Total Maximum Daily Loads (TMDL), and Clean Water Act Sec. 303(d) listed impaired water bodies.

   - Characterization of the potential water quality impacts from the proposed project and identification of the anticipated pollutants to be generated by the project.

   - Identification of downstream hydrologic conditions of concern, that may be affected by project-related changes in runoff volume and velocity; sediment load, makeup or characteristics; reduced infiltration; and/or increased flow, frequency, duration, and peak(s) of storm runoff.

   - Evaluation of thresholds of significance.

   - Assessment of project impact significance to water quality.

   - If a proposed project has the potential to create a major new stormwater discharge to a water body with an established TMDL, the EIR should consider quantitative analysis of the anticipated pollutant loads in the stormwater discharges to the receiving waters.

   - A reasonable analysis of the cumulative impacts of the proposed project together with past, present and reasonably anticipated future projects (related projects) that could produce cumulative impacts together with the proposed project.

If you have any questions or need clarification please do not hesitate to call me at (714) 667-3211.

Sincerely,

for R Maldonado

Polin Modanlou, Manager
Strategic Land Planning Division
OC Public Works/OC Planning Services
300 North Flower Street
Santa Ana, California 92702-4048
Polin.Modanlou@ocpw.ocgov.com

cc: Chris Crompton, Manager, OC Public Works/ OC Water Sheds/Environmental Resources

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Seal Beach
Stanton
Tustin
Villa Park
Yorba Linda
County of Orange
Costa Mesa Sanitary District
Midway City Sanitary District
Irvine Ranch Water District

Orange County Sanitation District
10844 Ellis Avenue, Fountain Valley, CA 92708
(714) 962-2411 www.ocsewers.com

September 13, 2013

Claire Flynn, AICP, Assistant Development Services Director
City of Costa Mesa, Planning Division/Development Services Department
77 Fair Drive
Costa Mesa, CA 92628

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the 125 East Baker Street Apartment Project

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This letter is in response to the above referenced Notice of Preparation (NOP) of a Draft Environmental Impact Report for the City of Costa Mesa's (City) 125 East Baker Street Apartment Project. The City is within the jurisdiction of the Orange County Sanitation District (OCSD).

Based on the Sewer Capacity Report, it does not appear like there will be a capacity issue for the OCSD sewer system. However, please verify that using the OCSD flow factors so we can properly determine the amount of wastewater entering our system from this development. Please use the following flow factors to estimate current and future flows in the Environmental Impact Report:

- 727 gpd/acre for estate density residential (0-3 d.u. /acre)
- 1488 gpd/acre for low density residential (4-7d.u. /acre)
- 3451 gpd/acre for medium density residential (8-16 d.u./acre)
- 5474 gpd/acre for medium-high density residential (17-25 d.u./acre)
- 7516 gpd/acre for high density residential (26-35 d.u./acre)

Also, please note that any construction dewatering that involve discharges to the local or regional sanitary sewer system must be permitted by OCSD prior to discharges. OCSD staff will need to review/approve the water quality of any discharges and the measures necessary to eliminate materials like sands, silts, and other regulated compounds prior to discharge to the sanitary sewer system.

Thank you for the opportunity to comment on the 125 East Baker Street Apartment Project. If you have any questions regarding the sewer capacity, please contact Rich Leon at (714) 593-7242. For planning issues regarding this project, please contact me directly at (714) 593-7119.

Daisy Covarrubias

Daisy Covarrubias, MPA
Senior Staff Analyst

DC:sa
EDMS:003978009/1.7f

REC'D SEP 16 2013

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

REC'D SEP 17 2013

September 12, 2013

Claire Flynn, AICP, Assistant Development Services Director
City of Costa Mesa, Palnning Division/Development Services Department
77 Fair Drive
Costa Mesa, CA 92628

Notice of Preparation of a CEQA Document for the
125 East Baker Street Apartment Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: www.aqmd.gov/ceqa/hdbk.html. SCAQMD staff also recommends that the lead agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/ceqa/handbook/signthres.pdf. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a

localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at imacmillan@aqmd.gov or call me at (909) 396-3244.

Sincerely,

Ian V. MacMillan

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

ORC130820-01
Control Number