Draft Initial Study/Mitigated Negative Declaration

City Commons
A 28-Unit Residential and Live/work Development
Costa Mesa, California

Prepared By:
City of Costa Mesa
Development Services Department
77 Fair Drive
Costa Mesa, CA 92626

April 7, 2014

Draft Initial Study/ Mitigated Negative Declaration

City Commons

28-Unit Residential and Live/Work Development Project

Lead Agency:

CITY OF COSTA MESA
Development Services Department
77 Fair Drive, Costa Mesa, CA 92628

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April 7, 2014

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Section 1: Introduction

The City of Costa Mesa has determined that the proposed project, City Commons (project) is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects associated with the project, as proposed. The project involves construction of a 28-unit detached condominium residential development in a Planned Development Commercial zoned property that was formerly used as a medical facility, an automotive repair and generator service facilities on the eastern portion and an undeveloped lot used for storage and parking on the western portion of the project site. The project-required entitlements include Vesting Tentative Tract No. 17668 (VT-17668) and Master Plan (PA-13-29). Section 2.0, Project Description, provides a detailed description of the project.

1.1 – Statutory Authority and Requirements

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), the City of Costa Mesa, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine if the project would have a significant environmental impact. If the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency must find that the project would not have a significant effect on the environment and must prepare a Negative Declaration (or Mitigated Negative Declaration) for that project. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c), Public Resources Code).

The environmental documentation is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required. The environmental documentation and supporting analysis is subject to a public review period. During this review, public agency comments on the document should be addressed to the City of Costa Mesa. Following review of any comments received, the City of Costa Mesa will consider these comments as a part of the project's environmental review and include them with the Initial Study documentation for consideration by the Planning Commission of the City of Costa Mesa.

1.2 – Purpose

The purpose of the Initial Study is to: (1) identify environmental impacts; (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Negative Declaration or CEQA exemption; (3) enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared; (4) facilitate environmental assessment early in the design of a project; (5) provide documentation of the factual basis for the finding in a Negative Declaration that a project would not have a significant environmental effect; (6) eliminate needless EIRs; (7) determine whether a previously prepared EIR could be used for a project; and (8) assist in the preparation of an EIR, if required, by focusing the EIR on the effects determined to be potentially significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant.

Section 15063 of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study must include: (1) a description of the project, including the location of the project; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study.

1.3 – Relationship to Other Documents

Pursuant to State CEQA Guidelines Section 15150, this Initial Study (IS)/Mitigated Negative Declaration (MND) incorporates by reference all or portions of technical documents that relate to the proposed project or provide additional information concerning the environmental setting in which the project is proposed. In addition to technical studies prepared specifically for this project provided as part of the appendices to this IS/MND, the information disclosed in this document is based in part on the following documents addressing the general project area:

City of Costa Mesa 2000 General Plan (Adopted January 22, 2002)
The City of Costa Mesa 2000 General Plan (General Plan) is the primary source of long-range planning and policy direction intended to guide growth and preserve the quality of life within the community. The General Plan contains goals, policies, and plans that are intended to guide land use and development decisions. It consists of a Land Use Plan Map and the following Elements, which together fulfill the state requirements for a General Plan: Land Use; Circulation/Transportation; Housing; Conservation; Noise; Safety; Open Space and Recreation; Growth Management; Community Design; and Historic and Cultural Resources. The General Plan was used throughout this Initial Study as a source of baseline data.

City of Costa Mesa 2000 General Plan Environmental Impact Report (SCH No. 2000031120) (Adopted January 22, 2002)
The City of Costa Mesa 2000 General Plan Environmental Impact Report was certified on January 22, 2002 through City Council Resolution No. 02-07. The General Plan EIR analyzed the potential environmental impacts that would result from implementation of the City of Costa Mesa 2000 General Plan. General Plan EIR Table 3-6, Growth Increases over Existing Conditions (2000) Associated with 2000 General Plan Implementation (2020), identifies new development projected between 2000 and 2020. The environmental impact analysis contained in the General Plan EIR assumes 42,469 dwelling units and 46,683,237 square feet (sq. ft.) of nonresidential land uses, which represents a growth of 1,892 additional dwelling units and 12,643,695 additional square feet of non-residential uses by 2020. The General Plan EIR concluded that impacts in the following areas would be significant and unavoidable (see General Plan EIR Section 8.0):

- Transportation and Circulation (roadway capacity at Gisele Avenue, west of Harbor Boulevard);
- Noise (long-term mobile sources);
- Air Quality (short- and long-term emissions).

The General Plan EIR was used in this Initial Study as a source of baseline data.

City of Costa Mesa Municipal Code

The City of Costa Mesa Municipal Code (CMMC) consists of regulatory, penal, and administrative ordinances of the City of Costa Mesa. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies. The City of Costa Mesa Zoning Code is found in CMMC Title 13, Planning, Zoning, and Development. The purpose of CMMC Title 13 is to promote the public health, safety, and general welfare, and preserve and enhance the aesthetic quality of the City by providing regulations to ensure that an appropriate mix of land uses occur in an orderly manner. The CMMC and CMMC Title 13 are referenced throughout this Initial Study for descriptions and requirements of the City's regulatory framework.

The documents are available for review at the City of Costa Mesa Development Services Department located at 77 Fair Drive, Costa Mesa, California 92626.

Section 2: Project Description

2.1 – Project Location

The City Commons project is located in the southern portion of the City of Costa Mesa, in the County of Orange. The project site is at the southwest corner of Harbor Boulevard and Hamilton Street and contains seven parcels. Please see Exhibit 1. The site is west of California State Route 55, also known as the Costa Mesa Freeway (SR 55), and approximately 3 miles northeast of the Pacific Ocean.

Regional Access to the site is provided via Interstate 405 (I-405) to SR-55. Pacific Coast Highway (CA-1) is located approximately 2 miles southwest of the site, and also provides regional access. Local access to the site is provided via Hamilton Street and Harbor Boulevard, with direct access coming from Hamilton and Charle Street.

2.2 – Environmental Setting

The project site consists of seven parcels totaling 1.53 acres (Assessor's Parcel Numbers 422-091-01, 422-091-08, 422-091-09 (2 parcels), 422-091-07, 422-091-02, and 422-091-06) and xx addresses. The site is relatively flat with onsite elevation of approximately 89 feet above mean sea level. The regional topographic gradient is to the northeast.

The project site is developed with three vacant buildings (medical building, and an automotive office and shop). The former medical office building (2095 Harbor Boulevard) is 5,909 square feet, constructed of wood frame with a stucco exterior coat and a flat built-up roof system with composite shingles. The former Randy's Automotive business (2089 Harbor Boulevard) is a small 1,183 square-foot office building constructed of wood frame with a stucco exterior coat and a pitched asphalt shingle roof and a two bay 900 square-foot shop constructed of wood frame with a stucco exterior finish and a flat built up roof system. The 2089 Harbor Boulevard property consists of a square foot office building and a 900 square foot shop. The 2099 Harbor Boulevard property is vacant but was previously occupied by Charlie Smiley Specialty Contractor (a roofing contractor) and had a small trailer with an ancillary structure (used as an office) and a fenced storage yard. The 511 Hamilton Street site is currently a vacant lot but was once developed with a house and a shop from approximately 1956 until 2003 when the buildings were demolished.

Exhibit 1: Location Map

Exhibit 2: Topographic Map

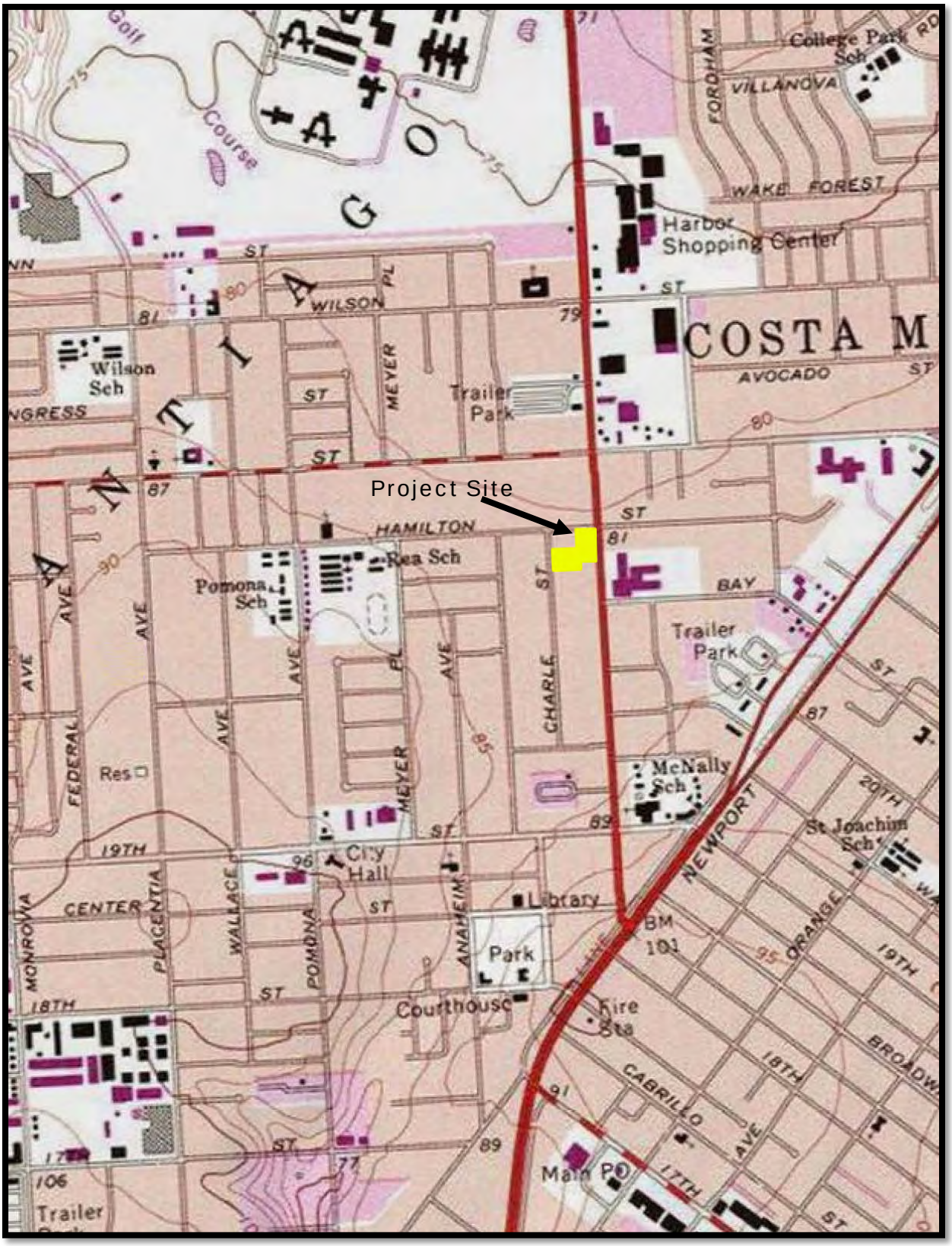


Exhibit 3: Aerial Map

Source: Google Earth, aerial photo taken 4/6/2013

General Plan and Zoning

General Plan

According to the City of Costa Mesa General Plan Land Use Map, the site is designated as General Commercial. This designation is intended to permit a wide range of commercial uses that serve both local and regional needs. The General Commercial land use designation also allows residential and other noncommercial uses that are complementary to commercial uses. The General Plan's Land Use Element notes that as complementary uses, residential and other noncommercial uses may be allowed in General Commercial land use designated areas. The City Council determined on February 4, 2014 that a residential project without a live/work or other commercial uses would be consistent with the General Plan and could proceed with entitlement processing as a master plan pursuant to the Zoning Code.

The General Plan indicates that the project site is located in the Harbor Boulevard Corridor, which is described as follows in the Community Design Element:

> **Harbor Boulevard Corridor.** Harbor Boulevard begins in the City at Newport Boulevard. The corridor represents the primary commercial corridor of the City, with a mix of vehicle-oriented uses, auto dealerships, neighborhood commercial centers, entertainment uses, and residential uses.

The Community Design Element also identifies Harbor Boulevard as a "Primary Corridor," which is described as a road that carries larger volumes of traffic and typically crosses through community boundaries.

Zoning

The project site is zoned PDC, Planned Development Commercial. The PDC Zone description states the following regarding allowing residential development in the zone:

> "As complementary uses, residential (density maximum of 20 dwelling units per acre) and industrial uses as well as other commercial and noncommercial uses of a similar or supportive nature to the uses noted in this subsection may be allowed if the Planning Commission approves the uses as compatible with the Planned Development Commercial project based on compatible uses listed in the General Plan for the applicable land use designation subject to FAR limits…"

The proposed residential development is proposed at 18.3 du/acre and within the allowable densities of the PDC zone. Seven of the 28 units are live/work units that include a workspace on the ground floor. The proposed use is subject to a determination by the Planning Commission for compatibility with Planned Development Commercial zone.

Surrounding Land Uses

The site is surrounded by a community garden and an automotive service business to the north and west, respectively. Immediately south of the site is a medical facility and equipment rental business. The general surrounding vicinity includes commercial uses and high density residential development. Land uses and the property's associated zoning designations immediately adjacent to the project Site consist of the following:

- **North**: Commercial land uses (i.e. fast food). These properties are zoned C2, "General Business District."
- **East**: Commercial, auto-dealership. Properties immediately east on Harbor Boulevard are zoned C1, "Local Business District."
- **South**: Medical office, and storage and equipment rental facility. These properties are zoned C1, "General Business District."
- **West**: Automotive shop (Rudy's Garage), community garden and residential. These properties are zoned C1, "General Business District" and Mesa West Ownership Urban Plan: R2-HD Multiple Family Residential (High Density).

2.3 – Background and History

South Coast Communities (Applicant) submitted a Vesting Tentative Tract Map application proposing a 28-unit development with some live-work units to the City of Costa Mesa on October 8, 2013. On February 4, 2014, the City Council determined the project is consistent with the General Plan and could proceed with entitlement processing as a master plan pursuant to the Zoning Code, subject to approval by the Planning Commission.

2.4 – Proposed Project

Proposed Land Use

The proposed project includes demolition of the existing vacant buildings and the development of a 28-unit residential neighborhood called City Commons (Project) on the 1.53-acre site, which results in a proposed density of 18.3 dwelling units per acre. The proposed project involves the following:

1. CEQA clearance, requiring adoption of an Initial Study/Mitigated Negative Declaration.
2. Planning Application PA-13-29 – Master Plan for development of a 28-unit residential project with 7 live/work units at an existing commercial site in the Planned Development Commercial Zoning district.
3. Tentative Tract Map No. 17668 to subdivide the property into 28 condominium units.

The project requests approval of the following deviations:

- A Minor Modification to reduce the perimeter open space along Harbor Boulevard from 20 feet to 17 feet.
- A Variance to reduce the perimeter open space along Hamilton Street from 20 feet to 10 feet.

Architecture

The proposed single-family detached homes in the community would be three-stories at a maximum height of approximately 35 feet. The project proposes five plan types consisting of two and three bedroom, three-story detached homes. The applicant proposes an architectural style that is defined as "Craftsman." The conceptual site plan is provided as Exhibit 4 and sample floor plans and elevation drawings are provided in Exhibits 5 and 6.

Parking and Access

Each unit (except one) includes a two-car garage and two open parking spaces in front of the garage. The project provides 113 parking spaces with 55 parking spaces in driveways that range from 18 to 21 feet in length and 54 garage parking spaces in 27 two-car garages, one single-car garage and two onsite open spaces.

The parking is in compliance with the zoning code as follows:

Unit Type	Required Parking per unit	Number of Units	Provided Garage Spaces	Provided Open Spaces	Required Spaces
Two bedrooms with a den or Three bedrooms	Two enclosed and two open	27	54	56	110
Two-bedroom	One enclosed and two open	1	1	2	3
Total Spaces Required					**113**

Primary access to the project is from a full access driveway on Charle Street. Secondary access is via an exit and right turn only, gated driveway on Hamilton Street. The Hamilton Street driveway includes an entry paved with artificial grass to deter residents and visitors from attempting entry at this location while allowing for emergency fire access. A 23-foot wide drive aisle connects the Charle Street entrance to the Hamilton Street exit and would serve as an internal street and as the primary vehicular and pedestrian access to the individual units. Pedestrian access will be provided at each of the entries as well as the construction of a new sidewalk along the project boundary on Charle Street.

Setbacks

The proposed site is an irregular shaped site with property lines adjoining commercial uses on the south and west, Harbor Boulevard on the east, a commercial use and the community garden to the north. The following setbacks are proposed for the project:

- **Rear yard:** 10 feet (abutting community garden and commercial uses) – none required
- **Perimeter open space:** 10 feet (along Hamilton Street) – 20 feet required
- **Perimeter open space:** 22.7 feet (along Charle Street) – 20 feet required
- **Perimeter open space:** 17 feet along Harbor Blvd. – 20 feet required
- **Interior Side yard** (units 21 and 22)**:** 5 feet (abutting commercial uses) – none required
- **Building to building setback :** 6 to 8 feet - none required

The project is required to provide a minimum 20-foot landscape setback along Harbor Blvd., Hamilton Street and Charle Street. Landscaping for the site will be provided in form of street setbacks along Charle Street, Hamilton Street, and Harbor Boulevard. Each unit will also include a private open space area. The majority of the common areas are paved and hardscape surfaces, landscape pockets will be provided between garages as shown in Exhibit 7. An 8-foot block wall with landscaping screen is provided along the project's southern property line abutting the equipment rental business, Red-E-Rentals. Additional perimeter fencing consisting of 6-foot high block walls is provided along the project's remaining boundary, except for units 10, 12 and 22 where buildings on adjacent properties serve as perimeter walls. Exhibits 4 and 7 illustrate the proposed perimeter wall conditions. Although the project includes the above-

mentioned amenities, the project does not include the minimum amount of landscape adjacent to Hamilton and Harbor Blvd.

Development within PDC zone is subject to approval of a master plan by the Planning Commission. The master plan review includes site design including vehicular and pedestrian access, architectural design, building massing and landscaping. The proposed reduced setbacks mentioned above are subject to approval of the overall master plan and the connection it provides to adjoining properties and the public rights-of-way. In addition an Administrative Adjustment and Variance are necessary to permit the reduced setbacks.

Drainage, Water Quality and Utilities

The project site is currently divided from a drainage standpoint in approximately two equal halves. One half of the site in the south westerly area sheet-flows westerly towards Charle Street the other northeastern half sheet flows northeasterly towards Hamilton Street and Harbor Boulevard. The site as currently developed is approximately 70% impervious, with various improvements onsite that prevents infiltration.

The proposed project would not modify drainage flow patterns. The southwesterly half of the site will drain to the west in the proposed private drive toward Charle Street. The other half will flow north in the private drive toward Hamilton Street. “First flush” storm water runoff will be directed to bio retention/swale areas in the open space areas onsite near the project entries.

Higher storm flows (greater than first flush) will be picked up in a drop inlet and conveyed directly to the existing street gutter (either Charle or Hamilton). Once storm water flow is in the street gutters, it will follow the exiting drainage pattern: On Charle Street storm water flows north to an existing catch basin on the east side of Charle Street at SE corner of Hamilton and Charle. On Hamilton, the flow travels east to an existing catch basin on the south side of Hamilton, west of Harbor.

The project proposes approximately 62% impervious surfaces; therefore, the developed condition is expected be allow slightly higher infiltration than the existing condition. The impervious area is summarized below in the following table.

IMPERMEABLE AREA CALCULATION:	SF	AC	% TOTAL
UNIT FOOTPRINT TOTAL	20,012	0.46	30%
DRIVEWAY AREA TOTAL	9,584	0.22	14%
DRIVE AISLE + GUEST PARKING	10,621	0.24	16%
ENTRY FLATWORK	565	0.01	1%
SIDEWALK ALONG HARBOR	374	0.01	1%
IMPERMEABLE AREA TOTAL	41,156	0.94	62%

Tentative Tract Map

The project site is comprised of seven separate parcels that would be consolidated into one single lot and subdivided for condominium purposes with approval of Vesting Tentative Tract Map No. 17668 (VTTM 17668. VTTM 17668 also dedicates various easements, including a 7-foot landscape easement along Harbor Boulevard, improvements to Hamilton Street, and easements for ingress and egress.

2.5 – Project Phasing

Project construction is estimated to occur in three phases concurrently over approximately 24 months including demolition, removals, and project construction and development, as follows:

- Phase I (2 months)
  - Ongoing soil remediation
  - Demolition and removal
  - Site grading
- Phase II (6 months)
  - Improvements: Sewer, Water, Storm Drain, Streets, Dry Utilities
  - Perimeter walls, gates, perimeter landscape and model home construction immediately following improvements
- Phase III (7 months)
  - Production Home construction would follow home sales at an estimated pace of 4 per month

2.6 – Project Approvals

The City of Costa Mesa, as Lead Agency for the project, has discretionary authority over the project proposal. In order to implement this project, the Applicant would need to obtain, at a minimum, the following permits/approvals:

- Certification of a California Environmental Quality Act (CEQA) document
- Approval of the Master Plan (PA 13-29) for a 28 unit residential-use development;
- Approval of Vesting Tentative Tract Map 17668 for a one-lot subdivision for condominium purposes;
- Demolition Permits for onsite utilities and any other structures, as applicable;
- Grading, Improvement and Building Permits to grade and construct the project; and
- Approval of onsite and offsite utility plans and encroachment permits for improvements within the public right-of-way.

Exhibit 4: Site Plan

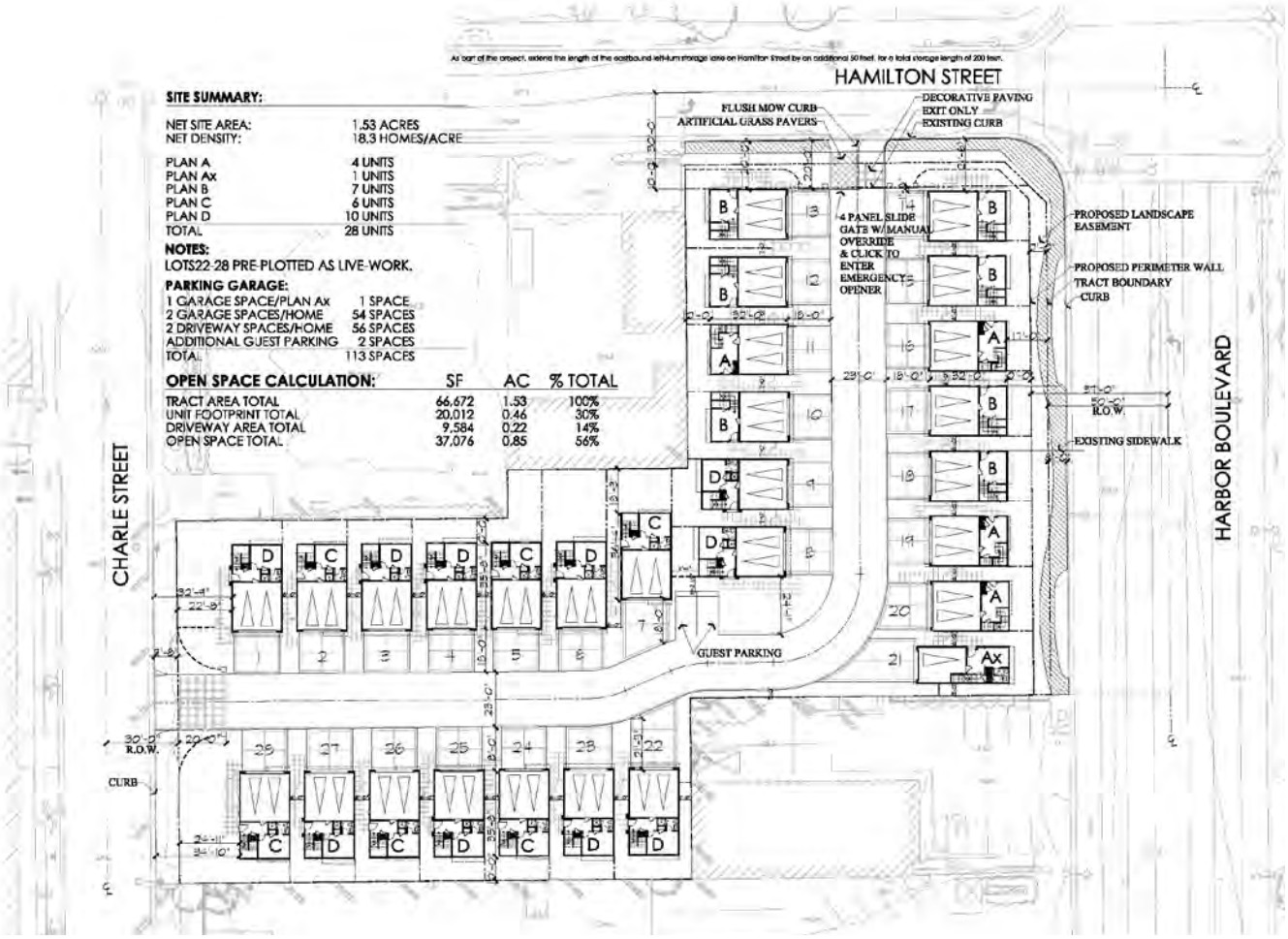


Exhibit 5: Sample Elevation Drawings

Charle Street

Hamilton Street

Exhibit 6: Sample Floor Plan C Plan
Live/Work Unit

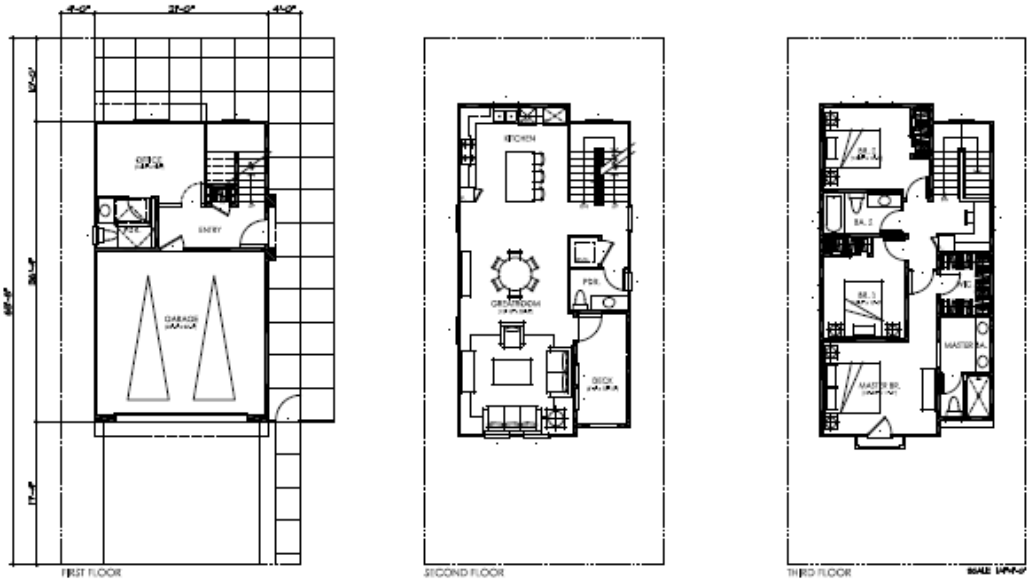


Exhibit 7: Conceptual Landscape Plan

Section 3: Initial Study Checklist

3.1 – Background

1. Project Title	City Commons, a 28-Unit Detached Condominium Residential Development
2. Lead Agency Name and Address	City of Costa Mesa Development Services Department 77 Fair Drive Costa Mesa, CA 92626
3. Contact Persons and Phone Number	Ms. Minoo Ashabi, AIA Principal Planner (714) 754-5610 Email: MinooAshabi@costamesa.co.gov
4. Project Location	2089 & 2099 Harbor Blvd and 511 Hamilton Street (southwest corner of Harbor Blvd. and Hamilton St.)
5. Project Sponsor's Name and Address	South Coast Communities
6. General Plan Designation	General Commercial
7. Zoning	Planned Development Commercial
8. Description of the Project	See Section 2, Project Description
9. Surrounding Land Uses and Settings	See Section 2, Project Description
10. Other public agencies whose approval is required (e.g. permits)	▪ South Coast Air Basin ▪ Santa Ana Regional Water Quality Control Board – Region 8

3.2 – 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" or "Less Than Significant With Mitigation Incorporated," as indicated by the checklist on the following pages.

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

3.3 – Lead Agency Determination

On the basis of this initial evaluation, the following determination is made:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.

☒ Although the proposed project could have a significant effect on the environment, there shall 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 shall be prepared.

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ 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.

	City of Costa Mesa
Signed	Agency
Minoo Ashabi, AIA, Principal Planner	
Signer's Name, Title	Date

Section 4: Environmental Analysis

Sections 4.1 through 4.18 analyze the potential environmental impacts associated with the project. The environmental issue areas that are evaluated are:

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

The environmental analysis in the following sections is patterned after the Initial Study Checklist recommended by the CEQA Guidelines, as amended, and used by the City of Costa Mesa in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.
- **Less than significant impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Less than significant with mitigation incorporated.** The development will have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially significant impact.** The development could have impacts, which may be considered significant, and therefore additional analysis is required to identify mitigation measures that could reduce potentially significant impacts to less than significant levels.

The following is a discussion of potential project impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

4.1 – Aesthetics

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion:

a) No Impact. A scenic vista is defined as a viewpoint that provides expansion views of a highly valued landscape for the benefit of the general public. Aesthetic components of a scenic vista generally include (1) scenic quality, (2) sensitivity level, and (3) view access. There are no General Plan-identified scenic vistas/views located in the project area. The project site is flat and is located in an urbanized area. The local vicinity consists of commercial uses and higher density residential uses. As a result, views of the project site from adjacent roadways would not be considered a scenic vista. The development of the project site would not directly alter any scenic vista. Therefore, project implementation would not have any effect on a designated scenic vista or scenic view.

b) No Impact. The project site is not located along a designated State scenic highway. There are minimal ornamental trees on the property, which does not include any protected species. No historic buildings or rock outcroppings are located at the project site. Therefore, project implementation would not damage scenic resources within a state scenic highway.

c) Less Than Significant Impact. The existing visual character of the area surrounding the project site is defined by the commercial uses along Harbor Boulevard and commercial and residential uses on Hamilton Street east and west of the project site. The commercial buildings have various uses (e.g., retail, office, restaurant), heights and massing, and often have associated monument or pole signs that equal or exceed the height of the buildings. The residential uses also vary in type (e.g., multifamily and single-family), height and massing.

The character of the project site is defined by the existing one- and two-story vacant commercial buildings that occupy the site and several mature trees along the west side of the site. The two-story building is approximately 30-feet tall. The buildings are visibly dilapidated and not maintained. The project area and

site do not exhibit a distinct architectural character and there is no uniformity of architectural styles. Along the western project boundary abutting Charle Street are 35-foot tall power poles and trees. No unique or scenic visual resources exist on the project site or in its surroundings.

A project is generally considered to have a significant visual/aesthetic impact if it substantially changes the character of the project site such that it becomes visually incompatible or visually unexpected when viewed in the context of its surroundings.

The proposed project includes demolition and removal of the existing vacant buildings and introduction of 28 three-story, single-family detached homes in a mature urban area. The architectural design of the buildings include elevations with varying but complementary colors, textures, building materials. The design is considered Craftsman style and the buildings include articulation that is consistent with that style. Additionally, a new block wall around the perimeter of the project site will be provided in order to screen the project and enhance the future residents' privacy. Landscaping consisting of ground cover, shrubs, and ornamental trees is also proposed along the interior street, along the sidewalks off Hamilton Street, Harbor Boulevard, and Charle Street. (See Elevations, Exhibits 5; Floor Plans, Exhibit 6; and Conceptual Landscape Plan, Exhibit 7, herein)

Although the proposed development would alter the visual character of the project site by demolishing the existing buildings and construction of 28 three-story single-family homes and other associated site improvements, the development would enhance and revitalize the site by constructing residential buildings with a unified architectural theme. Various design features to create a unique and aesthetically pleasing appearance are included. In so doing, the project is consistent with General Plan Community Design Element goals CD-7 and CD-7A, which encourage the promotion of unique identities in residential neighborhoods within Costa Mesa, and excellence in architectural design. The craftsman theme of the homes also makes the project consistent with Community Design Element policies CD-7A.1 and CD-7A.2, which seek to ensure that new residential structures are designed in architectural styles which reflect the City's diversity, yet are compatible in scale and character with existing buildings and the natural surroundings within residential neighborhoods and do not cause a substantial adverse impact on adjacent areas. The proposed 3-story, maximum 35-foot height is taller than other surrounding structures, but is not out of scale or character with the area due to the varying heights of buildings and the detached design with gaps between the structures. Therefore, the visual changes that would occur as a result of the proposed project would not degrade the visual character or quality of the site or its surroundings. Impacts to visual character would be less than significant.

The project would not produce shadows that would significantly impact neighboring properties. Project residences would be a maximum of 35 feet tall. Structures would be set back from the curb by a minimum of 20 feet along Hamilton Street, with wider setbacks of 24.5 feet along Harbor Boulevard and nearly 35 feet along Charle Street. The abutting commercial uses to the project site are not sensitive to shadows. The nearest residential structure, a two-story apartment building, would be approximately 83 feet away from the nearest residence on the west side of the project site. The community garden to the north of the project site is separated by a 10-foot rear yard setback and approximately 20-foot access drive from the nearest residence. Due to the broad setbacks from the sensitive uses, shadow impacts on nearby properties are considered less than significant.

d) Less than Significant Impact. The proposed project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. There are two primary

sources of light: light emanating from building interiors that pass through windows and light from exterior sources (e.g., street lighting, building illumination, and security lighting). Depending upon the location of the light source and its proximity to adjacent light-sensitive uses, light introduction can be a nuisance, affecting adjacent areas and diminishing the view of the clear night sky. Light spillage is typically defined as unwanted illumination from light fixtures on adjacent properties.

The site is surrounded by a community garden and an automotive service business to the north and west, respectively. Immediately south of the site is a medical facility and equipment rental business. The general surrounding vicinity includes commercial uses and higher density residential development. Existing lighting conditions in the project area include light emanating from building interiors, security lights and the surrounding commercial and residential land uses, as well as nearby street lighting. There are no residential uses located immediately adjacent to the project site and there are no additional sensitive land uses in the project's immediate vicinity.

The proposed development would create new sources of light due to light emanating from building interiors and light from exterior sources and exterior building mounted lights for site lighting (e.g. building illumination, and security lighting). The City considers building mounted lighting to be adequate for site lighting. No significant lighting is proposed beyond the building mounted lighting and some landscape lighting, which would consist of low voltage bulbs. Lighting proposed on site will be contained to the site with down-shields to protect surrounding properties from any resultant glare. Also, Standard Condition SC 4.1-1 requires preparation of a Lighting Plan and Photometric Study, in order to demonstrate that the proposed lighting meets minimum security lighting requirements and minimizes light/glare to residents. Compliance with Standard Condition SC 4.1-1 would reduce the proposed residential uses' potential spillover light impacts to less than significant. No significant adverse impacts are identified or anticipated and no mitigation measures are required.

Standard Condition

SC 4.1.-1 Prior to the issuance of Building Permits, the Applicant shall submit a Lighting Plan and Photometric Study for the approval of the City's Development Services Department. The Lighting Plan shall demonstrate compliance with the following:

- The mounting height of lights on light standards shall not exceed 18 feet in any location on the project site unless approved by the Development Services Director.
- The intensity and location of lights on buildings 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 deemed necessary for safety and security purposes on site.
- Glare shields may be required for select light standards.

4.2 – Agriculture and Forestry Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion:

a) No Impact. The Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation is charged with mapping Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance (Farmland) across the state. The project would not convert Farmland, as shown on the FMMP maps, to non-agricultural use, since the proposed project is not designated as such. The proposed project is not located on Important Farmland, as mapped by the State of California. The site is located in an area that is considered urbanized and is not located in an Agricultural Preserve area. There is no impact and no further analysis is warranted.

b) No Impact. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The current General Plan land use designation for the project area is General Commercial, which allows for a wide range of commercial uses, and mixed-use development projects that are intended to revitalize areas of the City, including residential development. The proposed project area is not under a Williamson Act contract. There is no impact and no further analysis is warranted.

c) No Impact. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The proposed project area has never been designated as forest land or timberland. The project site is zoned PDC, Planned Development Commercial. On February 4, 2014, the Costa Mesa City Council determined the project is consistent with the General Plan and could proceed with entitlement processing as a master plan pursuant to the Zoning Code as an all-residential development, subject to approval by the Planning Commission. No rezoning of the project site would be required as the proposed residential project is compatible with the site's General Plan and zoning designation. There is no impact and no further analysis is warranted.

d) No Impact. The project site is developed with three vacant commercial buildings. Project development would not cause the loss of forest land or conversion of forest land to non-forest use. Therefore, there are no impacts.

e) No Impact. The project site is developed with three vacant commercial buildings and the surrounding area is developed with commercial and residential uses. There is not forest land, mapped farmland or agricultural production onsite or adjacent to the site. Therefore, project implementation would have no impact related to the conversion of Farmland or to the conversion of Forest land to other uses.

4.3 – Air Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

a) No Impact. A project is consistent with the regional Air Quality Management Plan (AQMP) if it does not create new violations of clean air standards, exacerbates any existing violations, or delays a timely attainment of such standards. The site was previously used as an automobile storage yard, and automotive detailing and sales shop. A more detailed description of prior uses is provided in Section 2.2, Environmental setting. However, because the buildings are vacant, the land use assumption incorporated into the current AQMP did not include a current use and instead included assumptions related to demolition of the buildings, grading activities, and the proposed future residential and live/work use of the site. A conversion to residential use represents a changed circumstance in terms of air quality.

The proposed project consists of a 28-unit residential development, replacing three vacant commercial buildings. The project site is located in the South Coast Air Basin and is governed by the South Coast Air Quality Management District (SCAQMD). The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs.

SCAQMD is currently initiating an early development process for the 2015 AQMP. Until the 2015 AQMP is adopted, the applicable Air Quality Plan is the 2012 AQMP, which was adopted by the SCAQMD Governing Board on February 1, 2013. The purpose of the 2012 AQMP is to set forth a comprehensive program that will lead the region into compliance with federal air quality standards for 8-hour ozone (O_3)

and fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$). The 2012 AQMP is designed to accommodate expected future population, housing, and employment growth and is based on the Southern California Association of Governments' (SCAG's) 2012 regional population, housing and employment projections contained in their 2012 Regional Transportation Plan (RTP).

The two principal criteria for conformance to an AQMP are 1) whether the project would result in an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards; and 2) whether the project would exceed the assumptions in the AQMP.

The proposed City Commons project would not generate short-term and long-term emissions of volatile organic compounds (VOC), oxides of nitrogen (NOx, which are ozone precursors), or $PM_{2.5}$ that could potentially cause an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards. (refer to discussion in Item 4.3.b, below)

Projects such as the proposed City Commons project do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary measure by which impact significance of planned growth is determined. The change to regional air quality from the proposed project is immeasurably small due to the size of the project relative to the air quality basin. A project specific analysis of air quality impacts were conducted for this project and demonstrates that project construction or long-tern operational emissions are below the SCAQMD regional emissions thresholds for air quality standards (refer to discussion in Item 4.3.b, below). Therefore, the project is considered consistent with the region's AQMP and no impacts would occur.

Given that the proposed project would not significantly alter the population or employment projections considered during the development of the AQMP, and considering the minor emissions attributable to the proposed project during operation (refer to discussion in Item 4.3.b, below), there are no impacts associated with AQMP consistency.

b) Less than Significant Impact. The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Air quality impacts would include construction exhaust emissions generated from diesel- and gasoline-powered equipment construction equipment, vegetation clearing, grading, construction worker commuting, construction material deliveries, and operational activities upon project completion. Fugitive dust emissions include particulate matter and are a potential concern because the project is in a non-attainment area for PM-10 and PM-2.5, as well as ozone.

<u>Construction</u>
Dust is typically the primary concern during construction of new homes and infrastructure. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). These parameters are not known with any reasonable certainty prior to project development and may change from day to day. Any assignment of specific parameters to an unknown future date is speculative and conjectural.

Average daily PM_{10} emissions during site grading and other disturbance average about 10 pounds per acre. This estimate presumes the use of reasonably available control measures (RACMs). The project would be required to adhere to standard SCAQMD regulations, such as implementing SCAQMD Rule 403 and the use of best available control measures (BACMs) for fugitive dust from construction activities (see SC-1 below). With the use of BACMs, fugitive dust emissions can be reduced to 1-2 pounds per day per acre disturbed.

Construction emissions were calculated by using California Emissions Estimator Model (CalEEMod) version 2013.2.2. CalEEMod is a computer program accepted by the SCAQMD that can be used to estimate anticipated emissions associated with land development projects in California. CalEEMod has separate databases for specific counties and air districts. The Orange County database was used for the proposed land use consisting of 28 single family homes, assuming that the entire project would be built at once to assess the maximum potential impacts.

The CalEEMod was developed by the SCAQMD and provides a model to calculate both construction emissions and operational emissions from a residential or commercial land use project. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions. The default equipment fleet and schedule durations determined by CalEEMod 2013.2.2 that were used for modeling are shown in the table below.

Table 4.3-1: Construction Activity Equipment Fleet

Phase Name and Duration	Equipment
Demolition (20 days) 8,000 s.f. demo	1 Concrete Saw
	3 Loader/Backhoes
	1 Dozer
Grading (4 days) 2,000 CY Import	1 Grader
	1 Dozer
	1 Loader/Backhoe
	1 Crane
Construction (200 days)	1 Forklift
	1 Generator Set
	3 Welders
	1 Loader/Backhoe
Paving (10 days)	1 Cement Mixer
	1 Paving Equipment
	1 Paver
	1 Loader/Backhoe

Utilizing the indicated equipment fleet shown in Table 4.3-1, above, the following worst case daily construction emissions are calculated by CalEEMod 2013.2.2 and are listed in Table 4.3-2, below. Peak daily construction activity emissions are estimated to be well below SCAQMD - CEQA thresholds without the need for added mitigation.

Table 4.3-2: Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions - 2015	ROG	NOx	CO	SO_2	PM-10	PM-2.5
2015						
Unmitigated	39.8	41.5	27.9	0.1	7.7	4.2
Mitigated**	39.8	41.5	27.8	0.1	4.6	2.7
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
** assumes water use on exposed surfaces three times daily						

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24 hour per day, 365 days per year, 70 year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur.

Based on the above analysis, project construction and operations would neither violate any air quality standard nor contribute substantially to an existing or projected air quality violation. Impacts are less than significant.

Operational Impacts

Operational emissions for the proposed residential use, including the associated onsite and offsite emissions sources were calculated using CalEEMod2013.2.2 (assuming a project build-out year of 2015). Emissions would be from motor sources and area sources (natural gas, hearth, landscape, consumer products, and architectural coating). Motor sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Area sources would be generated due to an increased demand for electrical energy and natural gas with development of the project. The air quality analysis assumed the default trip generation rate for single-family homes. Calculated emission levels are shown in the table below. The project would not cause any operational emissions to exceed their respective SCAQMD - CEQA significance thresholds. Operational emission impacts are less than significant.

The project would also be required to adhere to standard SCAQMD regulations, such as implementing SCAQMD Rule 445 (see Standard Conditions below), which would prohibit permanently installed wood burning devices into any new development. SC-3 requires compliance with Title 24 of the California Code of Regulations.

Table 4.3-3: Daily Operational Impacts

	Operational Emissions (lbs/day)						
Source	**ROG**	**NOx**	**CO**	**SO_2**	**PM-10**	**PM-2.5**	**CO2**
Area	8.5	0.2	16.4	0.0	2.2	2.2	792.5
Energy	0.0	0.2	0.1	0.0	0.0	0.0	262.3
Mobile	1.0	2.5	12.1	0.0	2.1	0.6	2,535.7

	Operational Emissions (lbs/day)						
Source	**ROG**	**NOx**	**CO**	**SO_2**	**PM-10**	**PM-2.5**	**CO2**
Total	**9.5**	**2.9**	**28.6**	**0.1**	**4.2**	**2.7**	**3,590.4**
SCAQMD Threshold	55	55	550	150	150	55	-
Exceeds Threshold?	No	No	No	No	No	No	NA

Carbon Monoxide Hot Spot Thresholds

Carbon monoxide (CO) "hot spot" analyses are performed to determine if CO emissions from traffic generated by a project in combination with CO emissions from existing and forecasted regional traffic do exceed state or federal standards for CO at any traffic intersection impacted by the project. Project concentrations may be considered significant if a CO hot spot intersection analysis determines that project generated CO concentrations cause a localized violation of the state CO 1-hour standard of 20 ppm, state CO 8-hour standard of 9 ppm, federal CO 1-hour standard of 35 ppm, or federal CO 8-hour standard of 9 ppm.

As identified above, the project proposes 28 single-family homes. The project Traffic Study, January 10, 2014 states that the project would generate 267 daily trips, which would not result in traffic impacts. Therefore, because the project would not worsen the LOS at nearby intersections, the project would not require a CO hotspot analysis. Project impacts are less than significant.

Standard Condition

SC 4.3-1 Prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SC 4.3-2 The Project shall comply with Title 24 of the California Code of Regulations established by the energy conservation standards.

SC 4.3-3 All construction contractors shall comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Fugitive Dust. All grading (regardless of acreage) shall apply best available control measures for fugitive dust in accordance with Rule 403. To ensure that the project is in full compliance with applicable SCAQMD dust regulations and that there is no nuisance impact off the site, the contractor would implement each of the following:

- Moisten soil not more than 15 minutes prior to moving soil or conduct whatever watering is necessary to prevent visible dust emissions from exceeding 100 feet in any direction.
- Apply chemical stabilizers to disturbed surface areas (completed grading areas) within five days of completing grading or apply dust suppressants or vegetation sufficient to maintain a stabilized surface.

- Water excavated soil piles hourly or cover with temporary coverings.
- Water exposed surfaces at least twice a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.
- Wash mud-covered tired and under-carriages of trucks leaving construction sites.
- Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud, which would otherwise be carried off by trucks departing project sites.
- Securely cover loads with a tight fitting tarp on any truck leaving the construction sites to dispose of debris.
- Cease grading during period when winds exceed 25 miles per hour.
- Water exposed surfaces three times per day.

c) Less than Significant Impact. As discussed in Response 4.3.b, the project is not anticipated to exceed any SCAQMD criteria pollutant emission thresholds. The projected emissions of criteria pollutants as a result of the proposed project are expected to be well below the emissions thresholds established for the region. Cumulative emissions are part of the emission inventory included in the AQMP for the project area. Therefore, there would be no cumulatively considerable net increase of the criteria pollutants that are in nonattainment status in the South Coast Air Basin.

Localized Significance Threshold

In addition to the mass daily emissions thresholds established by the SCAQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of CO, NOx, PM10, and PM2.5 are examined based on SCAQMD's localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and this methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific emissions. The SCAQMD provides the LST lookup tables for one, two, and five acre projects emitting CO, NOX, PM2.5, or PM10. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres perform air quality dispersion modeling to assess impacts to nearby sensitive receptors.

For the purposes of an LST analysis, the SCAQMD considers receptors where it is possible that an individual could remain for 24 hours, such as a residence. The project is located within Source Receptor Area (SRA) 18, North Coastal Orange County. The project would disturb approximately 1.53 acre. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, the following table (Table 4.3-5) should be used to determine the maximum daily disturbed-acreage for comparison to LSTs.

Table 4.3-5: Maximum Daily Disturbed Acreage per Equipment Type

Equipment Type	Acres/8-hr-day
Crawler Tractor	0.5

Graders	0.5
Rubber Tired Dozers	0.5
Scrapers	1

The proposed project would result in 1.0 disturbed daily acre during peak construction grading activity (1 dozer x 0.5 + 1 grader x 0.5 = 1.0 acre disturbed).

The closet sensitive receptors to the project site are residential uses located to the west, approximately 50 feet (15.2 meters) from the western project boundary across Charle Street. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Because 25 meter construction LST values are the closest available to the project conditions, they were used in the analysis below.

The localized assessment methodology limits the emissions in the analysis to those generated from onsite activities. The onsite emissions during construction and operation are compared with the localized significance thresholds and summarized in Table 4.3-5. As shown in the table, emissions during construction and operation do not exceed the localized significance thresholds.

Table 4.3-5: Localized Significance Analysis (Construction and Operation) (pounds/day)

LST 1.0 acres/ 25 meters North Coastal Orange County	CO	NOx	PM-10	PM-2.5
Max On-Site Emissions *	647	92	4	3
Demolition				
Unmitigated	22	30	2	2
Mitigated**	22	30	2	2
Threshold Exceeded?	No	No	No	No
Grading				
Unmitigated	14	22	6	4
Mitigated**	14	22	3	2
Threshold Exceeded?	No	No	No	No
Construction				
Unmitigated	15	22	1	1
Mitigated**	15	22	1	1
Threshold Exceeded?	No	No	No	No
Paving				
Unmitigated	9	15	1	1
Mitigated**	9	15	1	1
Threshold Exceeded?	No	No	No	No
Operations				
Area and Energy Sources	16.5	0.4	2.2	2.2
Threshold Exceeded?	No	No	No	No

*excludes construction commuting, vendor deliveries and emissions associated with grading haul trucking.
**water exposed surfaces three times per day

d) Less than Significant Impact. The proposed project would not expose sensitive receptors to substantial pollutant concentrations (see Items 4.3.a through 4.3.c, regarding criteria pollutants). The project's construction and operations would not result in any significant air pollutant emissions, and there are no nearby sensitive receptors (i.e. residences) that would be significantly impacted by such emissions.

With regard to potentially hazardous air emissions, small amounts of hazardous air pollutants are contained in the diesel exhaust of the construction equipment to be used to prepare the site and develop the proposed housing units. Diesel exposure risk is calculated based on a 70-year lifetime with the receptor located outdoors permanently. Resident exposure to construction equipment exhaust emissions will only be for several months. The combination of limited exhaust particulate emissions, brief resident exposure and generally good daytime dispersion conditions renders hazardous emissions impacts as less-than-significant.

For those reasons, impacts are less than significant and an assessment of potential human health risks attributable to emissions of hazardous air pollutants is not required.

e) Less than Significant Impact. The project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during

construction activities, and the temporary storage of typical solid waste (refuse) associated with the project's (long-term operational) uses.

Standard construction requirements would minimize odor impacts resulting from construction activity. It should be noted that any construction odor emissions generated would be temporary, short-term, and intermittent in nature and would cease upon completion of construction activity and is thus considered less than significant. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed project construction and operations would be less than significant and no mitigation is required.

4.4 – Biological Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting:
The majority of the site is disturbed, vacant land that has been used for parking and storage of vehicles and other equipment by a roofing contractor that previously occupied a portion of the site. Another area of the site with the address 511 Hamilton had a single-family home; however, the home was demolished in 2003. Currently existing buildings on the site include a 5,909 square-foot medical building that was

constructed in 1955, a 1,183 square-foot office and 900 square foot shop that were both constructed in 1959. The buildings and site are vacant and not currently in use. See section 2.2 for further information.

The site is surrounded by urban development consisting of commercial and residential uses. Average temperatures range from January low of 46.9°F to August highs of 73.4°F. Average annual precipitation is approximately 11 inches; precipitation falls primarily as rain with most precipitation occurring between the months of November and April (WRCC 2013). The project site is generally flat. The following information sources were reviewed:

- The Newport Beach, California USGS 7.5-minute topographic quadrangle;
- Aerial photography of the project site (Google Earth);
- California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB) records for the Newport Beach, California 7.5-minute topographic quadrangle and the surrounding eight quadrangles;
- CDFW California Wildlife Habitat Relationship System (CWHR); and
- US Fish and Wildlife Service (USFWS) list of endangered and threatened species that may occur, or be affected by the project in the Newport Beach, California quadrangle.

Discussion:

a) No Impact. The project site contains limited ornamental landscaping along the eastern boundary along Charle Street and in the central portion near the site's project boundary. The project site is fully disturbed. No suitable habitat for any special-status plant or wildlife species occurs within the project-site. Therefore, project implementation would not impact either directly or through habitat modifications, any plant or wildlife species identified as a candidate, sensitive, or special status.

b) No Impact. The northeastern portion of the project site is developed with commercial buildings and the southwestern portion of the site had a single-family home that was demolished in 2003 and is now a vacant lot. There are no riparian habitats or other sensitive natural communities located within the project area identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Therefore, there would be no impacts to any of these habitat types.

c) No Impact. The project site has been previously graded and does not contain any natural hydrologic features or federally protected wetlands as defined by Section 404. The site is devoid of wetlands, marshes, and vernal pools. Therefore, there would be no impact to any federally protected wetlands under the Clean Water Act.

d) Less than Significant Impact with Mitigation. The project site is fully developed with commercial buildings on the northeast portion of the site and a vacant parcel in the southwest portion with mature ornamental trees along the western boundary abutting Charle Street and along the southeastern boundary. The site and surrounding areas are urban and do not provide habitat for the movement of any native resident or migratory fish or wildlife species. Although the project site may provide some habitat for limited wildlife movement and live-in habitat, particularly for reptile and avian species and small to medium mammals which are adapted to urban settings, the project site does not function as a wildlife corridor on a regional scale. A wildlife corridor is defined as a piece of habitat, usually linear in nature that connects two or more habitat patches that would otherwise be fragmented.

Implementation of the proposed project would be subject to the provisions of the Migratory Bird Treaty Act (MBTA), which prohibits disturbing or destroying active nests. Project implementation must be accomplished in a manner that avoids impacts to active nests during the breeding season. As such, the project is required to comply with the MBTA. Avoiding impacts can be accomplished through a variety of means, including restricting tree removal to periods (August 15-February 15) outside the avian nesting season or through performance of nesting bird surveys prior to clearing occurs during the nesting season. Mitigation Measure BIO-1 has been included to ensure that any potential impacts to nesting birds would be reduced to a level considered less than significant.

Mitigation Measure

MM BIO-1 Migratory Bird Treaty Act. In the event that the City Commons project construction or grading activities should occur within the active breeding season for birds (i.e., February 15–August 15), a nesting bird survey shall be conducted by a qualified biologist prior to commencement of construction activities. If active nesting of birds is observed within 100 feet (ft) of the designated construction area prior to construction, the construction crew shall establish an appropriate buffer around the active nest. The designated project biologist shall determine the buffer distance based on the specific nesting bird species and circumstances involved. Once the project biologist verifies that the birds have fledged from the nest, the buffer may be removed. Prior to commencement of grading activities and issuance of any building permits, the City of Costa Mesa (City) Economic and Development Services Director, or designee, shall verify that all project grading and construction plans include specific documentation regarding the requirements of the Migratory Bird Treaty Act (MBTA), that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.

e) No Impact. The project site does not contain any biological resources or tree species that are considered sensitive and protected by local ordinances. Therefore, project implementation would not conflict with any local policies or ordinances and no further analysis is required.

f) No Impact. The City of Costa Mesa is not within the jurisdiction of an adopted Habitat Conservation Plan or Natural Community Conservation Plan (NCCP). Therefore, project implementation would not conflict with the provisions of an approved local, regional, or state habitat conservation plan.

4.5 – Cultural Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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 §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion:

a) No Impact. The City's historic and cultural resources are illustrated on General Plan EIR Exhibit 4.10-1, Properties that meet the Standards for Listing in the National Register, and outlined in General Plan EIR Table 4.10-1, Historic Resources Inventory. The project site is not identified as a historically/culturally significant resource. A review of historic maps, aerial photographs and building records indicates that the structures located in the northeast portion of the site were constructed in the mid to late 1950s.

The existing structures were assessed for historic significance and do not appear to meet any of the four criteria (A-D) for listing on the California Register of Historic Resources (CR) nor do they appear to meet any criteria for local listing. The structures were built as functional buildings for local businesses and therefore, are not associated with events (A) that have made a significant contribution to the broad patterns of history. The businesses are not recognized locally, and would not be considered historically significant and therefore, the structures are not associated with a person(s) (B) significant in the past. The structures are not unusual or exceptional in any respect and therefore, they do not embody a distinctive characteristic of a type, period, or method of construction (C). Finally, the structures are not capable of providing information important in prehistory or history (D). The structures on the project site do not appear to meet any of the criteria for listing on the CR or local listings and further study is not deemed necessary.

Therefore, project implementation would not cause a substantial adverse change in the significance of a historic resource.

b) Less than Significant Impact. This project will not cause a substantial adverse change in the significance of an archeological resource, because no resources of significance have been identified on the site. Original grading of the parcel during development removed all sediments with the potential to contain in situ cultural resources. As a result, there is no potential for previously unknown subsurface

archaeological resources to be encountered during site preparation activities. Further, the proposed project site is not located in an area of the City that has been identified as being sensitive for archaeological resources (refer to Exhibit 4.10-1 of the City's General Plan). Therefore, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource, and no mitigation is required. Additionally, the project would be subject to compliance with Standard Condition SC 4.5-1, which provides direction in the event archeological resources are unearthed during project subsurface activities. Therefore, project implementation would result in a less than significant impact involving an adverse change in the significance of an archaeological resource.

Standard Condition

SC 4.5-1 In the event that archaeological resources 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.

c) Less than Significant Impact. As noted above, the project site has already been subject to extensive disruption and contains artificial fill materials. Additionally, there is no evidence of unique geologic features on the project site. Given the highly disturbed condition of the site, the potential for project implementation to impact an as yet unidentified paleontological resource is considered remote. The project would be subject to compliance with Standard Condition SC 4.5-2, which provides direction in the event paleontological resources are unearthed during project subsurface activities. Therefore, project implementation would result in a less than significant impact involving the potential destruction of a paleontological resource.

Standard Condition

SC 4.5-2 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 paleontological resources impact mitigation plan (PRIMP) for the review and approval by the City prior to resuming excavation activities.

d) Less than Significant Impact. The probability that construction of the project would impact any human remains is low, given the degree of past disturbance of the site, as it is developed with commercial buildings. In the event that human remains are encountered during earth removal or disturbance activities, the California Health and Safety Code Section 7050.5 requires that all activities cease immediately and a qualified archaeologist and Native American monitor be contacted immediately. The Coroner would also be contacted pursuant to Sections 5097.98 and 5097.99 of the Public Resources Code relative to Native American remains. Should the Coroner determine the human remains to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC would then be required to contact the most likely descendant of the deceased Native American, who would then serve as consultant on how to proceed with the remains. Compliance with the established regulatory framework (i.e., California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98), as required by Standard Condition SC 4.5-3, would reduce potential impacts involving disturbance to human remains would be less than significant.

Standard Condition

SC 4.5-3 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.

4.6 – Geology and Soils

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

A Geotechnical Investigation was prepared for the project site by Southern California Geotechnical; refer to Appendix B, Geotechnical Investigation. The purpose of the Geotechnical Due Diligence was to evaluate the project site soil conditions and provide preliminary geotechnical engineering conclusions and recommendations.

Discussion:

a. i) No Impact. Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely along active faults,

and typically occurs during earthquakes of magnitude five or higher. Ground rupture only affects the area immediately adjacent to a fault.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist Priolo (AP) Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). The project site is not affected by a State-designated AP Earthquake Fault Zone. Additionally, the Geotechnical Investigation report concluded that fault related surface rupture at the project site is considered to be low. Therefore, project implementation would not expose people or structures to potential substantial adverse effects involving rupture of a known earthquake fault.

a. ii) Less than Significant Impact. Southern California is considered a seismically active region and is potentially subject to strong ground acceleration from earthquake events along major regional faults in southern California. The nearest identified fault line to the project site is the Newport Inglewood Fault Zone (located about 3 miles southwest of the site), which is capable of generating significant seismic activity, as it is a Type B fault.

The principal seismic hazard to the subject property is strong ground shaking from earthquakes produced by local faults. It is likely that the project site will be subject to ground shaking by future earthquakes produced in Southern California. A moderate to large magnitude earthquake on a regional fault could cause moderate to severe seismic shaking in the City, thus exposing people or structures on the project site to potential substantial adverse effects, including the risk of loss, injury, or death. The possibility of moderate to high ground acceleration or shaking in the City may be considered as approximately similar to the Southern California region, as a whole. The intensity of ground shaking on the project site would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project site. The Newport Inglewood Fault, which is the nearest source fault to the project site, is a Type B1 fault with a magnitude of 6.9. Based on this factor, the Geotechnical Investigation report states that proposed structures should be designed and constructed to the prevailing standards and seismic design requirements, as appropriate.

Numerous controls would be imposed on the proposed development through the permitting process. Pursuant to CMMC Section 5-1, Construction Codes Adopted, the City has adopted various codes, including the 2010 Edition of the California Building Code, for the purpose of "prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures." According to Standard Condition 4.6-1, the project is subject to compliance with the requirements of the California Code of Regulations. In addition, the provisions of the various Codes specified in CMMC Section 5-1, as amended by the City, constitute the City's "Building Regulations." Therefore, the City would regulate the proposed development (and lessen potential seismic and geologic impacts) through compliance with the City's Building Regulations, as well as the Alquist-Priolo Earthquake Fault Zoning Act and local land use policies. Additionally, the Geotechnical Investigation concluded development of the site is considered feasible from a soils and geologic engineering standpoint, provided that the recommendations stated therein are incorporated into the design and are implemented in the field. Standard Condition 4.6-2 requires implementation of the project's Geotechnical Investigation recommendations. The effects of strong

ground shaking would be sufficiently mitigated for the proposed development, since it would be designed and constructed in conformance with the City's Building Regulations, current engineering standards, and the Geotechnical Investigation report recommendations. Project implementation would result in a less than significant impact.

Standard Condition

SC 4.6-1 The project shall comply with the requirements of the California Code of Regulations, Title 24, also known as the 2013 California Building Code, as amended by the City of Costa Mesa.

SC 4.6-2 Prior to the issuance of Grading Permits, the project applicant shall provide the City of Costa Mesa Department of Building Safety the geotechnical investigation of the project site detailing recommendations for remedial grading in order to reduce the potential of onsite soils to cause unstable conditions. Design, grading, and construction shall be performed in accordance with the requirements of the California Building Code applicable at the time of grading, appropriate local grading regulations, and the recommendations of the geotechnical consultant as summarized in a final written report, subject to review by the City of Costa Mesa Department of Building Safety.

a. iii) Less than Significant Impact. Liquefaction is the phenomenon whereby soils lose shear strength and exhibit fluid-like flow behavior. Other types of seismic-related ground failure include ground rupture (as discussed in Section 4.6.a.i), landslide (as discussed in Section 4.6.a.iv), dynamic ground subsidence (or settlement), and lateral spreading. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and grain size characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking.

Loose granular soils are most susceptible to liquefaction, and the phenomenon is generally restricted to saturated or near-saturated soils at depths of less than 50 feet. As stated in the Geotechnical Investigation prepared for the project (see Appendix B), the subsurface conditions encountered at the site are not conducive to liquefaction. Additionally, the site is not located within a designated liquefaction zone as designed by the California Geological Survey. Liquefaction is not considered to be a significant design concern for this project and no further analysis is warranted. The project also must comply with Standard Condition SC 4.6-1, which requires compliance with the California Building Code.

a. iv) No Impact. The proposed project would not have any risks associated with landslides. Landslides are the downslope movement of geologic materials. The stability of slopes is related to a variety of factors, including the slope's steepness, the strength of geologic materials, and the characteristics of bedding planes, joints, faults, vegetation, surface water, and groundwater conditions. The project area is relatively flat terrain where landslides have not historically been an issue; therefore, no significant impacts are anticipated with respect to seismic-related (or other) landslide hazards, and no further analysis is warranted.

b) Less than Significant Impact. Although the majority of the project site is paved, construction activities could result in substantial soil erosion or the loss of topsoil if the site is not properly designed. The potential impacts of soil erosion would be minimized through implementation of Development Code requirements. Specifically, as required in Standard Condition 4.6-3, the applicant would prepare a

Stormwater Pollution Prevention Plan (SWPPP) in compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. The SWPPP would prescribe temporary Best Management Practices (BMPs) to control wind and water erosion during and shortly after construction of the project. A preliminary Water Quality Management Plan (WQMP) will be prepared to specify permanent BMPs to control erosion and sedimentation once construction is complete (see Section 4.9 for related discussion). The impact on soil erosion is less than significant and no further analysis is warranted. The project is subject to compliance with the City's Standard Condition related to NPDES requirements.

Standard Condition

SC 4.6-3 The project shall comply with the NPDES requirements, as follows:

- Construction General Permit Notice of Intent (NOI) Design: Prior to the issuance of preliminary or precise grading permits, the project applicant shall provide the City Engineer with evidence that an NOI has been filed with the Storm Water Resources Control Board (SWRCB). Such evidence shall consist of a copy of the NOI stamped by the SWRCB or Regional Water Quality Control Board (RWQCB), or a letter from either agency stating that the NOI has been filed.
- Construction Phase Storm Water Pollution Prevention Plan (SWPPP): Prior to the issuance of grading permits, the applicant shall prepare a SWPPP that complies with the Construction General Permit and will include at a minimum the following:
  - Discuss in detail the BMPs planned for the project related to control of sediment and erosion, non-sediment pollutants, and potential pollutants in non-storm water discharges;
  - Describe post-construction BMPs for the project;
- Explain the maintenance program for the project's BMPs
- List the parties responsible for the SWPPP implementation and the BMP maintenance during and after grading. The project Applicant shall implement the SWPPP and modify the SWPPP as directed by the Construction General Permit.

c) Less than Significant Impact. Refer to Responses 4.6.a.ii and 4.6.a.iii above for discussions of potential impacts related to liquefaction and earthquake-induced landslides, respectively. As the site is relatively level, there is no potential for landslides or slope instabilities. Additionally, as the project site has a low potential for liquefaction, the potential for lateral spreading is also low. Following compliance with the City's Building Regulations pursuant to Standard Condition 4.6-1, project implementation would not expose people or structures to potential substantial adverse effects involving unstable geologic units or soils.

d) Less than Significant Impact. Expansive (or shrink-swell) behavior is attributable to the water-holding capacity of clay minerals and can adversely affect the structural integrity of facilities. In general, compliance with Building Code requirements would minimize potential impacts to project facilities. Site soils are determined by the Geotechnical Investigation to be very low expansive potential. Impacts would be less than significant and no further analysis is warranted.

e) No Impact. The project does not propose to use septic tanks or alternative wastewater disposal systems. The project would connect to the existing City sanitary sewer system for wastewater disposal; therefore, no impacts would occur. No further analysis is warranted.

4.7 – Greenhouse Gas Emissions

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion:

a) Less than Significant Impact. The project would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that would have a significant impact on the environment. In September 2006, the State enacted the Global Warming Solutions Act (Assembly Bill 32), which was created to address greenhouse gases emitted by human activity and implicated in global climate change. The Act requires that the greenhouse gas (GHG) emissions in California be reduced to 1990 levels by 2020. This is part of a larger plan in which California hopes to reduce its emissions to 80 percent below 1990 levels by 2050. On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). However, this project is not considered a stationary source.

Additionally, through the California Climate Action Registry (CCAR, now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. GHG sources are categorized into direct sources (i.e., from the project site itself and from activities directly associated with operations) and indirect sources (i.e., not directly associated with the project, but impacted by its operations). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

As discussed in Section 4.3 (Air Quality) of this document, the proposed project's primary contribution to air emissions is attributable to construction activities, including the delivery of construction material to the site. Project construction would result in GHG emissions from construction equipment, delivery of construction materials, and construction workers' personal vehicles traveling to and from the site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. The expected project equipment during construction is listed in Table 4.3-1.

The primary emissions that would result from the proposed project occur as carbon dioxide (CO_2) from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (N_2O) and methane (CH_4), as well as other GHG emissions related to vehicle cooling systems. To account for

variations in the effectiveness of these gases on climate change, a measure called CO_2-equivalent (CO_2e) is used.

Pursuant to Section 15064.4 of the State CEQA Guidelines, the treatment of GHG emissions follows a process of quantification of project-related GHG emissions, determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. The CalEEMod computer model was used to quantify construction-period and operational GHG emissions. Modeling predicts construction activities would generate an overall total of 248.8 metric tons CO_2e emissions. SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized construction emission is 8.3 metric tons CO_2e. Below is a table identifying the total operational and annualized construction emissions.

Table 4.7-1: Operational Emissions

Consumption Source	MT CO_2(e) tons/year
Area Sources	9.4
Energy Utilization	100.4
Mobile Source	382.6
Solid Waste Generation	14.9
Water Consumption	12.8
Annualized Construction	8.3
Total	**528.1**
Significance Threshold	3,000

The screening level operational threshold is 3,000 metric tons (MT) of CO2e per year. The total operational emissions and annualized construction emissions of CO_2e per year are well below this threshold and are considered less than significant.

b) Less than Significant Impact. The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration which the proposed project does not exceed. As shown in the discussion in Section 4.7a) above, the proposed project would not exceed the SCAQMDs draft threshold of significance for greenhouse gases. The Scoping Plan states, “The 2020 goal was established to be an aggressive, but achievable, midterm target, and the 2050 GHG emissions reduction goal represents the level scientists believe is necessary to reach levels that would stabilize the climate” (ARB 2008). The year 2020 GHG emission reduction goal of AB 32 corresponds with the mid-term target established by Executive Order S-3-05, which aims to reduce California’s fair-share contribution of GHGs in 2050 to levels that would stabilize the climate.

As described in Item 4.7.a, the project is well below the 3,000 Metric Tons of Carbon Monoxide equivalent (MTCO2e per year significance threshold. Because GHG emissions associated with implementation of the project would not exceed the 3,000 MTCO2e per year screening threshold, the project is determined to be consistent with the SCAQMD’s GHG emission policy and any potential impacts would be less than significant. No further analysis is warranted.

4.8 – Hazards and Hazardous Materials

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Phase I Environmental Site Assessments (Phase I ESAs) are intended to identify potential environmental liabilities associated with the presence of hazardous materials, their use, storage, and disposal at and in

the vicinity of a property, as well as regulatory noncompliance that may have occurred at a property. The goal of a Phase I ESA is to identify the presence or likely presence of any hazardous substances or petroleum products on a property that may indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum product into the soil, groundwater, or surface water of the property. A Phase I ESA was prepared by Clayton Group Services in 2005 for the project site. It identified a historic on-site underground storage tank, previous automotive repair uses, and groundwater contamination. Based on the findings, the Phase I recommended soil and groundwater sampling to evaluate potential impacts from the previous onsite activities.

Subsequent to the Phase I, a Phase II Environmental Site Assessments (Phase II ESA) was prepared for the project site by Stantec Consulting Corporation (Phase II Site Assessment Former Randy's Automotive, 2089 Harbor Boulevard, Costa Mesa, California, March 5, 2012); refer to Appendix C. The Phase II ESA confirmed that there was free product in several wells on the site, and that there was one area with elevated volatile organic compounds (VOCs) in a known source area with a former underground storage tank, located on the eastern parcel near the existing buildings. The Phase II ESA was prepared as a follow-up after implementing the recommendations made in the Remedial Action Plan (RAP) that was developed by SECOR (now Stantec) in April 2006; refer to Appendix C. Secor's RAP recommended soil vapor extraction and free product removal as remediation alternatives for the property. To date, soil vapor extraction and product removal has been performed. Stantec supervised the extraction of hydrocarbon vapors from subsurface soil using a thermal/catalytic oxidizer connected to five wells. This method has reduced soil vapor concentrations to very low to non-detect levels. A total of approximately 7,077 pounds of fuel hydrocarbons has been removed from the subsurface with levels now less than significant; the vapor extraction work effort is complete.

The groundwater beneath the site is contaminated with petroleum hydrocarbons. Currently, remediation efforts on the site include product removal from groundwater pursuant to the approved corrective action plan. Product removal system is conducted using what is referred to as down-hold total fluid pneumatic pumps to extract the product from two wells. Hand bailing and absorbent socks are also being used. The product is transferred to an above ground storage tank that is installed within a secondary containment for holding. The product is removed periodically by a licensed waste hauler and transported to and disposed of at a State licensed disposal facility.

In addition to the Phase I and II ESAs, an Asbestos-Containing Materials and Lead-Based Paint Survey was prepared by Advanced GeoEnvironmental, Inc., dated August 9, 2013. Advanced GeoEnvironmental surveyed the three existing buildings on the project site to evaluate the presence of asbestos and lead-based paint in the building materials. Samples of the materials and surface coating were collected to test for asbestos fibers and lead. No asbestos was discovered during the survey for any of the materials on all three buildings. Lead-based paint with concentrations exceeding the allowable concentration of lead in paint (0.06% dry weight) was identified in the surface coatings of what was formerly the sales office for the automotive shop. The other two smaller single-story buildings did not contain lead-based paint that exceeds the allowable concentration.

Discussion:

a) Less than Significant Impact. The proposed project is not expected to result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The proposed

residential project would introduce the use of household cleaning products and other materials routinely used in building maintenance and landscaping, such as degreasing solvents, fertilizers, pesticides. However, the proposed project would not involve the routine transport, use, or disposal of significant amounts of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act.

During construction, the proposed project would involve the transport of general construction materials (i.e., concrete, wood, metal, fuel, etc.) as well as the materials necessary to construct the proposed project. Construction activities would involve the use of hazardous materials such as fuels and greases for the fueling and servicing of construction equipment. Such substances may be stored in temporary storage tanks/sheds that would be located on the project site. Although these types of materials are not acutely hazardous, they are classified as hazardous materials and create the potential for accidental spillage, which could expose workers. The use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in accordance with federal, state, and county regulations. No extremely hazardous substances (i.e., governed under Title 40, Part 335 of the Code of Federal Regulations) are anticipated to be produced, used, stored, transported, or disposed of as a result of project construction. As needed, Material Safety Data Sheets for all applicable materials present on-site would be made readily available to on-site personnel as required by the SBCFD Hazardous Materials Division. During construction of the facility, non-hazardous construction debris would be generated and disposed of in local landfills. Sanitary waste would be managed using portable toilets, with waste being disposed of at approved sites.

The project would be required to comply with federal, state, and county laws, ordinances, and regulations; therefore, the project would result in less-than-significant impacts related to the creation of significant hazards through the routine transport, use, or disposal of hazardous materials. Once site remediation efforts are complete and construction is complete, operations associated with the proposed project would not create significant hazards.

b) Less than Significant Impact with Mitigation Incorporated. The proposed project would not 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. The site is currently in active remediation to remove contaminants from groundwater. Stantec's letter, dated January 7, 2014 provides a status update of the site remediation activities (Appendix C).

Soil vapor extraction and product removal was conducted with Stantec's supervision of the extraction of hydrocarbon vapors. The remediation activity has reduced soil vapor concentrations to very low to non-detect levels and the soil vapor extraction system was shut down the end of September 2013. Stantec continued with the remediation efforts by operating a product pumping system, hand bailing, and using absorbent socks. To date, approximately 1,400 gallons of a gasoline/diesel mixture of product has been removed, transported, and disposed of at a State licensed disposal facility.

The Stantec letter also indicates that if site development and occupancy occurs in the near future (i.e., less than two years) then it is likely that ongoing environmental activities may include groundwater and soil vapor monitoring at select locations, which would not impact the project site plan. Additionally, it is possible that limited product recovery activities from select wells will also be required. Any long-term monitoring or extraction wells would be located outside of building footprints. Exhibit 8 illustrates the location of existing ground water monitoring-extraction wells. Any wells needed for future monitoring

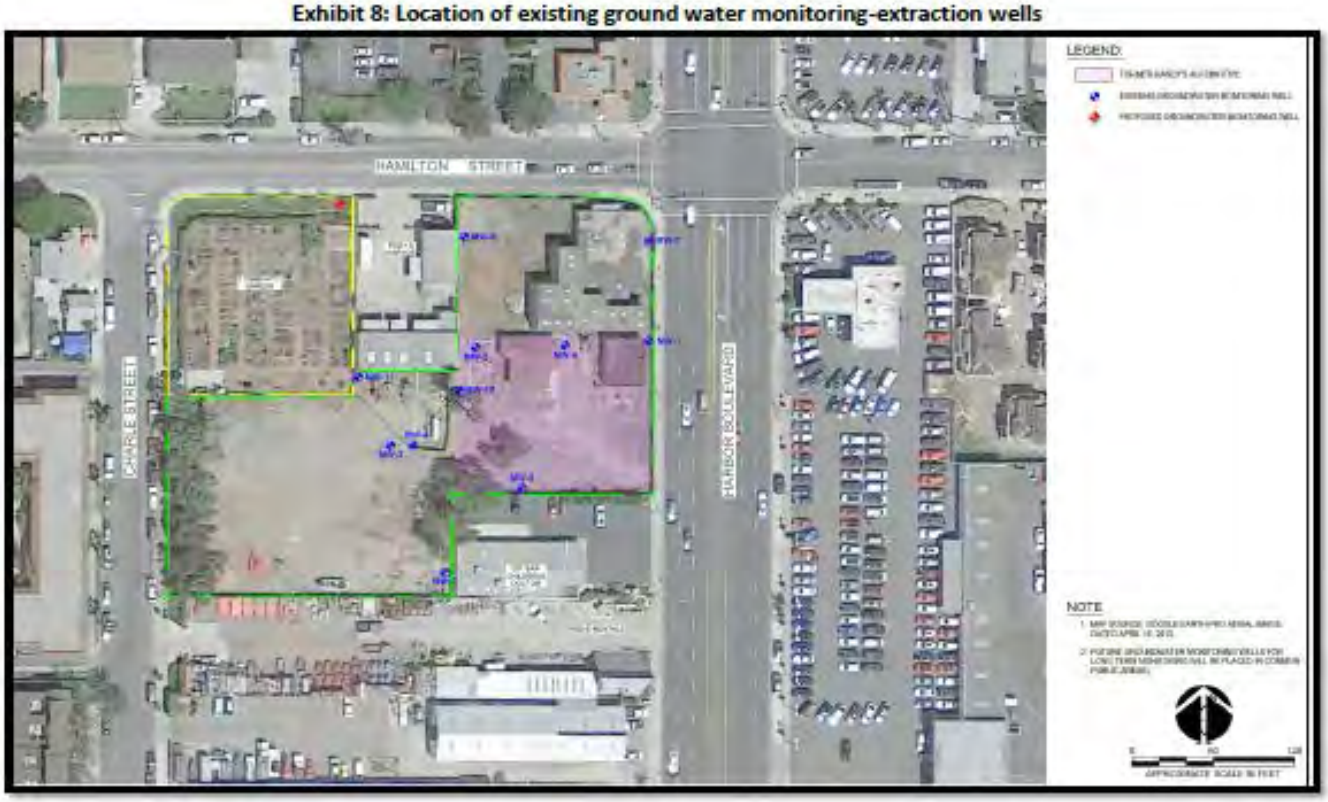
that happen to fall within private areas, building footprints, or drive aisles will be abandoned per agency standards and relocated to easily accessible common area locations that do not impact owners or access. The access points for these post development wells, if any, will be placed in a flush, at-grade box/can that is similar to a water valve can. This does not require any temporary storage of recovered product on the property.

Upon completion of the current site remediation efforts, the proposed project would not generate or require the use or storage of significant quantities of hazardous substances. Additionally, any proposed use or construction activity that might use hazardous materials is subject to permit and inspection by the Orange County Health Care Agency. Compliance with regulations and standard protocols during the storage, transportation, and usage of any hazardous materials would ensure no substantial impacts would occur.

Overall, compliance with the established regulatory framework, Standard Conditions SC 4.8-1, 4.8-2, and the specified Mitigation Measures would ensure that project implementation would result a less-than significant impact associated with creating a significant hazard to the public or the environment.

Exhibit 8: Monitoring Wells

Exhibit 8: Location of existing ground water monitoring-extraction wells



Standard Conditions

SC 4.8-1 During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.

SC 4.8-2 During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.

Mitigation Measures

MM HAZ-1 Prior to demolition activities, removal and/or abatement of buildings with lead-based paints and hazardous materials associated with the existing building materials shall be conducted by a qualified environmental professional in consultation with the Costa Mesa Fire Department. A hazardous materials abatement specification shall be developed by the qualified environmental professional, in order to clearly define the scope and objective of the abatement activities.

MM HAZ-2 Prior to investigations, demolition, or renovation, all activities shall be coordinated with Dig Alert (811).

MM HAZ-3 Visual inspections for areas of impact to soil shall be conducted during site grading. If unknown or suspect materials are discovered during construction by the contractor that are believed to involve hazardous wastes or materials, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the City Engineer and Costa Mesa Fire Department;
- Secure the area(s) in question; and
- Implement required corrective actions, including remediation if applicable.

MM HAZ-4 Prior to Building Permit issuance, additional soil and soil vapor sampling shall be performed in the area of the former Randy's Automotive repair facility in the eastern portion of the project site. If investigation results show elevated soil and soil vapor concentrations and the subsequent Health and Human Risk Assessment (HHRA) shows calculated residential risk levels significantly greater than $1x10^{-6}$, then vapor barriers and subsequent monitoring beneath select residential units may be required.

MM HAZ-5 On the basis of MM HAZ-4, if it is determined that soil vapor barriers are required, measures to assure the proper installation, monitoring and continued proper functioning

of such barriers shall be identified and submitted to the City prior to issuance of grading permits.

c) No Impact. There is no school located with ¼ mile of the project. The nearest schools are Rea Elementary School, which is about 0.5 mile west of the site and Page Private School, also about 0.5 miles west of the project site and one block north of Rea Elementary School. Additionally, the future occupants of the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing school because the residential project does not propose the use of hazardous materials. There would be no impact related to hazardous emissions or the handling of hazardous materials near schools resulting from implementation of the project.

d) Less than Significant Impact with Mitigation Incorporated. The project site is listed on the Cortese list of hazardous waste sites as Randy's Automotive Property (T0605988113) at 2089 Harbor Boulevard. According to the State Water Resources Control Board's Geotracker Database, the site is currently a cleanup program site with an open remediation status, indicating that there is active remediation activity on the site and the case is not yet closed. The Geotracker website indicates that four of the nine wells on site contain floating product, predominantly in the diesel fuel range. There is also methyl tertiary butyl ether contamination in eight of the nine contaminated wells, benzene in four of the eight wells, and tertiary butyl alcohol in one well. Compliance with the established regulatory framework and Mitigation Measure HAZ-1 through HAZ-5 would ensure that project implementation would create a less than significant hazard to the public or the environment.

Mitigation Measure:

MM HAZ-6 Prior to issuance of the building permit, the applicant shall submit clearance letter from the Water Resources Control Board, stating that the vapor and water remediation has been completed to the satisfaction of state requirement for residential development.

MM HAZ-7 Prior to issuance of the grading permit, the applicant shall obtain approval, from the appropriate City Departments, of a plan to implement and fund any ongoing monitoring or maintenance of hazard mitigation measures required by the Water Resource Control Board Clearance Letter, stating that the vapor and water remediation has been completed.

e) Less than Significant Impact. The project site is approximately 2.6 miles southwest of John Wayne Airport, and is located outside of the Runway Protection Zones (Clear Zones) and Safety Zones. However, the project site would be within the Federal Aviation Regulation (FAR) Part 77 Notification Area, which encompasses a 20,000-foot radius around John Wayne Airport. Because the project does not include construction or alteration of the site as listed under Section 77.9, nor does it exceed the notice criteria under Section 77.17, notification of the FAA is not required. Therefore, project implementation would not result in an airport-related safety hazard for people residing at the proposed development.

f) No Impact. The proposed project area is not located within the vicinity of a private airstrip; therefore, it would not result in a safety hazard for people residing or working in the project area. The nearest private airstrip is John Wayne Airport, located approximately 2.6 miles to the northeast of the project site. There is no impact and no further analysis is warranted.

g) No Impact. Activities associated with the proposed project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. The project would not result in any closures of existing roadways that might have an effect on emergency response or evacuation plans in the vicinity of the project site. In addition, all vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Accordingly, implementation of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. There is no impact and no further analysis is warranted.

h) No Impact. The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, because there are no wildlands adjacent to this site. The project site is in an urban area and is not located in a fire safety overlay district. Therefore, it is not adjacent to wildlands or near the wildlands/urban interface, and would not expose people, structures or infrastructure to risks of wildland fires. There would be no impact and no further analysis is warranted.

4.9 – Hydrology and Water Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death	☐	☐	☒	☐

involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation of seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion:

a) Less than Significant Impact. This section is divided into analyses for Short-Term (Construction) Impacts and Long-Term (Operational) Impacts.

Short-term Construction

Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via storm runoff into receiving waters.

The National Pollutant Discharge Elimination System (NPDES) permit program was established to control water pollution by regulating point sources that discharge pollutants into Waters of the U.S. Pursuant to Section 402(p) of the Clean Water Act (CWA), which requires regulations for permitting of certain stormwater discharges, the Stormwater Resource Control Board (SWRCB), issued the statewide NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No 2009-009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002).

Under this Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of stormwater from construction sites with a disturbed area of one or more acres and are required to either obtain individual NPDES permits for stormwater discharges or be covered by the Construction General Permit. During construction, the total disturbed soil area would be 1.53 acres. Because the proposed project disturbs greater than 1 acre of soil, the project site is subject to the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

Coverage under the Construction General Permit is accomplished by completing and filing Permit Registration Documents (PRDs) with the SWRCB prior to commencement of construction activities. Among the PRDs are a Risk Assessment, a Site Map, and a Storm Water Pollution Prevention Plan (SWPPP). The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. The Construction General Permit requires dischargers to assess the risk level of a project based on both sediment transport and receiving water risk, and each project would then be categorized into Risk Level 1, 2, or 3, with increased monitoring required for certain higher-risk sites.

Pursuant to Standard Condition SC 4.9-1, the project would be required to prepare a SWPPP and implement construction Best Management Practices (BMPs) that are detailed in the SWPPP during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving

waters. The SWPPP also must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

CMMC Section 8-32. Control of urban runoff, requires all new development and significant redevelopment within the City must be undertaken in accordance with the Orange County Drainage Area Management Plan (DAMP), including but not limited to the Development Project Guidance; and any conditions and requirements established by the development services department and the public services department which are reasonably related to the reduction or elimination of pollutants in storm water runoff from the project site. Prior to the City's issuance of a Grading or Building Permit for the project, the Development Services Department and Public Services Department would review the plans and impose terms, conditions, and requirements, as needed, in accordance with CMMC Section 8-32. The City also enforces its Master Plan of Drainage and CMMC Title 15 Chapter III addresses drainage protocols within the City during construction of new projects.

Compliance with the NPDES and CMMC requirements would reduce the project's construction related impacts to water quality to a less than significant level.

Long-Term Operations

Expected pollutants associated with the proposed residential use include suspended solids/sediments, nutrients, pathogens (bacteria/viruses), pesticides, oil and grease, trash and debris, heavy metals, and organic compounds, which are typically associated with residential development. Primary pollutants of concern based on expected pollutants and downstream receiving water impairments include sediments, nutrients, pesticides, metals, and pathogens.

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer (drain) systems (MS4s). The Orange County Flood Control District, the County of Orange, and the City of Costa Mesa, along with 34 other incorporated cities therein (Permittees) discharge pollutants from their MS4s. In Costa Mesa, storm water and non-storm water enter and are conveyed through the City's MS4 and other cities' MS4s to the Pacific Ocean. These discharges are regulated under countywide waste discharge requirements contained in Order No. R8-2009-0030 (as amended by Order No. R8-2010-0062), Waste Discharge Requirements for the County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County within the Santa Ana Region Area-wide Urban Storm Water Runoff Orange County, which was approved on May 19, 2011. Order No. R8-2009-0030, which serves as an NPDES permit, has expired but remains in effect until the Orange Water Board adopts a new permit.

The MS4 permit require the discharger to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what BMPs will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

The Permit requires the development and implementation of a program addressing storm water pollution issues in development planning for private projects. The primary objectives of the municipal storm water program requirements are to: 1) effectively prohibit non-storm water discharges; and 2) reduce the discharge of pollutants from storm water conveyance systems to the MEP (MEP statutory standard). The County Model WQMP was developed as part of the municipal storm water program to address storm water pollution from new Development and Redevelopment by the private sector, which the City of Costa uses as a template for project WQMPs.

The Model WQMP describes the process for preparing Conceptual or Preliminary WQMPs and final Project WQMPs for certain new development and significant redevelopment projects called "Priority Projects," which the project would be considered. As a Priority Project, the project would be required to prepare a WQMP that specifies the proposed BMPs to mitigate storm water pollution from the proposed development. The Model WQMP contains a list of the minimum required BMPs that must be used for a development project. Further, as noted above, the proposed development would be undertaken in accordance with the Orange County DAMP. These requirements are reflected in standard condition SC 4.9-1. Additionally, the project would be subject to compliance with the City's Master Plan of Drainage and CMMC Title 15 Chapter III. Compliance with these requirements would reduce the project's potential impacts to water quality to less than significant levels.

Standard Condition

SC 4.9-1 In order to comply with the 2003 DAMP, the proposed project shall prepare a Storm Drain Plan, Stormwater Pollution Prevention Plan (SWPPP), and Water Quality Management Plan (WQMP) conforming to the current National Pollution Discharge Elimination System (NPDES) requirements, prepared by a Licensed Civil Engineer or Environmental Engineer, which shall be submitted to the Department of Public Works for review and approval.

- The SWPPP shall be prepared and updated as needed during the course of construction to satisfy the requirements of each phase of development.
- The plan shall incorporate all necessary Best Management Practices (BMPs) and other City requirements to eliminate polluted runoff until all construction work for the project is completed. The SWPPP shall include treatment and disposal of all dewatering operation flows and for nuisance flows during construction.
- A WQMP shall be maintained and updated as needed to satisfy the requirements of the adopted NPDES program. The plan shall ensure that the existing water quality measures for all improved phases of the project are adhered to.
- Location of the BMPs shall not be within the public right-of-way.

b) Less than Significant Impact. The City's General Plan EIR Exhibit 4.8-2, Water Supply Agency Boundaries indicates that Mesa Consolidated Water District supplies water to the project site. The Water District prepared a 2010 Urban Water Management Plan, which provides information on the present and future water resources and demands and assesses water resource needs for the Water District. According to the Mesa Consolidated Water District's 2010 Urban Water Management Plan, main sources of water supply are groundwater pumped from wells within the Lower Santa Ana River Groundwater Basin (Orange County Basin) and imported water from Metropolitan Water District of Southern California through Municipal Water District of Orange County. The Mesa Consolidated Water District relies on approximately 15,900 acre-feet of groundwater from the Orange County Basin each year. This local source of water supply meets approximately 82 percent of the District's total annual demand.

The project would result in a less than significant increase in water demand (approximately 9,008 gallons per day[1]). Mesa Water has concluded in a will serve letter dated March 25, 2014 that they are capable of meeting the water demands of their customers in normal, single dry, and multiple dry years between 2015 and 2035. Further, Mesa Water's groundwater supply is anticipated to significantly increase with completion of the Colored Water Treatment Facility expansion. Therefore, project implementation would not substantially deplete groundwater supplies. The project would not interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Project implementation would result in a less than significant impact involving groundwater.

c) Less than Significant Impact. There are existing catch basins on Hamilton Street and Harbor Boulevard, and on Charle Street at Hamilton Street. All of the project's site flow currently ends up in these two catch basins and the project will be designed such that drainage will flow in the same manner in the post-development condition. The proposed project is designed so that the amount of runoff would not increase from the existing runoff conditions. Also, there is no stream or river on the site or in the vicinity that would be affected by construction of the project. The project is required to submit and implement an erosion control plan, and construction will be subject to a SWPPP to ensure that no erosion or sedimentation will result from the project. Impacts would be less than significant and no further analysis is warranted.

d) Less than Significant Impact. As described in the project description, the proposed project would not modify drainage flow patterns. Similar to the existing condition, the southwesterly half of the site will drain to the west in the proposed private drive toward Charle Street. The other half will flow north in the private drive toward Hamilton Street. The project proposes approximately 62% impervious surfaces, which is less than the 70% impervious surfaces on the site today; therefore, the developed condition is expected be allow slightly higher infiltration than the existing condition. As a result the project would not result in any substantial increase in runoff that could cause flooding on-or off-site.

IMPERMEABLE AREA CALCULATION:	SF	AC	% TOTAL
UNIT FOOTPRINT TOTAL	20,012	0.46	30%
DRIVEWAY AREA TOTAL	9,584	0.22	14%
DRIVE AISLE + GUEST PARKING	10,621	0.24	16%
ENTRY FLATWORK	565	0.01	1%
SIDEWALK ALONG HARBOR	374	0.01	1%
IMPERMEABLE AREA TOTAL	41,156	0.94	62%

The proposed project would not impact any drainage. No stream or river traverses the site or is located in its vicinity. Additionally, the project's drainage facilities would be subject to compliance with the City's Master Drainage Plan, as stated in Standard Condition SC 4.9-2 and review/approval by the City Engineer. Further, CMMC Section 15-64 establishes a Drainage Fee for development within the City that would require construction of additional drainage facilities. The Drainage Fee would be imposed "on a pro rata, per acre basis, upon any parcel or other piece of property for which an owner, developer or other applicant has requested approval to develop or redevelop, or to construct or reconstruct any structure

[1] Malcolm Pirnie, Inc., *Mesa Consolidated Water District 2010 Urban Water Management Plan*, May 2011, Page 2-5.

upon such property, prior to, and as a condition of, approval being granted for such development or construction." The Project would not result in a significant increase in impervious surface areas on the site and would be subject to compliance with the CMMC provisions, thus, would result in less than significant impacts. Compliance with SC 4.9-2 and CMMC Section 15-64 would result in less than significant impacts.

Standard Condition

SC 4.9-2 Prior to approval of Plans, the project shall fulfill the City of Costa Mesa Drainage Ordinance No. 06-19 requirements.

e) Less than Significant Impact. The project will not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. The proposed infrastructure improvements and connection to existing catch basins on Hamilton Street and Harbor Boulevard and on Charle Street at Hamilton Street are adequate to handle the anticipated flows. All necessary drainage improvements both on and off site will be required as conditions of the construction of the project, and will be subject to the same dust control measures, Best Management Practices for water quality and other standards and requirements that apply to on-site construction. There will be adequate capacity in the local and regional drainage systems so that downstream properties are not negatively impacted by any increases or changes in volume, velocity or direction of storm water flows originating from or altered by the project. No further analysis is warranted.

f) Less than Significant Impact. As described in section a), above, the proposed project would not otherwise substantially degrade water quality because appropriate measures relating to water quality protection, including erosion control measures have been required. No further analysis is warranted.

g) No Impact. The project will not 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, because the subject property is not mapped as occurring within a flood hazard zone. The FIRM panel for the site (06059C0268J) has not been printed. The Orange County map index (06059CIND0B, effective date 12/3/2009) states that this panel is not printed as it contains no Special Flood Hazard Areas (i.e., there are no 100-year flood zones within the area covered by the panel). No further analysis is warranted.

h) No Impact. The project will not place structures within a 100-year flood hazard area which would impede or redirect flood flows, because the site is not located within a 100-year flood hazard area and any area identified as being potentially affected by a 100-year storm.

i) No Impact. The project would not 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, because the project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake or sheet flow situation. There is no impact and no further analysis is warranted.

j) No Impact. A seiche is an earthquake or slide-induced wave that can be generated in an enclosed body of water of any size from swimming pool, to a harbor, or lake. There is no enclosed body of water that is located in the vicinity of the project site.

A tsunami is a sea wave generated by an earthquake, landslide, volcanic eruption, or even by a large meteor hitting the ocean. An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. Tsunamis generally affect coastal communities and low-lying (low-elevation) river valleys in the vicinity of the coast. Buildings closest to the ocean and near sea level are most at jeopardy. According to General Plan EIR Exhibit 4.8-5, the project site is not located within an area subject to a seiche, tsunami, or mudflow. According to the California Geological Survey Orange County Tsunami Inundation Maps, the project site is not located within a tsunami inundation area. Potential risk from mudflow (i.e., mudslide, debris flow) does not exist within the project area, as steep slopes are not located on or in proximity to the project site. Therefore, project implementation would not expose people or structures to potential hazards from inundation by seiche, tsunami, or mudflow. No impact is anticipated.

4.10 – Land Use and Planning

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☒	☐	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	☐	☐	☐	☒

Discussion:

a) Less Than Significant With Mitigation Incorporated. The project would develop residential uses in an area surrounded by commercial, higher density residential uses and light industrial uses. The site is currently developed with commercial buildings that have been vacant for several years. No pedestrian or vehicular connection is available to the adjacent properties other than via the public streets adjoining the project site. The project site is an irregular parcel containing several lots that will be consolidated for the 28-unit residential development. Access to the site will be provided from the adjoining public streets on the north and west sides of the site. The project site is unique in that there are three street frontages along Harbor Boulevard, Hamilton Street, and Charle Street. The street block includes an amalgamation of nonresidential uses adjacent to the project site, which are not considered a community. The project would provide vehicular and pedestrian connections to the Charle and Hamilton Streets and include construction of a new sidewalk on Charle Street along the project boundary where there is not currently a sidewalk. This would enhance pedestrian circulation in the area, but a division between the adjoining properties would remain. The abandoned buildings have contributed to loitering, graffiti and trash collection on Charle Street, which is anticipated to be addressed with the new development.

In order to enhance the logical future development in the area by creating linkages between adjoining properties and implement General Plan Community Design Element Policy CD-8B.1, which specifically encourages connections between adjacent residential and non-residential uses, mitigation measure MM LU-1 requires that Conditions, Covenants and Restrictions (CC&Rs) be prepared, which among other standard requirements would require the reservation of the right for the City to create a pedestrian and vehicular connection between the project site and the property to the south between Lots 21 and 22. The City could exercise its right to implement this connection when a compatible use is proposed on the property to the south.

The project does not otherwise include a linear feature that would act as a barrier to mobility within the area or divide an established community. The proposed project would complement the existing pattern of residential development in the area by constructing residential units of a comparable size. With the incorporation and compliance with MM No. LU-1 the effect of the project on the existing community would result in less than significant impacts.

Mitigation Measure

MM LU-1 Prior to the issuance of a certificate of occupancy, Conditions, Covenants and Restrictions (CC&Rs) must be prepared and submitted the Development Services for review and approval, which requires the reservation of the right for the City to require a pedestrian and vehicular connection between Lots 21 and 22 on the project site and the southerly property with future development of that site.

b) No Impact. The project site is unoccupied with the exception of three vacant buildings. The Land Use Element of the City's General Plan identifies the general locations and intensities of land uses within the City. According to the City of Costa Mesa General Plan Land Use Map, the site is designated as General Commercial. This designation is intended to permit a wide range of commercial uses that serve both local and regional needs. The General Commercial land use designation also allows residential and other noncommercial uses that are complementary uses through the Planned Development process. The General Plan's Land Use Element notes the following regarding noncommercial development projects in the General Commercial land use designated areas:

> *"As complementary uses, residential and other noncommercial uses may be allowed through the Planned Development process. Residential densities in planned development projects shall not exceed 20 dwelling units per acre. The corresponding population density is up to 50 persons per acre. Noncommercial uses would be subject to the same floor area standards as commercial uses in this designation."*

The project proposes a density of 18.3 dwelling units per acre, thus it is within the maximum density specified for this land use designation. The following analysis evaluates the project for consistency with other relevant specific goals and objectives of the General Plan Land Use Element.

- **Goal LU-1, Land Use**: It is the goal of the City of Costa Mesa to provide its citizens with a balanced community of residential, commercial, industrial, recreational, and institutional uses to satisfy the needs of the social and economic segments of the population and to retain the residential character of the City; to meet the competing demands for alternative developments within each land use classification within reasonable land use intensity limits; and, to ensure the long term viability and productivity of the community's natural and man-made environments.

  The project is primary a residential use with seven live/work units on a site designated General Commercial, which allows residential uses as a complementary use. The live/work units include an approximately 200 square feet of work space on the ground floor that could be used as an office or a service use. The project would provide additional new housing opportunities in a mixed-use area on a site bounded by commercial uses that has been vacant for years and as such does not contribute to a balanced community. The project site is considered infill; therefore, development of the site with residential protects the viability of the natural environment and

decreases the need for infrastructure expansion. The project is consistent with this General Plan goal.

Objective LU-1A: Establish and maintain a balance of land uses throughout the community to preserve the residential character of the City at a level no greater than can be supported by the infrastructure.

The project is an infill residential project. As concluded in Sections 4.14, Public Services, 4.16, Transportation/Traffic and Section 4.17, Utility and Service Systems, adequate infrastructure would be available to serve the project. Therefore, the project is consistent with this General Plan objective.

- **Goal LU-2, Development:** It is the goal of the City of Costa Mesa to establish development policies that will create and maintain an aesthetically pleasing and functional environment and minimize impacts on existing physical and social resources.

  The project would redevelop an infill site that currently has vacant, visually unappealing buildings with a residential community designed with Craftsman architecture that includes building articulation, different colors, textures and building materials, all contributing to an appealing visual design. Landscaping consisting of complementary grass, shrubs, and ornamental trees is also proposed along the interior street, along the sidewalks off Hamilton Street, Harbor Boulevard, and Charle Street. Therefore, the project is supportive of this General Plan goal.

- **Objective LU-2A:** Encourage new development and redevelopment to improve and maintain the quality of the environment.

  Pursuant to the environmental impact analysis provided herein, the project would not result in significant adverse environmental impacts, with mitigation incorporated. As an infill residential development of a site that is currently developed, it would not result in the loss of any habitat or require extensive infrastructure improvements to provide service to the site. The project is consistent with this objective.

  In addition to the above analysis, the City Council determined on February 4, 2014 that a 100% residential project without a live/work or other commercial uses would be consistent with the General Plan and could proceed with entitlement processing as a master plan pursuant to the Zoning Code.

  According to the City's Zoning Map, the project site is zoned PDC, "Planned Development Commercial". The PDC Zone states the following, for residential development:

  > "As complementary uses, residential (density maximum of 20 dwelling units per acre) and industrial uses as well as other commercial and noncommercial uses of a similar or supportive nature to the uses noted in this subsection may be allowed if the Planning Commission approves the uses as compatible with the Planned Development Commercial project based on compatible uses listed in the General Plan for the applicable land use designation subject to FAR limits…"

The site is surrounded by various uses in the vicinity and the proposed residential project is consistent with the suggested density for the site's land use designation and PDC zone.

Based on the above, the project would not conflict with any existing surrounding land uses, or any planned surrounding land uses as designated in the General Plan. Other than those mentioned in this Initial Study, the project site is not subject other applicable policies or regulations.

c) **No Impact.** The project is not subject to a NCCP/HCP. See discussion in Section 4.4f, *Biological Resources*.

4.11 – Mineral Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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?	☐	☐	☐	☒
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:

a) No Impact. The project site is not located within a State-designated Mineral Resource Zone. In addition, the project site is developed with commercial buildings in the northeastern portion of the project site. The existing site conditions do not support mineral extraction operations. This condition precludes the possibility of related impacts. No impact would occur and no further analysis is warranted.

b) No Impact. The Costa Mesa 2000 General Plan does not identify the project site as a mineral resource zone. The site is not in a specific plan or other local land use plan and is therefore not delineated as a locally important mineral resource recovery site. No impacts would occur and no further analysis is warranted.

4.12 – Noise

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

An Exterior Noise Analysis was prepared for this project by Bridgenet International, February, 12, 2014, which serves as the bases for the analysis below. The Acoustical Study is provided as Appendix D.

Discussion:

a) Less than Significant Impact. The project Noise Analysis evaluates the projects ability to comply with the City of Costa Mesa's General Plan Noise Element and noise ordinance for residential development. In addition, this analysis provides specific noise mitigation measures to ensure that the noise levels comply with the required City standards. The City's Noise Element of the General Plan (adopted January 2002) specifies an exterior noise standard of 65 dB CNEL and an interior noise standard of 45 dB CNEL with closed windows for single family residential land use. The exterior noise standard for single family residential land use is limited to private yards. Additionally, the City's Noise Ordinance establishes exterior and interior noise standards within Title 13-Chapter XIII. The intent of the Noise Ordinance is to control unnecessary, excessive and annoying sounds generated on one property from

impacting an adjacent property and to protect residential areas from noise sources other than transportation sources. Table 4.12-1, below, includes the residential noise standards.

Table 4.12-1: City of Costa Mesa's Exterior and Interior Noise Standards

Time Period	Exterior Noise Standards (dBA)					Interior Noise Standards (dBA)		
	L50	L25	L8	L2	LMax	L8	L2	LMax
Daytime (7 AM – 11 PM)	55	60	65	70	75	55	60	65
Nighttime (11 PM – 7 AM)	50	55	60	65	70	45	50	55

In the event that the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the noise levels shall be reduced by 5 dBA. It also states corrections for time characteristics. No person shall create noise or allow the creation of noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level measured on any other residential property to exceed:

1. The exterior noise standard for a cumulative period of more than 30 minutes in any hour (L50);
2. The exterior noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour (L25);
3. The exterior noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour (L8);
4. The exterior noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour (L2); or
5. The exterior noise standard plus 20 dBA for any time period (LMax).
6. The interior noise standard for a cumulative period of more than 5 minutes in any hour (L8);
7. The interior noise standard plus 5 dBA for a cumulative period of more than 1 minute in any hour (L2); or
8. The interior noise standard plus 10 dBA for any time period (LMax).

If the measured ambient level exceeds any of noise limit categories 1-4 and 6-7 above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event measured ambient level exceeds noise limit categories 5 and 8 above, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

The noise ordinance exempts several categories of noise sources, including construction activities which take place between the hours of 7 a.m. and 7 p.m. Monday through Friday and 9 a.m. to 6 p.m. on Saturday. Construction activities are prohibited for all hours on Sundays and federal holidays. Standard Condition SC 4.12-1 would be applied to ensure that noise impacts are less than significant during the construction phase.

Relative to the future residential use and potential noise impacts on the future residents, Exhibit 6, below, identifies the noise measurement locations that were used in the Noise Analysis to assess the site's ambient noise levels. These measurement locations are also used in Tables 4.13-2 through Table 4.13-5 that follows, which presents a summary of the ambient sound measurements. Values that exceed the noise standards are shown in red. The City of Costa Mesa's daytime exterior noise standards are listed on the bottom row of the table in **bold** for comparison.

Exhibit 9: Noise Measurement Locations

Table 4.12-2: Ambient Noise Measurement Results for Location 1

Date	Start Time	End Time	L50	L25	L8	L2	LMax	Leq
2/3/2014	9:00 AM	10:00 AM	61.9	62.2	63.0	64.8	76.0	61.6
2/3/2014	10:00 AM	11:00 AM	54.4	55.3	58.1	62.5	72.0	55.8
2/3/2014	11:00 AM	12:00 AM	49.0	52.1	59.6	68.4	76.8	56.7
2/3/2014	12:00 AM	1:00 PM	49.9	52.7	59.2	75.3	82.6	62.4
2/3/2014	1:00 PM	2:00 PM	51.5	55.2	63.3	75.0	79.8	62.5
2/3/2014	2:00 PM	3:00 PM	52.1	55.5	63.5	75.0	81.3	63.3
2/3/2014	3:00 PM	4:00 PM	51.2	53.1	56.4	60.9	78.4	54.3
2/3/2014	4:00 PM	5:00 PM	51.9	53.9	57.0	62.2	75.8	54.5
Daytime Exterior Noise Standards:			**55.0**	**60.0**	**65.0**	**70.0**	**75.0**	**-**

Table 4.12-3: Ambient Noise Measurement Results for Location 2

Date	Start Time	End Time	L50	L25	L8	L2	LMax	Leq
2/3/2014	9:00 AM	10:00 AM	57.4	60.9	63.5	66.1	71.7	59.6
2/3/2014	10:00 AM	11:00 AM	56.9	60.6	63.6	67.1	74.5	59.7
2/3/2014	11:00 AM	12:00 AM	57.0	60.5	63.0	65.7	76.3	59.3
2/3/2014	12:00 AM	1:00 PM	56.6	60.0	62.6	66.0	76.7	59.1
2/3/2014	1:00 PM	2:00 PM	57.1	60.8	63.5	67.5	76.4	63.9
2/3/2014	2:00 PM	3:00 PM	58.0	61.1	63.5	66.6	76.6	60.0
2/3/2014	3:00 PM	4:00 PM	57.2	61.2	63.7	67.8	78.3	62.9
2/3/2014	4:00 PM	5:00 PM	58.0	61.9	64.4	67.9	79.1	62.2
Daytime Exterior Noise Standards:			**55.0**	**60.0**	**65.0**	**70.0**	**75.0**	**-**

Table 4.12-4: Ambient Noise Measurement Results for Location 3

Date	Start Time	End Time	L50	L25	L8	L2	LMax	Leq
2/3/2014	9:00 AM	10:00 AM	52.5	53.6	56.0	59.5	64.3	53.5
2/3/2014	10:00 AM	11:00 AM	52.5	54.6	58.7	65.7	72.9	56.2
2/3/2014	11:00 AM	12:00 AM	48.4	52.9	61.5	67.7	76.7	57.3
2/3/2014	12:00 AM	1:00 PM	49.6	52.8	57.3	69.1	76.3	57.3
2/3/2014	1:00 PM	2:00 PM	51.3	54.3	59.4	69.8	74.7	58.0
2/3/2014	2:00 PM	3:00 PM	50.9	53.8	59.4	68.8	75.3	57.7
2/3/2014	3:00 PM	4:00 PM	50.3	52.2	55.2	59.9	71.5	53.0
2/3/2014	4:00 PM	5:00 PM	51.0	53.4	56.4	61.3	72.3	54.4
Daytime Exterior Noise Standards:			**55.0**	**60.0**	**65.0**	**70.0**	**75.0**	**-**

Table 4.12-5: Ambient Noise Measurement Results for Location 4

Date	Start Time	End Time	L50	L25	L8	L2	LMax	Leq
2/3/2014	9:00 AM	10:00 AM	58.5	60.2	60.0	62.4	70.6	60.3
2/3/2014	10:00 AM	11:00 AM	50.3	52.9	56.1	58.3	68.3	53.2
2/3/2014	11:00 AM	12:00 AM	48.7	50.3	57.3	65.7	72.9	54.7
2/3/2014	12:00 AM	1:00 PM	47.9	49.2	56.5	72.6	78.1	60.2
2/3/2014	1:00 PM	2:00 PM	49.4	52.9	60.4	73.2	76.5	58.5
2/3/2014	2:00 PM	3:00 PM	51.8	53.7	62.8	71.0	77.2	61.9
2/3/2014	3:00 PM	4:00 PM	49.2	50.1	53.9	57.9	74.7	50.1
2/3/2014	4:00 PM	5:00 PM	48.0	50.7	55.0	60.2	70.4	51.3
Daytime Exterior Noise Standards:			**55.0**	**60.0**	**65.0**	**70.0**	**75.0**	**-**

The noise measurement survey results for noise measurement Location 1 are presented in Table 4.12-2. The noise at this location was dominated by traffic on Harbor Boulevard. Noise from the medical office building was not audible above the traffic noise and therefore, would have a less than significant impact. The noise survey results from location 2 (Table 4.12-3) and 3 (Table 4.12-4) show noise levels that are dominated by noise emanating from the Red-E-Rentals business to the south. The main noise sources were from various tools, construction equipment and intercom system that operate throughout the day. Noise levels at location 4 are shown in Table 4.12-5. The noise at this location was dominated by traffic on Hamilton Street. Noise from Rudy's garage was not audible and therefore would have a less than significant impact on the project. According to the commercial businesses adjacent to the project site at the time of the Noise Analysis, they only operate between daytime hours (7 a.m. to 11 p.m.) and not

nighttime hours (11 p.m. to 7 a.m.); therefore the City of Costa Mesa's nighttime exterior noise standards are not applicable.

At each measurement location, noise levels exceed City standards at different times of the day; however, the Noise Analysis determined that with the construction of the proposed minimum 6-foot perimeter block wall around the project site, which would provide approximately 5-6 dB of noise reduction, exterior noise levels would be reduced to be within the City of Costa Mesa's daytime exterior noise standards. The Noise Analysis also concludes that implementation of standard construction measures with double paned Sound Transmission Class (STC) rating 26, or if necessary STC 28-30 windows, which typically provide 25-30 dB of noise reduction, would reduce interior noise levels to below thresholds. No additional exterior or interior mitigation measures are required. However, to ensure interior noise levels would be reduced to below City thresholds once detailed building construction plans are complete, mitigation measure MM N-1 requires an interior noise analysis be reviewed and approved prior to the issuance of building permits. Compliance with Mitigation Measure MM N-1 will ensure that exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance will not occur. Therefore, the impacts of noise exposure would be less than significant with mitigation, and no further analysis is required.

Standard Condition

SC 4.12-1 During construction, the contractor shall ensure that construction activity complies with the City's noise ordinance. Exceptions may be made for activities that will not generate noise audible from offsite, such as painting and other quiet indoor work.

Mitigation Measure

MM N-1 Prior to issuance of building permits for residential structures, the project applicant shall submit to the Building Official an interior noise analysis showing compliance with the City's noise standards

b) Less than Significant Impact. Groundborne vibration and groundborne noise could originate from earth movement during the construction phase of the proposed project. Construction activities may result in short term impacts to the noise environment including groundbourne vibration and noise. However, the project's construction activities do not include activities known to induce strong vibration effects, such as those produced by tunneling or blasting.

Ground vibration generated by construction equipment spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in structural damage. The ground vibration levels measured by peak particle velocity (PPV) at 25 feet (in/sec) associated with construction equipment that are likely to be used onsite are listed below.[2]

[2] Source: Federal Transit Administration, 2006.

- Large Bulldozer: 0.089 in/sec
- Loaded Trucks: 0.076 in/sec
- Jackhammer: 0.035 in/sec
- Small Bulldozer: 0.003 in/sec

Using modern construction techniques, a PPV of less than 0.5 inch per second will avoid structural damage. The exceptions to this threshold are fragile historic structures or ruins; however, no such uses are within the projects' vicinity.

Project construction would include the use of jackhammers, bulldozers, loaded trucks, and other mobile equipment within close proximity to existing commercial structures. However, even with the use of the equipment immediately adjacent to the existing structures, ground vibration levels would be below 0.5 inch per second. Therefore, construction impacts related to groundborne vibration and noise levels would be less than significant

The proposed residential community would not involve the use of any equipment or activity that would result in potentially significant levels of groundbourne vibration or noise; therefore, impacts would be less than significant.

c) Less than Significant Impact. Development of the proposed project site would result in an increase in daily traffic trips in the project vicinity over existing conditions; therefore, there would be a potential increase in traffic noise along access roads leading to the project site. However, the increase would be less than significant in comparison to the existing noise levels of Harbor Boulevard, Hamilton Street, and Charle Street. The proposed project includes the construction of a residential community. The primary on-site noise-generating activity would be from the road noise coming from the drive aisle and resident activities.

The Acoustical Analysis shows that the project would not create a substantial permanent increase in traffic-related noise levels or expose persons to noise levels in excess of the exterior noise level standards established by the City of Costa Mesa; therefore, project impacts would be less than significant.

d) Less than Significant Impact. Although there would be high intermittent construction noise in the project area during project construction at times, construction of the proposed project would not significantly affect land uses adjacent to the project site. In addition, construction at the project site would comply with the hourly limits specified by the City's Noise Control Ordinance. Therefore, project impacts would be less than significant.

e) Less than Significant Impact. The project is located approximately 2.6 miles from John Wayne Airport (JWA), which is outside the two-mile radius, according to Figure 1 of the Orange County Airport Land Use Commission (OCALUC) Land Use Plan for John Wayne Airport. However, the project site is located within the JWA Airport Environs Land Use Plan Airport Planning Area. JWA operations noise contours are indicated in Appendix D of the OCALUC on a figure titled John Wayne Airport Impact Zones. The figure identifies the airport's noise contours for the 65 and 60 dBA CNEL impact zones. The project site is not located within the 65 or 60 dBA CNEL airport noise contours. Therefore, less than significant impacts related to excessive airport noise are anticipated, and no mitigation is required.

f) No Impact. The project site is not located within the vicinity of a private airstrip. Please also refer to Response 4.12.e). There are no impacts related to this issue, and no mitigation is required.

4.13 – Population and Housing

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

a) Less than Significant Impact. The proposed project is not expected to induce substantial population growth in the area, either directly or indirectly. The project involves construction of 28 units of detached residential homes in place of vacant commercial buildings. The average household size in the City of Costa Mesa was 2.69 persons per household, according to the 2010 data from the US Census, Center for Demographic Research. Based on this average, the project would result in a population increase of approximately 75 persons. This potential population growth is nominal, representing less than one-thousandth of one percent increase over the City's existing 2013 population of 111,358 persons. Project implementation would not induce substantial population growth within the City, therefore the impact would be less than significant and no further analysis is required.

b) No Impact. The proposed project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere because the project site is currently developed with three vacant commercial buildings and there are currently no residential structures. No significant adverse impacts are anticipated and no further analysis is required.

c) No Impact. The proposed project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere because the project site is currently developed with three vacant commercial buildings and there are currently no residential structures. No significant adverse impacts are anticipated and no further analysis is required.

4.14 – Public Services

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services::				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

Discussion:

a) Less than Significant Impact. The Costa Mesa Fire Department (CMFD) provides fire protection and emergency medical services to the City, which include fire prevention and suppression, paramedic, emergency medical, and hazardous materials management/environmental safety. The CMFD is comprised of three divisions: Administration; Suppression/Mobile Intensive Care (Emergency Medical Services); and Fire Prevention. There are four paramedic engine companies, two truck companies, an urban search and rescue squad, and a Battalion Chief on duty 24-hours a day, seven days a week. These fire personnel respond from six fire stations strategically located within the City. The closest station to the project is the Park Station, located at 1865 Park Avenue, approximately 0.70 miles from the project site. Depending on the nature, size, and location of the alarm, units from multiple stations will respond. There are 29 fire suppression/EMS personnel on duty that work 24-hour shifts at the Park Station. According to the GPEIR page 4.11-4, the goal of the Costa Mesa Fire Department is to respond to fire alarms and emergencies within five minutes, 80 percent of the time.

The project does not propose new or physically altered fire protection facilities. The project involves construction of a 28-unit, detached residential development in place of the vacant buildings that exist on the property. Therefore, project implementation would result in a net increase of 28 dwelling units with a resultant increase in the demand for fire protection services. However, project implementation is not anticipated to increase CMFD response times to the project site or surrounding vicinity, or require construction of new or physically altered fire protection facilities. The project's design would be subject to compliance with the requirements set forth in the 2010 California Fire Code (and all amendments), including the provision of fire sprinkler systems throughout buildings, as noted in CMMC Title 7, Fire Protection and Prevention. The development would also be subject to compliance with the fire provisions specified in the 2013 California Building Code and all incorporated amendments, and the 2013 International Fire Code. Additionally, the project would be subject to compliance with the Standard Conditions specified below, in order to enhance fire protection measures. The project plans would be reviewed and approved by the Costa Mesa Building and Fire Departments, which would ensure adequate emergency access, fire hydrant availability, and compliance with all applicable codes and standards.

The project would also be subject to compliance with CMMC Title 13 Chapter XII Article 2, Fire Protection Systems, which sets forth the parameters for assessing the Fire Protection System Development Impact Fee. The purpose of these fees is to minimize, to the greatest extent practicable, the impact that new development has on the City's public services and public facilities. The project Applicant would be required to pay their fair share of the costs of providing fire protection services and facilities. Compliance with the City's discretionary review process and CMMC requirements, which include payment of the Fire Protection System Development Impact Fee, would ensure that project implementation would result in a less than significant impact to fire protection services.

Standard Conditions:

SC 4.14-1 The final master plan for development of the project site shall provide sufficient capacity for fire flows required by the City of Costa Mesa Fire Department.

SC 4.14-2 Vehicular access shall be provided and maintained serviceable throughout construction to all required fire hydrants.

SC 4.14-3 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.

SC 4.14-4 The project shall provide approved smoke detectors to be installed in accordance with the 2013 Edition of the Uniform Fire Code.

SC 4.14-5 The project shall provide fire extinguishers with a minimum rating of 2A to be located within 75 feet of travel distance from all areas. Extinguishers may be of a type rated 2A, 10BC as these extinguishers are suitable for all types of fires and are less expensive.

SC 4.14-6 The project shall provide an automatic fire sprinkler system according to NFPA 13 R.

SC 4.14-7 The project shall provide individual numeric signage for proposed residences with minimum 6 inches height.

b) Less than Significant Impact. The Costa Mesa Police Department (CMPD) provides police protection services to the City from their headquarters located at 99 Fair Drive. The CMPD is composed of four divisions: Administration; Technical Services; Field Operations; and Support Services. The CMPD is comprised of 196 full-time positions, of which 130 are sworn officers and 66 are civilians, with various part-time positions to aid throughout the organization. The City's existing police protection service ratio is 1.17 officers for every 1,000 people, based on the City's existing 2013 population of 111,358 persons.

The project does not propose new or physically altered police protection facilities. The project involves construction of a 28-unit, residential development in place of vacant buildings that exist on the property.

As discussed in Response 4.13.a, project implementation would result in a net increase of 28 dwelling units with a resultant increase in the demand for police protection services. However, project implementation is not anticipated to increase CMPD response times to the project site or surrounding vicinity, or require construction of new or physically altered police protection facilities. The project would be subject to compliance with Standard Condition SC 4.14-8, in order to enhance police protection services. In addition, the project plans would be reviewed and approved by the Costa Mesa Building and Police Departments, which would ensure adequate safety and crime prevention measures are provided. Compliance with the City's discretionary review process would ensure that project implementation would result in a less than significant impact to fire protection services.

Standard Conditions:

SC 4.14-8 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 project to increase safety and avoid unsafe conditions. These measures focus on security measures are recommended by the Police Department, including 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.
- Emergency vehicle parking areas shall be designated within proximity to buildings.
- 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.

c) Less than Significant Impact. The project site is situated within the Newport-Mesa Unified School District (NMUSD) (grades K thru 12). The project site is located in the Wilson Elementary School, TeWinkle Middle School, and Estancia High School service areas, with school enrollments of approximately 554 students, 707 students, and 1,279 students, respectively.

The project does not propose new or physically altered school facilities. The project involves construction of a 28-unit detached development in place of vacant buildings that exist on the property. Project implementation would result in a net increase of 28 dwelling units, with a resultant increase in the demand for school facilities. Based on a student generation factor of 0.26 students per dwelling unit, project implementation could generate a total of 7.28 students. As the project is anticipated to generate a nominal increase in the student population, it is anticipated that the NMUSD schools would have the capacity to accommodate these students and construction of new or physically altered school facilities would not be required.

Assembly Bill 2926 (AB 2926) passed in 1986 allows school districts to collect impact fees from developers of new residential and commercial/industrial building space. Senate Bill 50 (SB 50) and Proposition 1A, both of which passed in 1998, provided a comprehensive school facilities financing and reform program. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use

approvals on the basis that school facilities are inadequate, and reinstates the school facility fee cap for legislative actions (e.g., General Plan amendments, specific plan adoption, zoning plan amendments). According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." The NMUSD collects $1.84 per square foot of residential uses from developers. The project Applicant would be subject to payment of this development fee pursuant to Standard Condition SC 4.14-9, which would fully mitigate any potential impact to NMUSD school facilities. Therefore, project implementation would result in a less than significant impact.

Standard Condition

SC 4.14-9 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 and $0.30 per square foot for commercial development.

d) Less than Significant Impact. There are approximately 1,708 acres of open space and parkland in the City, including Neighborhood and Community Parks, Community Centers, Regional Nature Preserve areas, Institutional Uses, Open Space Easements, and Golf Courses. The City's standard for permanent public open space is 4.26 acres per 1,000 residents.

The project does not propose new or physically altered park facilities. Project implementation would result in a net increase of 28 dwelling units, which equates to approximately 75 people. Based on a parkland demand factor of 4.26 acres per 1,000 residents, project implementation would generate a demand for approximately 0.32 acres of parkland (75 x 4.26/1,000).

CMMC Title 13 Chapter XI Article 5, Park and Recreation Dedications, establishes procedures for requiring park and recreational facilities in conjunction with residential subdivisions. More specifically, CMMC Section 13-256, Amount of Fee in Lieu of Land Dedication, specifies that "where there is no public park or recreation facility required within the proposed subdivision, or where the subdivision contains fifty (50) lots or fewer, the subdivider shall pay a fee in lieu of land dedication reflecting the value of land required for park and recreation purposes, in accordance with the schedule of fees as adopted by resolution of the City Council."

According to the City of Costa Mesa Parkland Impact Fee Schedule, the current fee per single-family dwelling unit is $13,572. As permitted by CMMC Section 13-256 and in compliance with Standard Condition 4.14-11, the Applicant would pay this Parkland Impact Fee in lieu of dedication of 0.43 acres of parkland. Compliance with CMMC Title 13 Chapter XI Article 5 would ensure that project implementation would result in a less than significant impact involving parkland demand. Thus, impacts to parks is less than significant and no further analysis is required.

Standard Condition

SC 4.14-11 Prior to issuance of occupancy permits, the Developer shall pay the City's park impact mitigation fee to meet the demands of the proposed development.

e) Less than Significant Impact.

There are three public libraries within the City of Costa Mesa. The nearest public library to the project site is the Costa Mesa/Donald Dungan Library located approximately 0.8 miles south of the site, at 1855 Park

Avenue, Costa Mesa. The project does not propose new or physically altered library facilities. Project implementation would result in a net increase of 28 dwelling units, with a resultant population increase of approximately 75 persons.

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 square feet of facility space and 1.3 volumes per capita. Based on a population of 75, this equates to 1.5 square feet of facility space and 97.5 volumes. According to the Orange County Public Library, the City of Costa Mesa has a current facility space deficit of 6,294 square feet. The Costa Mesa General Plan anticipates growth in the City from 113,134 residents to 128,483 residents by the Year 2025. The project would allow for the addition of 75 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 square feet 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 Orange County Public Library did not anticipate any direct significant impacts on these facilities.

Given the project's nominal growth in population, and because the proposed residential land use is consistent with the City's General Plan land use designation, the construction of new or physically altered library facilities would not be required. Therefore, since the project would be consistent with the City's General Plan, the proposed project will result in less than significant impact on library services.

4.15 – Recreation

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion:

a) Less than Significant Impact. The proposed 28-unit detached condominium residential project is not expected to result in a significant increase in 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. The project's implementation will result in a net increase of 28 units resulting in a population increase of 76 persons. Based on a parkland factor of 4.26 acres per 1,000 residents, the project will generate a demand for approximately 0.32 acres of parkland. CMMC Title 13 Chapter XI Article 5, Park and Recreation Dedications, establishes procedures for requiring park and recreational facilities in conjunction with residential subdivisions and the payment of fees in lieu of land dedication.

There are numerous community parks available throughout the City. A 3.45-acre City park, Wilson Street Park, is located approximately .6 miles northeast of the project site; Lions Park, a 10-acre City park, is located 0.9 mile south of the project site; and Canyon Park, a 1.45 acre City park, is located 1.7 miles west of the project site. In addition, Talbert Regional Park, a 180-acre regional park is located west of the project site. Existing City and regional parks in the vicinity of the project site provide almost 195 acres parkland and open space to serve the project's 75 residents. Existing recreational facilities are adequate to handle park needs of future residents without resulting in substantial physical deterioration of the existing recreational facilities. In addition, any increased demands for recreational facilities would be mitigated through compliance with CMMC requirements and the provision of onsite landscaping and private yards. Please also refer to Response 4.14.d. The provision of onsite open space would further minimize potential impacts to recreational facilities. Impacts are less than significant and no further analysis is required.

b) Less than Significant Impact. See discussion in a) above. The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. No impacts on recreation would result from implementation of the project and no further analysis is warranted.

4.16 – Transportation/Traffic

Environmental Issues	Potentially Significant Impact	Less Than Significant With 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 non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

This section is based on the Traffic Study that was prepared by Arch Beach Consulting for City Commons Residential Development, dated January 10, 2014. The Study is included as Appendix E, Traffic Study. The Traffic Study evaluates the trip generation for the project and determines the effect of the project trips on the level of service (LOS) for four study area intersections. The study assumed a total of 28 dwelling units for the proposed project based on the site plan.

Methodology

The signalized study area intersection of Harbor Boulevard/Hamilton Street was analyzed using the Intersection Capacity Utilization (ICU) methodology for weekday a.m. and p.m. peak hour levels of service (LOS). The ICU method determines the volume-to-capacity (V/C) ratio on a critical lane basis and determines LOS associated with each critical V/C ratio at the signalized intersection. The remaining three intersections were analyzed using the Highway Capacity Manual (HCM) "Operations" methodology. The HCM method determines the average control delay a driver may experience at the intersection, as well as provides queue lengths for the 95th percentile (design) queue.

The degree of congestion at an intersection is described by the Level of Service (LOS), which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. A complete description of the meaning of level of service can be found in the traffic study (Appendix E herein). The City of Costa Mesa considers LOS D or better to be satisfactory LOS during peak hours.

Significance Criteria

For signalized intersections, the proposed project would create a significant impact if it causes an intersection to operate from LOS D or better, to LOS E or F with addition of project traffic, or if the project contributes 0.010 ICU or more when the performance standard (LOS D) is exceeded. For an unsignalized intersection impact is considered to be significant if the traffic signal warrant analysis determines that a signal is justified (minimum of 100 trips per hour on the minor leg approach subject to delay, 150 trips if the approach has two lanes), and the project contributes more than 10 percent of the total future added trips.

Site Location and Study Area

Regional access to the site is provided by Interstate 405 (I-405), State Route 55 (SR 55), and Pacific Coast Highway – State Route 1 (SR 1 – PCH), while local access to the site is provided by Harbor Boulevard, Hamilton Street, and Charle Street. Per consultation with the City Traffic Engineer, the study area intersections are as follows:

1. Harbor Boulevard/Hamilton Street
2. Charle Street/Hamilton Street
3. Charle Street/Main Project Driveway
4. Outbound Project Driveway/Hamilton Street

All four intersections are within the jurisdiction of the City.

Existing Traffic Conditions

Roadways
The following roadways in the study area would serve the proposed project:

Harbor Boulevard

Harbor Boulevard is a north-south Major Arterial on the City's Circulation Element that provides continuous access through the cities of Santa Ana, Garden Grove, Anaheim, Fullerton, and LaHabra. Harbor Boulevard also provides access to I-405 and SR 55. At the Orange-Los Angeles County border,

Harbor Boulevard becomes Fullerton Road. Within the study area, it is a six-lane divided road with a painted median serving as a two-way left-turn lane (TWLTL) providing access to commercial uses along the road. There are sidewalks on both sides, and on-street parking is not permitted on either side of the street. The posted speed limit is 40 miles per hour (MPH). In general, in the project vicinity, retail/commercial and light industrial land uses line Harbor Boulevard.

Hamilton Street

In the project vicinity, Hamilton Street is an east-west Collector on the City's Circulation Element that provides continuous access through residential neighborhoods between Placentia Avenue and SR 55. Within the study area, it is a two-lane undivided road. There are also sidewalks and Class II bike lanes on both sides, and on-street parking is permitted only on the north side of the street. The posted speed limit is 25 MPH. In general, in the project vicinity, residential land uses line Hamilton Street. Per counts collected in November 2013, the average daily traffic volume (ADT) on Hamilton Street, east of Charle Street is 7,500 ADT.

Charle Street

Charle Street is a north-south oriented street that provides access to multi-family residential uses, retail/commercial uses, and light industrial uses between Hamilton Street and Bernard Street. Within the study area, it is a two-lane undivided road. There are sidewalks, and on-street parking is permitted on both sides of the street. Per counts collected in November 2013, the ADT on Charle Street, south of Hamilton Street is 1,200.

Existing Levels of Service

Table 4.16-1 provides the existing a.m. and p.m. peak hour traffic volumes, which were input into the Traffix and Synchro LOS software to determine the intersection ICU, delay, and LOS values.

Table 4.16-1: Existing Condition Intersection Level of Service Summary

Intersection	Control	AM Peak Hour		PM Peak Hour	
		V/C or Delay	LOS	V/C or Delay	LOS
1. Harbor Boulevard/Hamilton Street	signal	0.447 22.7 seconds	A C	0.552 26.1 seconds	A C
2. Charle Street/Hamilton Street	1-way stop	12.0 seconds	B	12.6 seconds	B
3. Charle Street/Main Project Driveway	1-way stop	*does not exist*		*does not exist*	
4. Outbound Project Driveway/Hamilton St	1-way stop	*does not exist*		*does not exist*	

Based on the existing LOS analysis, the two existing study area intersections are currently operating with satisfactory LOS (LOS D or better) during both peak hours.

a) Less than Significant Impact.

Project Trip Generation

Weekday daily, a.m. and p.m. peak hour trip generation estimates for the proposed project were developed using trip rates provided in the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition. Summaries of the trip generation rates and resulting vehicle trips for the proposed project are presented in Table 4.16-2.

Table 4.16-2: Project Trip Generation Estimates

Land Use	Size/Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
TRIP RATES								
Single-Family Detached Home	per DU	9.52	0.19	0.56	0.75	0.63	0.37	1.00
TRIP GENERATION								
Single-Family Detached Home	28 DUs	**267**	**5**	**16**	**21**	**18**	**10**	**28**

Notes: Trip rates from *Trip Generation, 9th Edition*, Institute of Transportation Engineers, 2012.

According to the table, the proposed project would generate approximately 267 daily trips, 21 a.m. peak hour trips (5 inbound and 16 outbound), and 28 p.m. peak hour trips (18 inbound and 10 outbound).

Existing plus Project

Traffic generated by the proposed project was added to the existing scenario (Table 4.16-1) and the project impacts on the circulation system were analyzed in Table 4.16-3, which presents the results of the existing plus project intersection LOS analysis and compares this condition with the existing condition.

Table 4.16-3: Existing plus Project Condition Intersection Level of Service Summary

Intersection	Existing plus Project				Difference		Impact?
	AM Peak Hour		PM Peak Hour				
	V/C or Delay	LOS	V/C or Delay	LOS	AM	PM	
1. Harbor Blvd/Hamilton St	0.447	A	0.559	A	0.000	+0.007	no
	22.8 sec	C	26.3 sec	C	+0.1 sec	+0.2 sec	no
2. Charle St/Hamilton St	12.1 sec	B	12.8 sec	B	+0.1 sec	+0.2 sec	no
3. Charle St/Main Proj Dwy	8.7 sec	A	8.6 sec	A	+8.7 sec	+8.6 sec	no
4. Outbound Dwy/Hamilton St	10.1 sec	B	9.9 sec	A	+10.1 sec	+9.9 sec	no

Based on the Existing plus project LOS analysis, both existing study area intersections would continue to operate with satisfactory LOS (LOS D or better) with addition of traffic from the proposed project, and the two new access driveways would also operate with satisfactory LOS.

The proposed project results in a negligible increase in traffic and does not have a significant traffic impact on the surrounding roadway network. Additionally, the proposed project is consistent with the site's general plan designation and zoning. Given the project's consistency with zoning, and since negligible traffic generation is created due to the proposed change in land uses, no traffic impacts are forecast and no traffic mitigation is required. The project would be subject to compliance with Standard Condition SC 4.16- 1, which requires payment of traffic impact fees. Impacts are less than significant and no mitigation measures are required.

Refer to Response 4.16.f for a discussion of pedestrian and bicycle paths, and mass transit.

Standard Condition

SC 4.16-1 The project Applicant shall be responsible for the payment of fees in accordance with Costa Mesa's traffic impact fee program to mitigate project-generated traffic impacts (including regional traffic).

b) Less than Significant Impact. The purpose of the Congestion Management Program (CMP) is to develop a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use, and air quality planning programs throughout the County, consistent with that of the Southern California Association of Governments (SCAG). The CMP requires review of substantial individual projects, which might on their own impact the CMP transportation system.

Specifically, the Congestion Management Program (CMP) Traffic Impact Analysis (TIA) measures impacts of a proposed development project on the CMP Highway System (CMPHS). Development projects that generate more than 2,400 daily trips are subject to a TIA for CMP evaluation. For projects that will directly access or be in close proximity to a CMP Highway System link, a reduced threshold of 1,600 trips per day is used.

As concluded in Response 4.16.a, the project would generate 267 daily trips, thus, would not meet the criteria for CMP traffic impact analysis. Therefore, no further CMP traffic analysis is warranted and a less than significant impact would occur.

c) No Impact. The project involves a 28-unit, three–story residential development. Due to the nature and height of the proposed developed, project implementation would not result in a change in air traffic patterns.

Less than Significant Impact. The project would be required to prepare and receive approval of a Construction Management Plan, which would limit traffic disruption during construction (see SC 4.16-2). Once construction is complete, the proposed project would provide primary access off Charle Street via a new 23-foot wide driveway. This driveway would provide for full access for inbound and outbound project traffic. A secondary limited-access 23-foot wide driveway would be located towards the northeastern corner of the site, approximately 50 feet from Harbor Boulevard. This access would be limited to outbound right-turning traffic from the site only. All other site ingress/egress would occur off the primary driveway on Charle Street. The driveway on Hamilton Street, which will be used only for exiting the project site, is proposed to be gated and controlled by a key card issued to residents.

Because of the close spacing between the secondary driveway and Harbor Boulevard (approximately 50 feet, from tangent of curve between the driveways), and the relatively high volume of eastbound left turning vehicles at the Harbor Boulevard/Hamilton Street intersection during the peak hours, the project would construct an at-grade deterrent that is intended to limit outbound project vehicle movements that cross multiple lanes to access the eastbound left turn lane on Hamilton Street at the Harbor Boulevard intersection. Project vehicles destined to travel northbound on Harbor Boulevard would be required to use the primary driveway on Charle Street to access the eastbound left turn storage lane at the intersection of Charle Street/Hamilton Street. This driveway treatment would require vehicles exiting this driveway to travel eastbound on Hamilton Street or southbound on Harbor Boulevard. Exhibit 4, Site Plan illustrates the conceptual plan for this driveway treatment.

A single, two-way 23-foot wide driveway aisle would traverse the site, between Hamilton Street and Charle Street, with homes loading on both sides of the street. Emergency vehicle-only access would be provided at the secondary driveway on Hamilton Street. The outbound driveway on Hamilton Street would be gated. This egress gate will be designed such that it opens only when vehicles approach the gate from inside the project site. In addition, artificial turf would be installed on the emergency only ingress side of the gate to discourage drivers from trying to enter the project site on Hamilton Street. Emergency vehicles would be given inbound access at the gate via a key card or Knox box. Less than significant impacts related to design features would result.

Project Design Feature (PDF)
The proposed project would extend the length of the eastbound left-turn storage lane by an additional 50 feet, for a total storage length of 200 feet. This would involve minor re-striping of the existing pavement markings on Hamilton Street, and the loss of one on-street parking space to accommodate approximately 25 feet of additional red-curb (no parking) to accommodate the shift of the westbound transitional lane striping. This PDF would improve the Existing (without project) queuing condition, as well as accommodate the Existing Plus Project condition.

Standard Condition

SC 4.16-2 Prior to issuance of grading permits, developer shall submit for review and approval a Construction Management Plan. This plan features methods to minimize disruption to the neighboring residential uses to the fullest extent that is reasonable and practicable. The plan shall include construction parking and vehicle access and specifying staging areas and delivery and hauling truck routes. The plan should mitigate disruption to residents and also businesses during construction.

The truck route plan shall preclude truck routes through residential areas and major truck traffic during peak hours. The total truck trips to the site shall not exceed 200 trucks per day (i.e., 100 truck trips to the site plus 100 truck trips from the site) unless approved by the Development Services Director or Transportation Services Manager.

e) Less than Significant Impact. The proposed project site would have adequate emergency access. The onsite roadway and driveways have been designed in accordance with the City of Costa Mesa design standards and the final tract map would be subject to review by the Public Works Department and approval by the City Council. By following the design standards for streets and the City's Municipal Code and through the process of review and approval by the City, emergency access would be maintained. See Section 4.16d related to emergency access. The proposed project would have less than significant impacts on emergency access.

f) Less than Significant Impact. The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.
The project site is served by the Orange County Transportation Authority (OCTA), a multi-modal transportation agency that serves Orange County. OCTA provides countywide bus and para-transit service, and Metrolink rail service, among other services. The bus lines located nearest the project site are located along Harbor Boulevard (south of project site, near the intersection of Harbor Boulevard and West Bay Street) and along Victoria Street (north of the project site, near its intersection with Harbor Boulevard).

Based on CMP guidelines, person transit trips are typically estimated using a 1.4 factor to convert total vehicle trips to person trips, and a 3.5 percent factor to convert person trips to total transit trips. As concluded in Response 4.16.a, the project is forecast to generate approximately 267 daily trips. Based on the CMP guidelines, and the proximity of the various land uses in relation to available transit in the project vicinity, the project is forecast to generate less than 13 transit trips. Since the project transit trip can be accommodated by existing transit service in the project vicinity, no significant CMP transit impacts are forecast to occur, and project implementation would not conflict with adopted policies, plans, or programs regarding public transit.

Project implementation would not interfere with adopted plans and programs related to bicycle or pedestrian facilities. The City's General Plan Circulation Element includes the Master Plan of Bikeways. The nearest bicycle facilities are Class 2 bike lanes along Victoria Street, north of the project site, and along Placentia Avenue, approximately .6 miles west of the project site. Class 2 bike lanes are at least 5 feet wide and are designated within the travel way adjacent to the curb; bicycles are separated from vehicles by a solid stripe line. Pedestrian facilities in the project area include sidewalks and crosswalks. Development of the proposed 28-unit residential development would not interfere with existing bicycle and pedestrian facilities. Impacts would be less than significant.

4.17 – Utilities and Service Systems

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected	☐	☐	☒	☐

demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

a) Less than Significant Impact. The Regional Water Quality Control Board, Santa Ana Region, issued a National Pollutant Discharge Elimination System (NPDES) permit, which includes the City as a Permittee. That NPDES permit implements federal and state law governing point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. Implementation of the proposed project would only nominally increase wastewater generation, thus, nominally increasing the demand for wastewater treatment; refer to Response 4.17.b. Therefore, given the residential nature and scope of the proposed development, project implementation would not cause an exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board. Impacts would be less than significant.

b) Less than Significant Impact.

Water
The project site is located within the Mesa Consolidated Water District (Mesa Water) service area and specifically within their Division Area 1. Mesa Water provides water service to an 18-squaremile area that includes the City of Costa Mesa (as well as parts of Newport Beach and parts of unincorporated Orange County). The project site would be served by public utilities located on Hamilton Street and Charle Street.

In compliance with legislative requirements, Mesa Water has prepared their 2010 Urban Water Management Plan (UWMP). The UWMP provides information on the present and future water resources and demands, and assesses Mesa Water's water resource needs.

Water Supplies and Demand
According to the UWMP, Mesa Water's main sources of water supply are groundwater pumped from wells within the Orange County Basin and imported water from Metropolitan Water District of Southern California through Municipal Water District of Orange County. The project involves construction of a 28-unit, residential development. The project would result in a population increase of approximately 75 persons. (See 4.13a above). Project implementation would generate a demand for approximately 9,008 gallons per day[3]. The increase in water demand would place an incremental increase in the demand for water supplies and treatment facilities. The increase is not considered substantial, since the project is consistent with the site's General Plan land use designation and City's General Plan forms the basis for

[3] Malcolm Pirnie, Inc., *Mesa Consolidated Water District 2010 Urban Water Management Plan*, May 2011, Page 2-5.

evaluating the service area's future water demands. Mesa Water has concluded they are capable of meeting the water demands of their customers in normal, single dry, and multiple dry years between 2015 and 2035 (Exhibit 10). Impacts to water supplies would be less than significant.

Water Treatment
According to the UWMP, groundwater is pumped from six wells that pump clear water from the Orange County Basin and two wells that pump colored water. The colored water is treated at the Colored Water Treatment Facility (CWTF) and imported water is treated at the Diemer Filtration Wastewater Plant, and then delivered to Mesa Water through the imported water connections. As concluded above, the proposed project would result in a negligible increase in water demand, thus, resulting in a negligible impact on the existing water treatment facilities (Exhibit 10). Therefore, project implementation would not require or result in the construction of new water treatment facilities or expansion of existing facilities. Impacts would be less than significant.

Water Conveyance
As concluded above, the proposed project would result in a negligible increase in water demand, thus, resulting in a negligible impact on the existing water conveyance facilities. All utilities including sewer and water lines exist in both Hamilton and Charle streets and services to the project will connect to these existing lines. The Applicant would be responsible for construction of all water conveyance facilities pursuant to current Uniform Codes, City Ordinances, Public Works standards, and Water Division criteria. Therefore, the project would not require the construction of new water conveyance facilities or expansion of existing facilities. A less than significant impact would occur.

Wastewater
The project site is located within the Costa Mesa Sanitary District (Sanitary District) service area. The Sanitary District boundaries include all of the City of Costa Mesa and portions of the City of Newport Beach and unincorporated County of Orange. The proposed site will join to the existing 8-inch sanitary sewer for all effluent demands. The water system(s) will join to the existing 14-inch Cast Iron Water Line in two locations.

Wastewater Generation
The increase in wastewater generation would place an incremental increase in the demand for wastewater conveyance and treatment facilities. The project is consistent with the site's General Plan land use designation and City's General Plan forms the basis for issuance of the County Sanitation's NPDES wastewater discharge permits; refer also to the Wastewater Treatment Section below.

Wastewater Conveyance
The Sanitary District's facilities include 216 miles of mainline, 114 miles of private property sewer lateral pipelines, and 20 pumping stations. As concluded above, the proposed project would result in a small increase in wastewater generation, thus, resulting in a negligible impact on the existing wastewater conveyance facilities. The Applicant would be responsible for construction of all wastewater conveyance facilities pursuant to current Uniform Codes, City Ordinances, and Public Works standards, pursuant to Standard Condition SC 4.17-1. The Sanitary District would issue a Sewer Service Confirmation Letter indicating that they will serve sanitary sewer to the proposed development. Service to the project would be conditioned upon approval of sewer infrastructure construction plans by the Sanitary District's Engineers, processing of easements (if necessary), and payment of all applicable fees, pursuant to Standard Conditions SC 4.17-2 through 4.17-4. Therefore, the project would not require the construction

of new wastewater conveyance facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. A less than significant impact would occur.

Wastewater Treatment
Wastewater collected by the Sanitary District is sent to the County Sanitation Districts of Orange County (County Sanitation) plants for treatment and disposal. County Sanitation is responsible for collecting, treating, and disposing the wastewater generated within their 479-square mile service area. Wastewater is treated at County Sanitation's treatment plants in Fountain Valley and Huntington Beach. According to County Sanitation's treatment plant operational data, the combined effluent treated at both plants (2004-2005) totaled approximately 244 million gallons daily (average). County Sanitation operates under an NPDES ocean discharge permit issued by the California Regional Water Quality Control Board. Since the project is consistent with the site's General Plan land use designation and City General Plans form the basis for issuance of the NPDES wastewater discharge permits, the project's increase in wastewater generation is not considered substantial. Project implementation would not cause the treatment plants' operating capacities to be exceeded. Also see section 4.9, Hydrology and Water Quality regarding stormwater. Therefore, a less than significant impact would occur in this regard.

Standard Conditions

SC 4.17-1 Applicant will be required to construct sewers to serve the project, at his own expense, meeting the approval of the Costa Mesa Sanitary District.

SC 4.17-2 County Sanitation District fees, fixtures fees, inspection fees, and sewer permit are required prior to installation of sewer.

SC 4.17-3 The Applicant shall submit a plan showing sewer improvements that meets the District Engineer's approval to the Building Division as part of the plans submitted for plan check.

SC 4.17-4 The Applicant is required to contact the Costa Mesa Sanitary District to arrange final sign-off prior to Certificate of Occupancy being released.

c) Less than Significant Impact. The project would include the development of onsite drainage facilities and would not include the construction of offsite storm drainage facilities. Refer to Response 4.9.d. Impacts would be less than significant.

d) Less than Significant Impact.

Senate Bill 610
SB 610 requires a detailed report regarding water availability and planning for additional water supplies be included with the environmental document for specified projects. Under SB 610, water supply assessments are required to be included in environmental documentation for certain projects, as defined in Water Code 10912[a], subject to CEQA. Under SB 221, approval by a city or county of certain residential subdivisions requires a written verification of sufficient water supply.

All projects that meet any of the following criteria require the water availability assessment:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sq. ft.) of floor space;

- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 sq ft of floor space;
- A proposed hotel and motel having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or an industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than
- 650,000 sq. ft. of floor area;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project.

The proposed project is a 28-unit residential development and does not satisfy the criteria outlined above; thus, a less that significant impact would occur.

Senate Bill 221
While SB 610 primarily affects the Water Code, SB 221 principally applies to the Subdivision Map Act. The primary effect of SB 221 is to require an applicant of every applicable tentative map subdivision to verifying that the public water supplier (PWS) has sufficient water supply available to serve it. Under SB 221, approval by a city or county of certain residential subdivisions requires a written verification of sufficient water supply.

SB 221 applies to any subdivision, defined as:

- A proposed residential development of more than 500 dwelling units (if the PWS has more than 5,000 service connections); or
- Any proposed development that increases connections by 10 percent or more (if the PWS has fewer than 5,000 connections).

The project does not satisfy the criteria outlined above, thus, preparation of a Water Supply Assessment, in order to verify that sufficient water supplies are available to serve the project from existing entitlements/resources, is not warranted and a less than significant impact would occur.

e) Less than Significant Impact. Refer to Response 4.17.b.

f) Less than Significant Impact. The project site would continue to be served by the solid waste facilities and landfills that currently serve the City:

- Frank R. Bowerman Sanitary Landfill
- Olinda Alpha Sanitary Landfill
- Prima Deschecha Sanitary Landfill

In total, 110,886.46 tons of solid waste were generated by the City of Costa Mesa in 2012. Project implementation would result in a net increase of 28 dwelling units with a resultant population increase of approximately 75 persons. Demolition and construction activities associated with the proposed development would generate construction debris. The residential development's operational activities would also increase the volume of solid waste generated over existing conditions. Based on generation rates of 4 pounds per dwelling unit per day, it is estimated that the proposed project would generate

approximately 300 lbs of solid waste per day or 55 tons of solid waste per year. The increased solid waste generation would contribute to incrementally shortening the lifespan of the landfills identified above. However, given project's scale, and since the City would continue to comply with the existing regulatory framework for reducing solid waste disposal volumes, it is anticipated that the specified landfills would have the capacity to accommodate the project's waste disposal needs. Additionally, the project would be subject to compliance with Standard Conditions SC 4.17-5 and SC 4.17-6, which address solid waste disposal and District consultation. CR&R, provides the City of Costa Mesa with curbside refuse and recycling collection services (CR&R). CR&R has reviewed the project plans to ensure that adequate site access would be provided for trash collection. A less than significant impact would occur.

Standard Conditions

SC 4.17-5 Unless an offsite trash hauler is being used, the Applicant shall contact the Costa Mesa Sanitary District to pay trash collection program fees and arrange for service for all new residences. Residences using bin or dumpster services are exempt from the requirement.

SC 4.17-6 The Applicant shall contact Costa Mesa Sanitary District for any additional district requirements.

g) Less than Significant Impact. In 1989, the Legislature adopted the California Integrated Waste Management Act of 1989 (AB 939), in order to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." AB 939 established a waste management hierarchy: Source Reduction; Recycling; Composting; Transformation; and Disposal. The law also required that each county prepare a new Integrated Waste Management Plan and each city prepare a Source Reduction and Recycling Element (SRRE) by July 1, 1991. The SRRE is required to identify how each jurisdiction will meet the mandatory state waste diversion goal of 50 percent by the year 2000. The Act mandated that California's 450 jurisdictions (i.e., cities, counties, and regional waste management compacts), implement waste management programs aimed at a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. If the 50 percent goal was not met by the end of 2000, the jurisdiction was required to submit a petition for a goal extension to Cal Recycle.

Senate Bill (SB) 2202 made a number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

SB 1016, Wiggins, Chapter 343, Statutes of 2008 introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent. The bill repealed the board's two-year process, requiring instead that the board make a finding whether each jurisdiction was in compliance with the act's diversion requirements for calendar year 2006 and to determine compliance for the 2007 calendar year, and after, based on the jurisdiction's change in its per capita disposal rate. The board is required to review a jurisdiction's compliance with those diversion requirements in accordance with a specified schedule, which is conditioned upon the board finding that the jurisdiction is in compliance with those requirements or has implemented its source reduction and recycling element and household hazardous waste element. The bill requires the board to issue an order of compliance if the board finds that the jurisdiction has failed to make a good faith effort to implement its source reduction and recycling element or its household hazardous waste element, pursuant to a specified procedure.

The per capita disposal rate is a jurisdiction-specific index, which is used as one of several “factors” in determining a jurisdiction’s compliance with the intent of AB 939, and allows CalRecycle and jurisdictions to set their primary focus on successful implementation of diversion programs. Meeting the disposal rate targets is not necessarily an indication of compliance. CalRecycle reports that Costa Mesa’s Disposal Rate Targets for Reporting Year 2012 are 8.5 pounds per day (PPD) per Resident and 11.3 PPD per Employee.

Participation in the City is recycling programs during project construction and operation would ensure that the project would not conflict with federal, state, and local statutes and regulations related to solid waste. A less than significant impact would occur in this regard. Refer also to Response 4.17.f.

4.18 – Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant With 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?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion:

a) Less than Significant Impact. As concluded in Section 4.4, Biological Resources, the project proposes a 28-unit residential development on previously disturbed site. The proposed project includes demolition of the existing vacant buildings and the development of a 28-unit residential neighborhood called City Commons on the 1.53-acre site. The project site and its surroundings are fully developed, and there are no significant biological resources present in the area. With the incorporation of Mitigation Measure MM BIO 1 to ensure that any potential impacts to nesting birds would be reduced to a level considered less than significant, the project would not 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.

As concluded in Response 4.5.a, the project site does not contain a historically/culturally significant structure. Therefore, project implementation would not eliminate important examples of the major periods of California history.

As concluded in Response 4.5.b, the project site has already been subject to extensive disruption, and contains artificial fill materials. Given the highly disturbed condition of the site, the potential for project implementation to impact an as yet unidentified archeological resource is considered remote. Therefore, project implementation would not eliminate important examples of the major periods of California prehistory. Impacts would be less than significant.

b) Less than Significant Impact. For the environmental issues analyzed in this Initial Study/Mitigated Negative Declaration, there would be no impact that would be individually limited, but cumulatively considerable. In accordance with CEQA Guidelines Section 15183, this environmental analysis was conducted to determine if there were any project-specific effects that are peculiar to the project or its site. No project-specific significant effects peculiar to the project or its site were identified that could not be mitigated to a less than significant level. The project would not induce substantial population growth or significant traffic volumes. The project would contribute to environmental effects in the areas of air quality, greenhouse gas emissions, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, population and housing, public services, recreation, traffic, and utilities/service systems. However, these impacts are negligible and would not be cumulatively considerable. Standard conditions of approval and mitigation measures incorporated herein mitigate any potential impacts associated with these environmental issues. Therefore, the project does not have impacts that are cumulatively considerable. Impacts would be less that significant.

c) Less than Significant Impact with Mitigation Incorporated. See 4.18b. With implementation of standard conditions of approval and mitigation measures, all of the project's impacts are reduced to a less than significant level. As a result, with implementation of the existing regulations, standard conditions of approval and specified mitigation measures, the project would not cause significant adverse effects on human beings. Thus, impacts would be less than significant with mitigation incorporated.

Section 5: Inventory of Standard Conditions and Mitigation Measures

5.1 – Standard Conditions

Aesthetics

SC 4.1.-1 Prior to the issuance of Building Permits, the Applicant shall submit a Lighting Plan and Photometric Study for the approval of the City's Development Services Department. The Lighting Plan shall demonstrate compliance with the following:

- The mounting height of lights on light standards shall not exceed 18 feet in any location on the project site unless approved by the Development Services Director.
- The intensity and location of lights on buildings 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 deemed necessary for safety and security purposes on site.
- Glare shields may be required for select light standards.

Air Quality

SC 4.3-1 Prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SC 4.3-2 The Project shall comply with Title 24 of the California Code of Regulations established by the energy conservation standards.

SC 4.3-3 All construction contractors shall comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Fugitive Dust. All grading (regardless of acreage) shall apply best available control measures for fugitive dust in accordance with Rule 403. To ensure that the project is in full compliance with applicable SCAQMD dust regulations and that there is no nuisance impact off the site, the contractor would implement each of the following:

- Moisten soil not more than 15 minutes prior to moving soil or conduct whatever watering is necessary to prevent visible dust emissions from exceeding 100 feet in any direction.
- Apply chemical stabilizers to disturbed surface areas (completed grading areas) within five days of completing grading or apply dust suppressants or vegetation sufficient to maintain a stabilized surface.
- Water excavated soil piles hourly or covered with temporary coverings.
- Water exposed surfaces at least twice a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.

- Wash mud-covered tired and under-carriages of trucks leaving construction sites.
- Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud, which would otherwise be carried off by trucks departing project sites.
- Securely cover loads with a tight fitting tarp on any truck leaving the construction sites to dispose of debris.
- Cease grading during period when winds exceed 25 miles per hour.
- Water exposed surfaces three times per day.
- Water exposed surfaces three times per day.

Cultural Resources

SC 4.5-1 In the event that archaeological resources 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.

SC 4.5-2 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 paleontological resources impact mitigation plan (PRIMP) for the review and approval by the City prior to resuming excavation activities.

SC 4.5-3 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.

Geology and Soils

SC 4.6-1 The project shall comply with the requirements of the California Code of Regulations, Title 24, also known as the 2013 California Building Standards Code, as amended by the City of Costa Mesa.

SC 4.6-2 Prior to the issuance of Grading Permits, the project applicant shall provide the City of Costa Mesa Department of Building Safety the geotechnical investigation of the project site detailing recommendations for remedial grading in order to reduce the potential of onsite soils to cause unstable conditions. Design, grading, and construction shall be performed in accordance with the requirements of the California Building Code applicable at the time of grading, appropriate local grading regulations, and the recommendations of the geotechnical

consultant as summarized in a final written report, subject to review by the City of Costa Mesa Department of Building Safety.

SC 4.6-3 The project shall comply with the NPDES requirements, as follows:

- Construction General Permit Notice of Intent (NOI) Design: Prior to the issuance of preliminary or precise grading permits, the project applicant shall provide the City Engineer with evidence that an NOI has been filed with the Storm Water Resources Control Board (SWRCB). Such evidence shall consist of a copy of the NOI stamped by the SWRCB or Regional Water Quality Control Board (RWQCB), or a letter from either agency stating that the NOI has been filed.
- Construction Phase Storm Water Pollution Prevention Plan (SWPPP): Prior to the issuance of grading permits, the applicant shall prepare a SWPPP that complies with the Construction General Permit and will include at a minimum the following:
  - Discuss in detail the BMPs planned for the project related to control of sediment and erosion, nonsediment pollutants, and potential pollutants in non-storm water discharges;
  - Describe post-construction BMPs for the project;
- Explain the maintenance program for the project's BMPs
- List the parties responsible for the SWPPP implementation and the BMP maintenance during and after grading. The project Applicant shall implement the SWPPP and modify the SWPPP as directed by the Construction General Permit.

Hazards and Hazardous Materials

SC 4.8-1 During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.

SC 4.8-2 During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.

Hydrology and Water Quality

SC 4.9-1 In order to comply with the 2003 DAMP, the proposed project shall prepare a Storm Drain Plan, Stormwater Pollution Prevention Plan (SWPPP), and Water Quality Management Plan (WQMP) conforming to the current National Pollution Discharge Elimination System (NPDES) requirements, prepared by a Licensed Civil Engineer or Environmental Engineer, which shall be submitted to the Department of Public Works for review and approval.

- The SWPPP shall be prepared and updated as needed during the course of construction to satisfy the requirements of each phase of development.

- The plan shall incorporate all necessary Best Management Practices (BMPs) and other City requirements to eliminate polluted runoff until all construction work for the project is completed. The SWPPP shall include treatment and disposal of all dewatering operation flows and for nuisance flows during construction.
- A WQMP shall be maintained and updated as needed to satisfy the requirements of the adopted NPDES program. The plan shall ensure that the existing water quality measures for all improved phases of the project are adhered to.
- Location of the BMPs shall not be within the public right-of-way.

SC 4.9-2 Prior to approval of Plans, the project shall fulfill the City of Costa Mesa Drainage Ordinance No. 06-19 requirements.

Noise

SC 4.12-1 During construction, the contractor shall ensure that construction activity complies with the City's noise ordinance. Exceptions may be made for activities that will not generate noise audible from offsite, such as painting and other quiet indoor work.

SC 4.12-2 Prior to issuance of a Building Permit for residential structures, the project applicant shall submit to the Building Official an interior noise analysis showing compliance with the City's noise standards.

Public Services

SC 4.14-1 The final master plan for development of the project site shall provide sufficient capacity for fire flows required by the City of Costa Mesa Fire Department.

SC 4.14-2 Vehicular access shall be provided and maintained serviceable throughout construction to all required fire hydrants.

SC 4.14-3 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.

SC 4.14-4 The project shall provide approved smoke detectors to be installed in accordance with the 2013 Edition of the Uniform Fire Code.

SC 4.14-5 The project shall provide fire extinguishers with a minimum rating of 2A to be located within 75 feet of travel distance from all areas. Extinguishers may be of a type rated 2A, 10BC as these extinguishers are suitable for all types of fires and are less expensive.

SC 4.14-6 The project shall provide an automatic fire sprinkler system according to NFPA 13 R.

SC 4.14-7 The project shall provide individual numeric signage for proposed residences with minimum 6 inches height.

SC 4.14-8 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 are recommended by the Police Department, including 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.
- Emergency vehicle parking areas shall be designated within proximity to buildings.
- 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.

SC 4.14-9 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 and $0.30 per square foot for commercial development.

SC 4.14-10 Prior to issuance of occupancy permits, the Developer shall pay a park impact fee or dedicate parkland to meet the demands of the proposed development.

Transportation/Traffic

SC 4.16-1 The project Applicant shall be responsible for the payment of fees in accordance with Costa Mesa's traffic impact fee program to mitigate project-generated traffic impacts (including regional traffic).

SC 4.16-2 Prior to issuance of grading permits, developer shall submit for review and approval a Construction Management Plan. This plan features methods to minimize disruption to the neighboring residential uses to the fullest extent that is reasonable and practicable. The plan shall include construction parking and vehicle access and specifying staging areas and delivery and hauling truck routes. The plan should mitigate disruption to residents and also businesses during construction.

The truck route plan shall preclude truck routes through residential areas and major truck traffic during peak hours. The total truck trips to the site shall not exceed 200 trucks per day (i.e., 100 truck trips to the site plus 100 truck trips from the site) unless approved by the Development Services Director or Transportation Services Manager.

Utilities and Service Systems

SC 4.17-1 Applicant will be required to construct sewers to serve the project, at his own expense, meeting the approval of the Costa Mesa Sanitary District.

SC 4.17-2 County Sanitation District fees, fixtures fees, inspection fees, and sewer permit are required prior to installation of sewer.

SC 4.17-3 The Applicant shall submit a plan showing sewer improvements that meets the District Engineer's approval to the Building Division as part of the plans submitted for plan check.

SC 4.17-4 The Applicant is required to contact the Costa Mesa Sanitary District to arrange final sign-off prior to Certificate of Occupancy being released.

SC 4.17-5 Unless an offsite trash hauler is being used, the Applicant shall contact the Costa Mesa Sanitary District to pay trash collection program fees and arrange for service for all new residences. Residences using bin or dumpster services are exempt from the requirement.

SC 4.17-6 The Applicant shall contact Costa Mesa Sanitary District for any additional district requirements.

5.2 – Mitigation Measures

Biological Resources

MM BIO-1 Migratory Bird Treaty Act. In the event that the City Commons project construction or grading activities should occur within the active breeding season for birds (i.e., February 15–August 15), a nesting bird survey shall be conducted by a qualified biologist prior to commencement of construction activities. If active nesting of birds is observed within 100 feet (ft) of the designated construction area prior to construction, the construction crew shall establish an appropriate buffer around the active nest. The designated project biologist shall determine the buffer distance based on the specific nesting bird species and circumstances involved. Once the project biologist verifies that the birds have fledged from the nest, the buffer may be removed. Prior to commencement of grading activities and issuance of any building permits, the City of Costa Mesa (City) Economic and Development Services Director, or designee, shall verify that all project grading and construction plans include specific documentation regarding the requirements of the Migratory Bird Treaty Act (MBTA), that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.

Hazards and Hazardous Materials

MM HAZ-1 Prior to demolition activities, removal and/or abatement of buildings with lead-based paints and hazardous materials associated with the existing building materials shall be conducted by a qualified environmental professional in consultation with the Costa Mesa

Fire Department. A hazardous materials abatement specification shall be developed by the qualified environmental professional, in order to clearly define the scope and objective of the abatement activities.

MM HAZ-2 Prior to investigations, demolition, or renovation, all activities shall be coordinated with Dig Alert (811).

MM HAZ-3 Visual inspections for areas of impact to soil shall be conducted during site grading. If unknown or suspect materials are discovered during construction by the contractor that are believed to involve hazardous wastes or materials, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the City Engineer and Costa Mesa Fire Department;
- Secure the area(s) in question; and
- Implement required corrective actions, including remediation if applicable.

MM HAZ-4 Prior to Building Permit issuance, additional soil and soil vapor sampling shall be performed in the area of the former Randy's Automotive repair facility in the eastern portion of the project site. If investigation results show elevated soil and soil vapor concentrations and the subsequent HHRA shows calculated residential risk levels significantly greater than $1x10^{-6}$, then vapor barriers and subsequent monitoring beneath select residential units may be required.

MM HAZ-5 On the basis of MM HAZ-4, if it is determined that soil vapor barriers are required, measures to assure the proper installation, monitoring and continued proper functioning of such barriers shall be identified and submitted to the City prior to issuance of grading permits.

<u>Land Use</u>

MM LU-1 Prior to the issuance of a certificate of occupancy, Conditions, Covenants and Restrictions (CC&Rs) must be prepared and submitted the Building Official for review and approval, which requires the reservation of the right for the City to create a pedestrian and vehicular connection between Lots 21 and 22 on the project site and the southerly property.

<u>Noise</u>

MM N-1 Prior to issuance of building permits for residential structures, the project applicant shall submit to the Building Official an interior noise analysis showing compliance with the City's noise standards

Section 7: References

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TECHNICAL APPENDICES ON CD

Appendix A: Air Quality and Greenhouse Gas Emissions CalEEMod2013.2.2 Data

Appendix B: Geotechnical Investigation

Appendix C: Phase I and Phase II Environmental Site Assessment and Associated Documents

Appendix D: Exterior Noise Analysis

Appendix E: Traffic Study