



**Initial Study/Mitigated Negative Declaration
2277 Harbor Boulevard Project
City of Costa Mesa, Orange County, California**

Prepared for:

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SECTION 1: INTRODUCTION

The City of Costa Mesa has determined the proposed 2277 Harbor Boulevard Project (i.e., 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 proposed project. The project involves construction of a 224-unit luxury apartment development and the demolition of an existing motel use (Costa Mesa Motor Inn) at 2277 Harbor Boulevard in Costa Mesa, California. The project also includes approximately 82,076 SF of private and communal open space. The proposed project involves the following discretionary requests:

- **General Plan Amendment GP-14-04** to change the land use designation from General Commercial to High Density Residential. Per the applicant’s request, the proposed base density is 166 units (40 du/acre) with a density incentive for an additional 58 dwelling units to be justified by (a) Provision of 20 affordable units for moderate-income households and (b) Complete demolition of the Costa Mesa Motor Inn/236 motel rooms and redevelopment to an upscale apartment building with full security, structured parking, and significant amenities. Therefore, for the 4.15-acre project site the General Plan Amendment would specify an overall site-specific density of 54 du/acre for the proposed 224-unit apartment complex and a site-specific building height for the 5-level parking structure.
- **Rezone R-14-04** to change the zoning classification from C1 (Local Business District) to PDR-HD (Planned Development Residential – High Density).
- **Zoning Code Amendment CO-14-02** to make specific references to the parcel, where appropriate, including the site-specific height and density for the development site in the PDR-HD zone in Title 13 (Zoning Code) of the Costa Mesa Municipal Code and any other related changes.
- **Planning Application PA-14-27** to implement a Master Plan for the 224-unit apartment project with specified deviations from the PDR-HD development standards, including the following:
 - i. Variance to allow deviation from required Open Space and Private Open Space requirements;
 - ii. Variance from building height to allow a five level parking structure (maximum 4 levels allowed; 5 levels proposed);
 - iii. Administrative Adjustment for encroachment of ground floor private patios into required perimeter open space area (20 feet required; 15 feet proposed). Section 2.0, Project Description, provides a detailed description of the project.

1.1 - Statutory Authority and Requirements

In accordance with 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, 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 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 an 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) or Negative Declaration; (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 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 - Incorporation by Reference

Pertinent documents relating to this Initial Study/Mitigated Negative Declaration (IS/MND) have been cited and incorporated, in accordance with Sections 15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports within the Initial Study. Of particular relevance are those previous environmental documents that present

information regarding descriptions of environmental settings, and future development-related growth and cumulative impacts. The references outlined below were utilized during preparation of this Initial Study. The documents are available for review at the City of Costa Mesa Development Services Department located at 77 Fair Drive, Costa Mesa, California 92626.

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. According to the current (2013-2021) Housing Element (City of Costa Mesa 2008), as of 2010, there were 39,946 households within 16 square miles in the City.

City of Costa Mesa 2000 General Plan Environmental Impact Report. 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 non-residential land uses, which represents an increase 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 Gisler Avenue, west of Harbor Boulevard);
- Noise (long-term mobile sources);
- Air Quality (short- and long-term emissions).

The General Plan and General Plan EIR were used in this Initial Study/Mitigated Negative Declaration 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.

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SECTION 2: PROJECT DESCRIPTION

2.1 - Project Location

The project site is located in the south central portion of the City of Costa Mesa, in the County of Orange; refer to Exhibit 1. Specifically, the site is located west of Harbor Boulevard and directly south of the Costa Mesa Golf Course, at 2277 Harbor Boulevard; refer to Exhibit 2. The site is located approximately 2.9 miles northeast of the Pacific Ocean.

Regional access to the site is provided via California State Route 55 (SR-55)/Newport Boulevard, which is located approximately 0.75-mile to the east. The San Diego Freeway (I-405), which is located approximately 2 miles north of the site, also provides regional access. Local access to the site is provided via Harbor Boulevard, West Wilson Street and Victoria Street.

2.2 - Environmental Setting

The project site (Assessor's Parcel Number 422-163-31) consists of one parcel totaling approximately 4.15 acres. The site is relatively flat with onsite elevation of approximately 78 feet above mean sea level.

The majority of the project site was vacant from at least 1938 through 1972. The project site is currently occupied by the 236-room, 94,500 square foot Costa Mesa Motor Inn motel. The current structures were constructed at the site around 1974, originally as the Ambassadors Inn. The existing motel is a two-story building featuring 236 rooms and associated surface parking with 268 spaces; refer to Exhibit 3. In general, the motel provides housing for the local transient community and extended stay options are available. Visitors are permitted to stay up to a month at the motel.

The project site is bounded by the Costa Mesa Golf Course to the North; residential and commercial uses to the south, which include an auto repair business and a Taco Bell at the northwestern corner of the Harbor Boulevard and Wilson Street intersection; the Ala Moana Apartments and several single family homes occur west of the commercial uses along Wilson Street, adjacent to the southern portion of the site; apartments occur immediately west of the site; and Harbor Center, a commercial shopping center, occurs to the east of the site, across Harbor Boulevard. Refer to Exhibit 4 for project area photographs.

A chain link fence generally surrounds the project site, with some barbed wire fencing present along the southwest border. There is an existing 72-inch storm drain to the north of the site, and onsite water and sewer services are currently provided by Mesa Consolidated Water District and Costa Mesa Sanitary District. The existing site is very flat and drains directly into grate inlets in the drive aisles, parking lots, and interior courtyards. The existing storm drain flows from the south to north into an existing City owned 72-inch RCP storm drain north of the project. This storm drain then flows northerly and westerly through the Costa Mesa Country Club golf course property into a County owned trapezoidal channel, then into a reinforced concrete rectangular channel. Eventually, the water flows into the Santa Ana River.

2.2.1 - General Plan and Zoning

General Plan

According to the City of Costa Mesa General Plan Land Use Map, the site is currently designated GC (General Commercial). The General Commercial designation is intended for a variety of commercial uses. Allowed Floor Area Ratios (FAR) are dependent on the level of traffic present within the project area. Refer to Exhibit 5.

Zoning

As shown on the Official Zoning Map, the project site is currently zoned C1 (Local Business District). Under this designation the minimum lot area is 12,000 square feet, buildings are restricted to two stories, and a master plan is not required. Refer to Exhibit 6.

Existing Surrounding Land Uses

Surrounding land uses generally consist of residential, recreational, and commercial uses; refer to Exhibit 4. Land uses immediately adjacent to the project site consist of the following:

- **North:** A public trail and the Costa Mesa Golf Course are located directly north of the site, and zoned I&R (Institutional and Recreational). Pal's Vacuum Cleaner is located along the project's northeastern border, between the proposed project and the Costa Mesa Golf Course. This private commercial use is zoned C2 (General Business District).
- **East:** Harbor Boulevard borders the site to the east, with commercial development located beyond. The site is zoned C1-S (Shopping Center District).
- **South:** Commercial and residential uses bound the site to the south. This area is zoned R3 (Multiple-Family Residential District) and C2 (General Business District).
- **West:** Residential uses are located west of the site. Such uses are zoned R2-MD (Multiple-Family Residential District, Medium Density).

2.3 - Project Features

The project involves the demolition of the existing motel use, and the construction of a new 224-unit development of luxury apartments at 2277 Harbor Boulevard. The proposed project involves the following:

- **General Plan Amendment GP-14-04** to change the land use designation from General Commercial to High Density Residential. Per the applicant's request, the proposed base density is 166 units (40 du/acre) with a density incentive for an additional 58 dwelling units to be justified by (a) Provision of 20 affordable units for moderate-income households and (b) Complete demolition of the Costa Mesa Motor Inn and significant redevelopment of the property. The General Plan Amendment would specify an overall site-specific density and site-specific building height for the project.
- **Rezone R-14-04 from C1** (Local Business District) to PDR-HD (Planned Development Residential – High Density).

- **Zoning Code Amendment CO-14-02** to make specific references to the parcel, where appropriate, including the site-specific height and density for the development site in the PDR-HD zone in Title 13 (Zoning Code) of the Costa Mesa Municipal Code and any other related changes.
- **Planning Application PA-14-27** to approve a Master Plan for the 224-unit apartment project with specified deviations from the PDR-HD development standards, including the following:
 - i. Variance to allow deviation from required Open Space and Private Open Space requirements;
 - ii. Variance from building height to allow a five level parking structure (maximum 4 levels allowed; 5 levels proposed);
 - iii. Administrative Adjustment for encroachment of ground floor private patios into required perimeter open space area (20 feet required; 15 feet proposed).

These project components are described further below. Also refer to Exhibit 7a for an illustrative site plan.

The proposed project includes five different multi-family unit types, which are summarized in Table 1, below. The project has been designed to include various amenities intermixed within the residential buildings. The requested density incentive program for an additional 58 apartment units involves: (1) affordable housing covenants for 20 dwelling units restricting affordability to moderate income households and (2) Complete demolition of the 236-room Costa Mesa Motor Inn. Parking onsite would be accommodated with a new multi-level parking structure. The project would provide 503 garage/covered parking spaces at ratios of 1.75 cars per 1-bedroom unit (140 units), 2.25 cars per 2-bedroom unit (84 units), and 0.05 guest car spaces per unit for the first 50 units, and 0.25 spaces for each unit above 50 units (174 remaining), for a total of 503 spaces, as required by the City’s parking code; refer to Exhibit 7a.

Table 1: Project Summary

Type of Unit	Description	Level 1 Units	Level 2 Units	Level 3 Units	Level 4 Units	Total Units ¹	Percentage of Total Units
Unit A1	1 bedroom 1 bathroom	21	24	24	24	93	41%
Unit A2	1 bedroom 1 bathroom	7	8	8	8	31	14%
Unit A3	1 bedroom 1 bathroom 1 den	4	4	4	4	16	7%
Unit B1,B2, B3	2 bedrooms 2 bathrooms	17	17	21	21	76	34%
Unit B4	2 bedrooms 2 bathrooms 1 den	2	2	2	2	8	4%
Total Units	—	51	55	59	59	224	100%
Notes: ¹ Combined total of 224 units proposed onsite. A total of 503 parking spaces are provided, all within an onsite parking garage.							

Architectural Features

The proposed project architecture would feature a contemporary design, consisting of geometric layouts of wood, stone, and composite paneling. The proposed colors consist of earthen tones of deep brown and light brown, with silver accents and white contemporary elements. The project proposes to use clear glass; fiber-reinforced cement siding; metal, limestone, and white smooth stucco finishes; metal fencing, metal wire mesh, and woven metal wire cloth. Projections are included to maximize usable outdoor space, provide building articulation, texture and color variation throughout the project's design. Private balconies are also proposed for some units; refer to Exhibit 7a and 7b.

A split face concrete masonry unit (CMU) block wall would be located along the southern and western borders of the site, as well as the northeastern corner of the site, where the project abuts the existing commercial use. The project frontage along Harbor Boulevard and the northern border would include a metal fence.

The project plans to develop a four-story apartment building and a parking structure with five levels (all above grade). The building heights for the project would extend to a maximum height of 50 feet, as shown in Exhibit 8c. The City of Costa Mesa generally identifies setbacks of 10 feet between multi-unit buildings, 5 to 20 feet along project borders, and 20 feet along a project frontage, as seen in Exhibit 7a. The project includes setbacks of 20 feet on all borders.

Open Space and Residential Amenities

The project would provide 72,277 square feet of outdoor open space and 11,799 interior communal areas for a total of 82,076 square feet. The project would establish several distinct outdoor courtyards onsite, and would include an indoor fitness center, outdoor exercise circuit and other amenities, which are described in Table 2, below.

Table 2: Project Amenities

Amenity Description	Characteristics
Main Entry	<ul style="list-style-type: none"> Resort style Linear concrete paver entry auto court
Swimming Pool	<ul style="list-style-type: none"> Cabanas (8 feet by 8 feet) Over scaled (15 feet by 50 feet) Frameless glass safety enclosure Spa
Sun Decks/ Courtyards	<ul style="list-style-type: none"> Fully landscaped
Fitness Center Gym/Recreation Room	<ul style="list-style-type: none"> Two-story building Cardio equipment Weights
Barbeques	<ul style="list-style-type: none"> Outdoor Available to residents Built-in appliances located on each side of ramp to raised deck

Table 2 (cont.): Project Amenities

Amenity Description	Characteristics
Business and Computer Library Center	<ul style="list-style-type: none"> • Printing • Computers available • Wi-Fi
Indoor lounge	<ul style="list-style-type: none"> • Fire place
Internet Café and Seating Area	<ul style="list-style-type: none"> • Snack bar • Wi-Fi • TV monitor • Shade trellis
Media Room	<ul style="list-style-type: none"> • Surround sound • Theater
Concierge Service	<ul style="list-style-type: none"> • Located within the lobby
Washer and Dryer	<ul style="list-style-type: none"> • Available in every unit
Dog walking	<ul style="list-style-type: none"> • Pet friendly facilities • Dog waste station
Dining Niches	<ul style="list-style-type: none"> • Semi-private • Outdoor
Fire Pit	<ul style="list-style-type: none"> • Outdoor • Seating
Exercise Circuit	<ul style="list-style-type: none"> • Decomposed granite
Exercise Deck	<ul style="list-style-type: none"> • Raised • Yoga • Dance • 18 feet high • Movable wooden benches
Fountains	<ul style="list-style-type: none"> • Serenity fountains • Feature fountains
Grass Court	<ul style="list-style-type: none"> • Badminton • Multi-purpose court
Sources: FCS 2014; GMPA Architects 2015, Conceptual Plan.	

Site Access

The project would utilize two access locations along Harbor Boulevard, with the main entrance in the northeast corner and the secondary access point within the southeast corner. Both access points would be provided via a right-turn in/ right-turn out driveways. A loading and unloading area would be located at the western terminus of the southern roadway. Additionally, a fire department

turnaround would be located along the southern roadway near the southwest corner of the site, which would utilize a grasscrete¹ lawn area.

Parking

The project would include the establishment of a 5-story parking structure within the central southern portion of the site. The parking structure would be accessible via both access driveways from Harbor Boulevard, with garage ingress and egress provided from the southern driveway and at the terminus of the main entrance. The parking garage would provide a total of 503 spaces, as required by the City's parking code.

Construction Activities and Grading

The project includes demolition and removal of the existing motel buildings located on the project site, which would include the demolition of approximately 94,500 square feet of existing buildings and related facilities. Prior to demolition of the existing structures, removal and/or abatement of any potential asbestos containing building materials, lead based paints, and any hazardous materials associated with the existing building materials would be conducted by a qualified environmental professional in consultation with the Costa Mesa Fire Department. Once demolition and removal is completed, the project site would be graded and new improvements would be constructed in a single-phase. Grading quantities are expected to balance onsite, with no need to import/export soils. Project demolition/construction activities are expected to begin in February 2016 and be completed in January 2018.

Utilities

The project would connect to an existing 72' storm drain to the north of the site. The existing sewer line within the northern portion of the site would be removed, and the easement would be terminated with the easement holder. The project would connect to the existing sewer line that lies further to the east. The project would utilize a new connection along Harbor Boulevard to provide potable water to the site. A new backflow and fire department connection would be located in the southeast corner of the site. The project would also provide seven new fire hydrants, with one provided for public use.

The proposed drainage pattern is similar to the existing condition, except that the proposed site will drain into biofiltration facilities prior to discharging into the storm drain system.

2.4 - Project Approvals

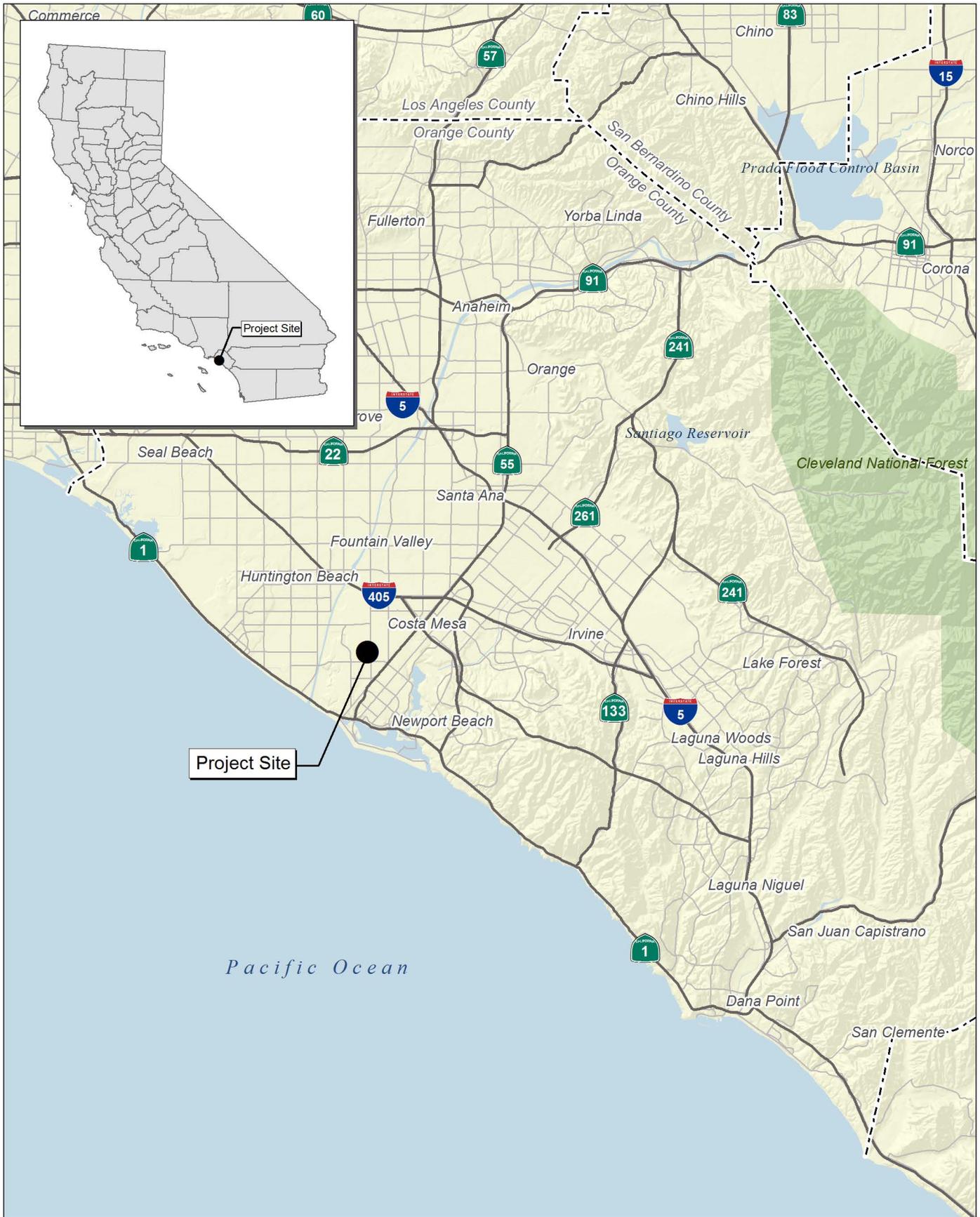
The City of Costa Mesa, as Lead Agency for the project, has discretionary authority over the project. In order to implement this project, the Applicant would need to obtain the following permits/approvals from the City of Costa Mesa, including, but not limited to:

- City Council approval of the Initial Study/Mitigated Negative Declaration;

¹ "Grasscrete" is a cellular reinforced concrete system with voids created to allow for the growth of a lawn.

- City Council approval of a General Plan Amendment to change the land use designation from General Commercial to High Density Residential and to establish a site-specific density and building height, including a density incentive.
- City Council approval to Rezone the site (R-14-04) to PDR-HD (Planned Development Residential – High Density);
- City Council approval of a Zoning Code Amendment (CO-14-02) to make specific reference to the parcel, where appropriate, and the site-specific density for the development site in the PDR-HD zone in Title 13 (Zoning Code) of the Costa Mesa Municipal Code;
- City Council approval of a Master Plan (PA-14-27) for a 224-unit apartment project with certain deviations from the PDR-HD development standards.
Some of the requested deviations from PDR-HD development standards of the proposed Master Plan include:
 - Variance to allow deviation from required Open Space and Private Open Space requirements
 - Variance from building height to allow a 5-level parking structure (4-levels allowed; 5-levels proposed);
 - Administrative Adjustment for encroachment of ground floor private patios into required 20-foot perimeter open space area (20 FT Required; 15 FT Proposed)
- Demolition Permits for onsite structures and other improvements;
- Grading and Building Permits to grade and construct the project; and
- Approval of a Construction Management Plan.

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Source: Census 2000 Data, The CaSIL.

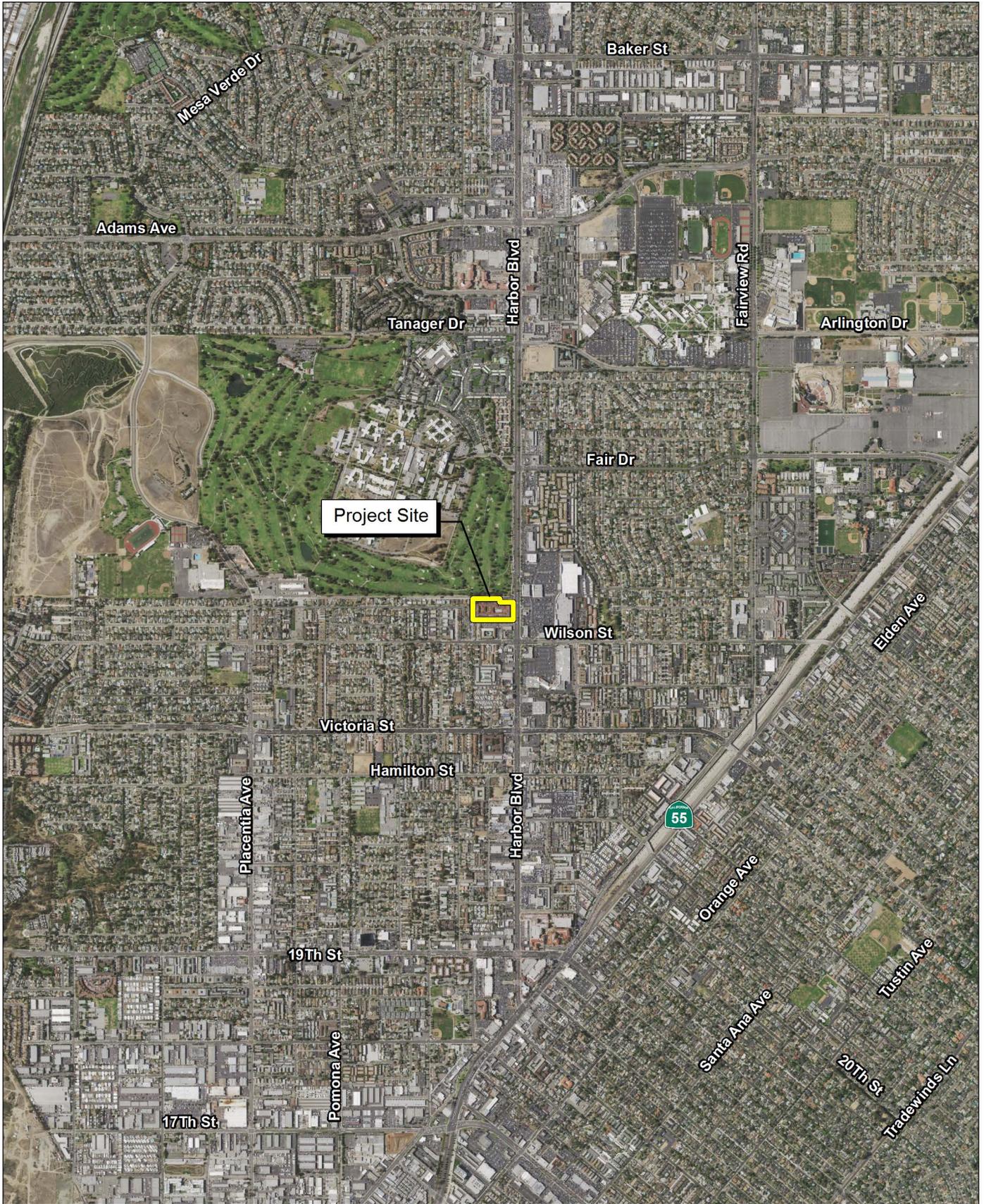


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Exhibit 1 Regional Location Map

CITY OF COSTA MESA • 2277 HARBOR BOULEVARD
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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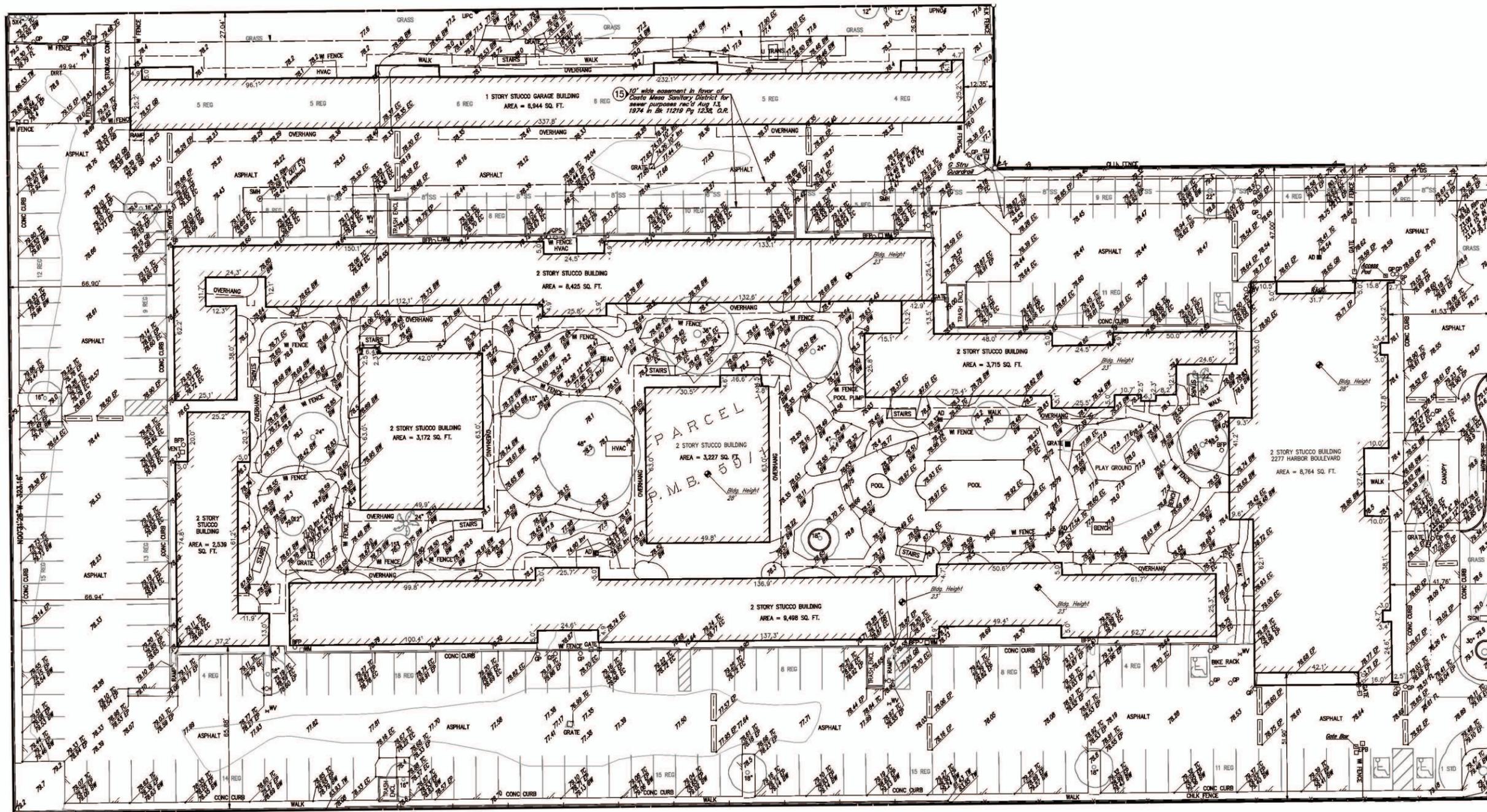


Source: NAIP Aerial Imagery, 2014.



Exhibit 2 Local Vicinity Map

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Source: PSOMAS, August 2014.



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Exhibit 3 Existing Site Layout

CITY OF COSTA MESA • 2277 HARBOR BOULEVARD
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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Source: GMPA Architects, April 2015.



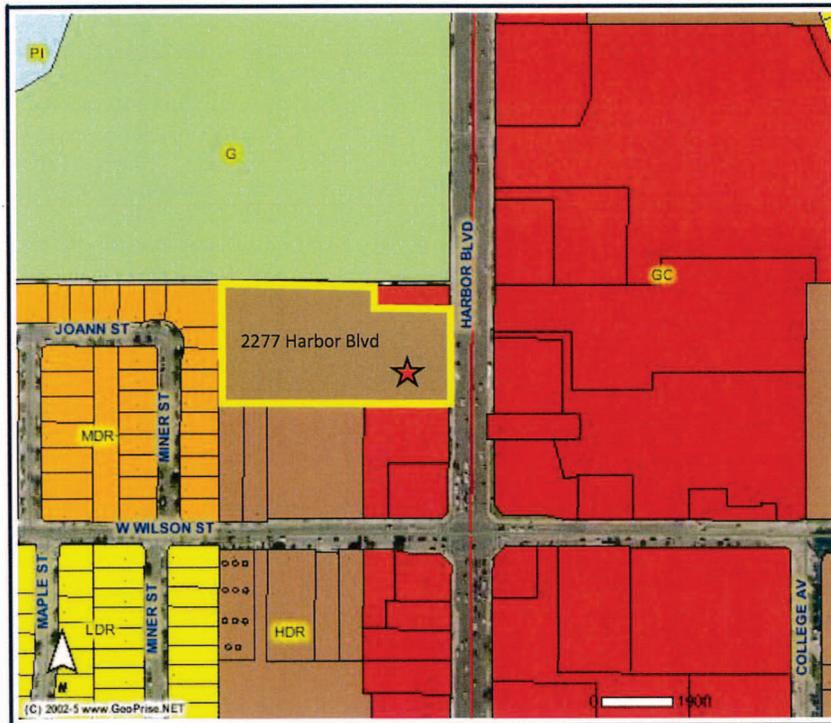
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Exhibit 4 Site Photographs

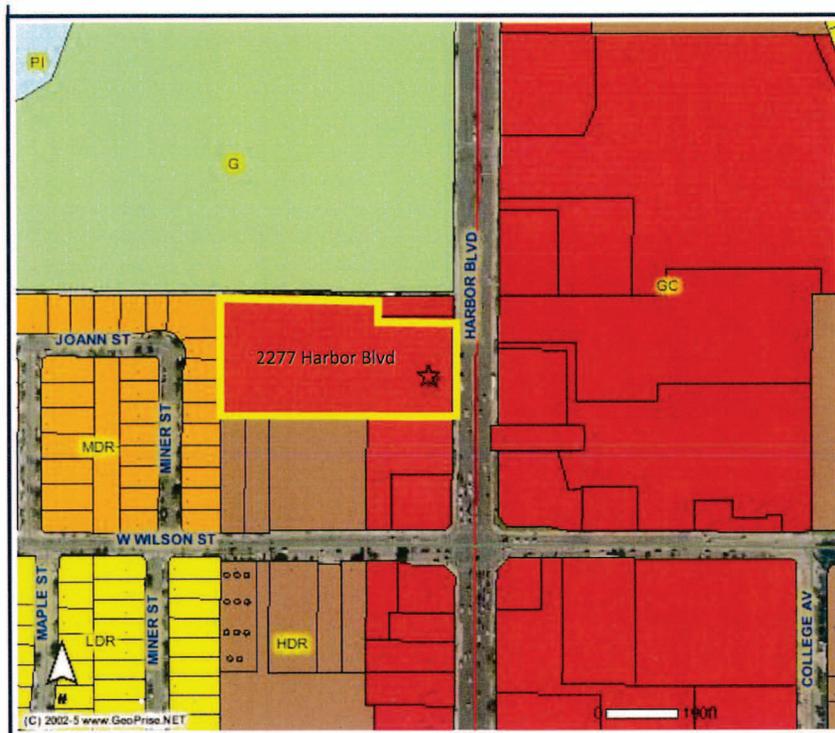
CITY OF COSTA MESA • 2277 HARBOR BOULEVARD
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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Proposed General Plan Land Use Map: High Density Residential (HDR)



Existing General Plan Land Use Map: General Commercial (GC)



Source: City of Costa Mesa.



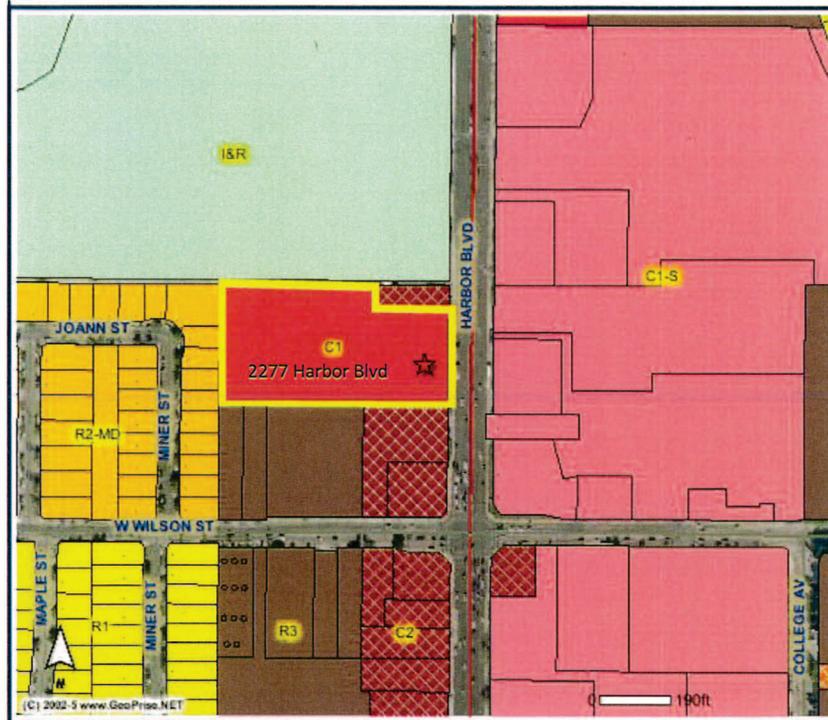
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Exhibit 5
General Plan Land Use Map

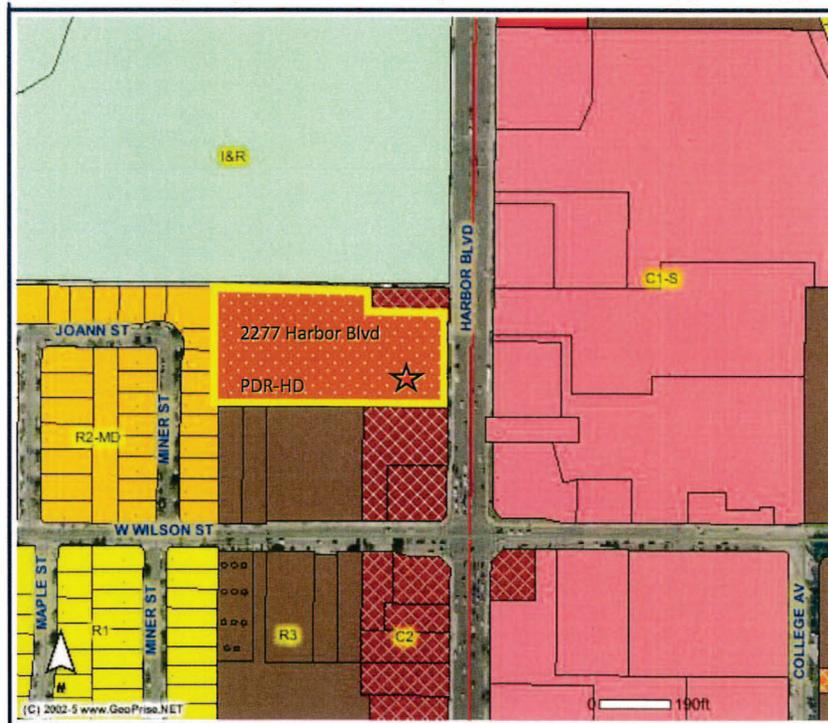
CITY OF COSTA MESA • 2277 HARBOR BOULEVARD
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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Existing Zoning Map: Local Business District (C1)



Proposed Zoning Map: Planned Development Residential-High Density (PDR-HD)

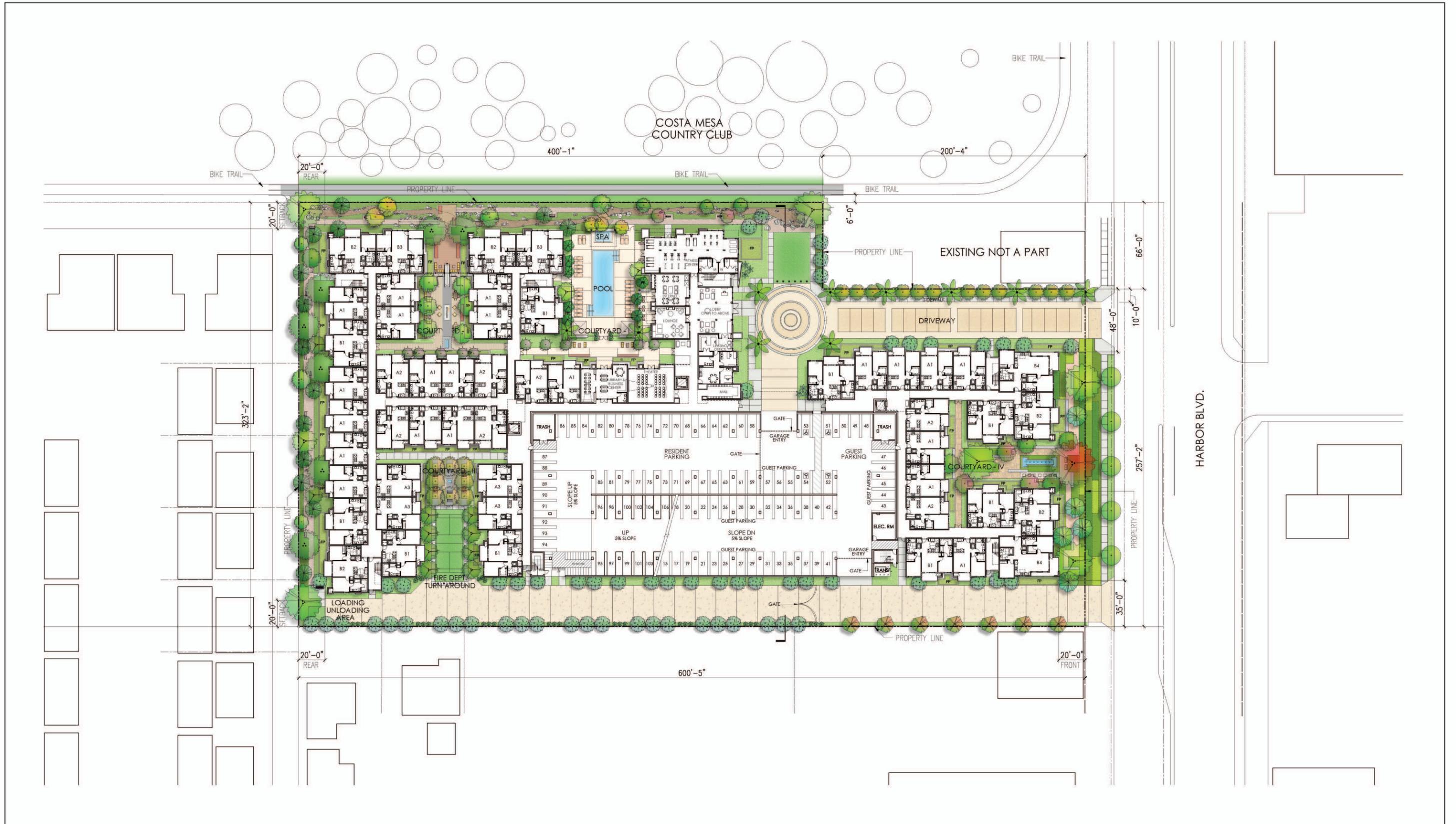


Source: City of Costa Mesa.



Exhibit 6
Zoning Map

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Source: GMPA Architects, April 2015.

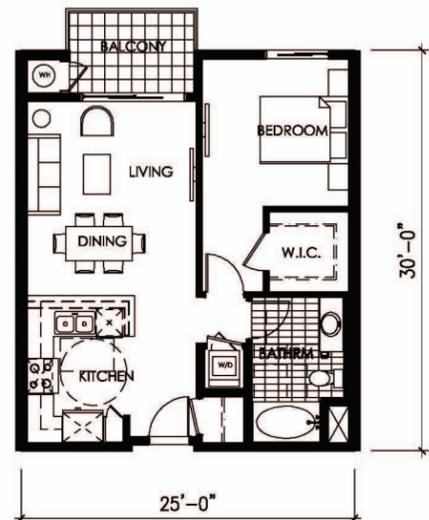


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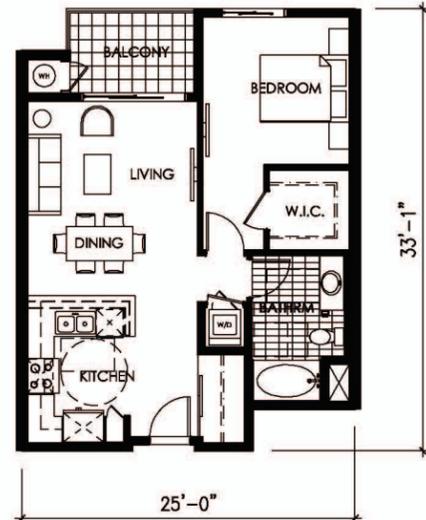
Exhibit 7a Illustrative Site Plan

CITY OF COSTA MESA • 2277 HARBOR BOULEVARD
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

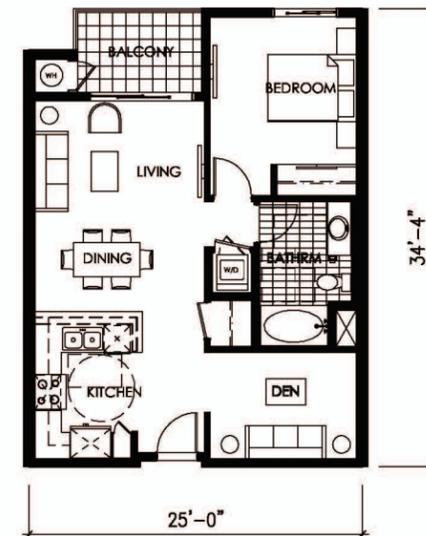
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UNIT A1 (1 BEDROOM) ± 750 SF.



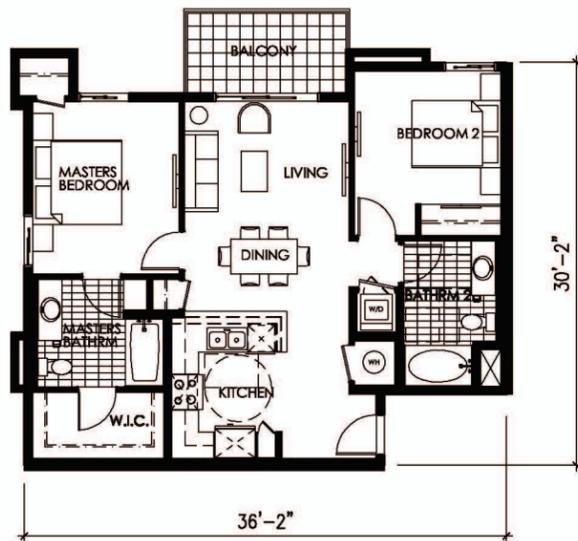
UNIT A2 (1 BEDROOM) ± 730 SF.



UNIT A3 (1 BEDROOM + DEN) ± 780 SF.



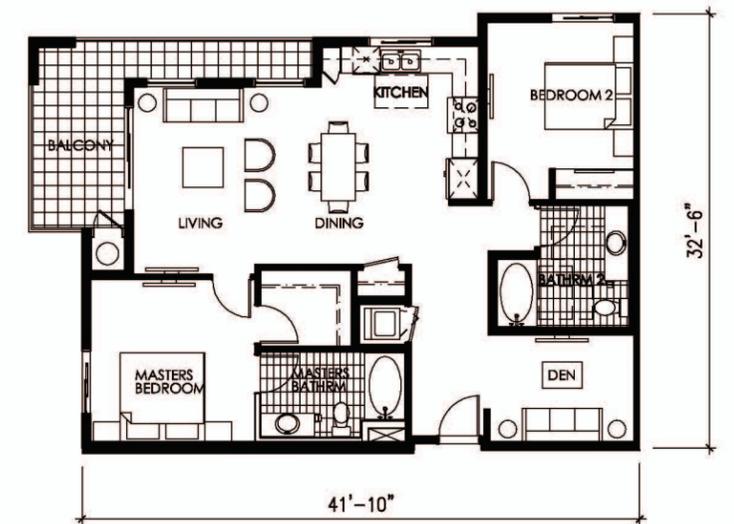
UNIT B1 (2 BEDROOM) ± 1,050 SF.



UNIT B2 (2 BEDROOM) ± 1,050 SF.



UNIT B3 (2 BEDROOM) ± 1,050 SF.



UNIT B4 (2 BEDROOM + DEN) ± 1,200 SF.

Source: GMPA Architects, April 2015.



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Exhibit 7b
Typical Unit Plans

CITY OF COSTA MESA • 2277 HARBOR BOULEVARD
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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EXISTING BUILDING
NORTH ELEVATION

MAIN DRIVEWAY ENTRANCE

MAIN PARKING STRUCTURE ENTRANCE

MAIN ENTRY: 2 STORY LOBBY, GYM, LOUNGE, WIFI CAFE, SCREENING / MULTI-PURPOSE, LIBRARY, CONFERENCE

COURTYARD I: RECREATION, CABANAS, SWIMMING POOL & OUTDOOR CAFE

COURTYARD II: DINING AREA, YOGA, BBQ & FIRE PIT



SOUTH ELEVATION

COURTYARD III: THE EDIBLE GARDEN, FOUNTAIN & ACTIVITY LAWN AREA

PARKING STRUCTURE

SECONDARY PARKING STRUCTURE ENTRANCE

SECONDARY DRIVEWAY ENTRANCE

Source: GMPA Architects, April 2015.



Exhibit 8a
Building Elevations - North and South

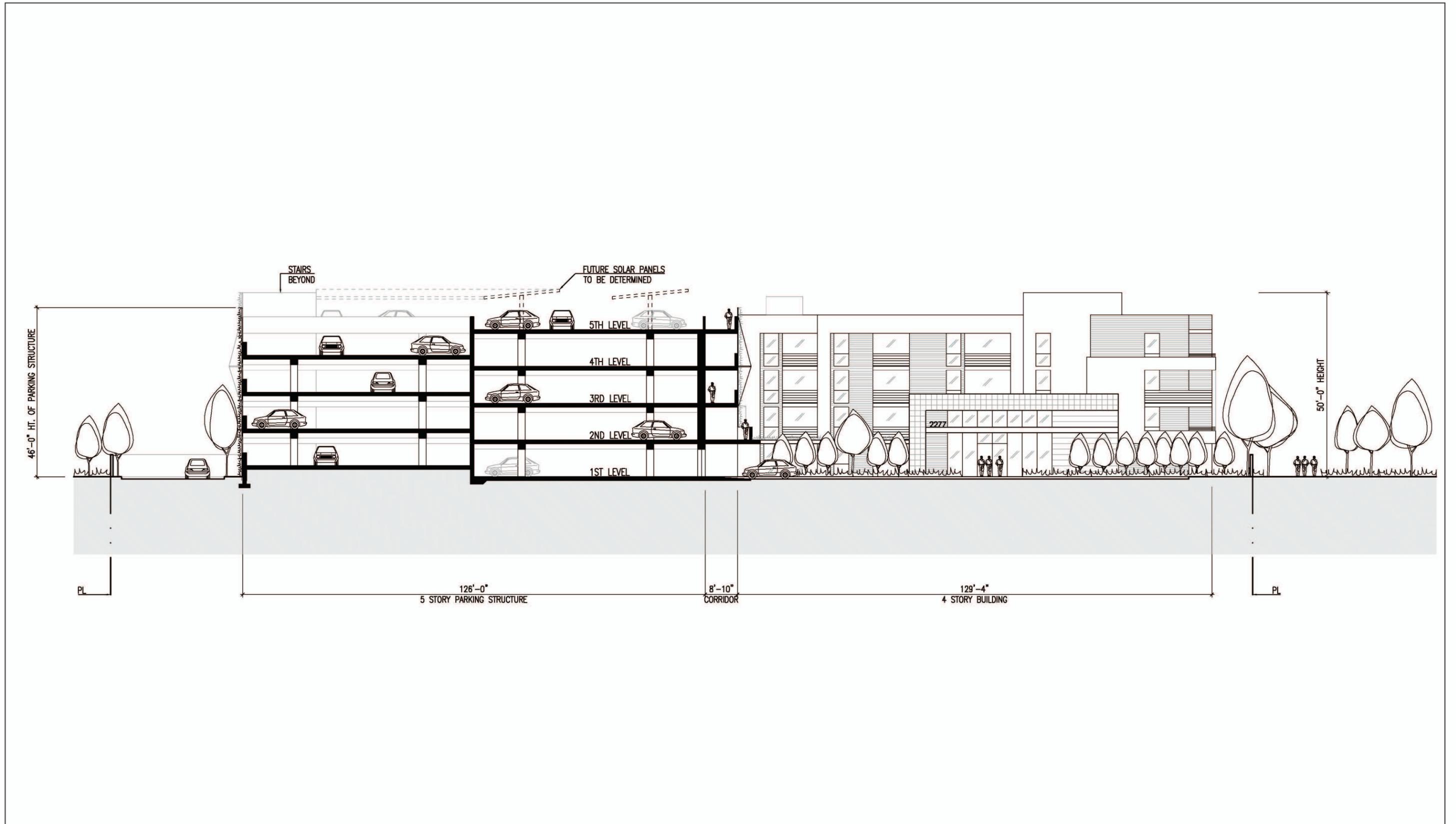
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Source: GMPA Architects, April 2015.



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Source: GMPA Architects, April 2015.



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SECTION 3: INITIAL STUDY CHECKLIST

3.1 - Background

1. Project Title
2277 Harbor Boulevard Project
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:
Ryan Loomis Associate Planner 714.754.4913 Email: ryan.loomis@costamesaca.gov
4. Project Location:
2277 Harbor Boulevard Costa Mesa Orange County, CA 92626
5. Project Sponsor's Name and Address:
Miracle Mile Properties 4221 Wilshire Boulevard, Suite 480 Los Angeles, CA 90010
6. General Plan Designation:
GC- General Commercial
7. Zoning:
C1- Local Business District
8. Description of the Project:
See Section 2, Project Description
9. Surrounding Land Uses and Setting:
See Section 2, Project Description
10. Other public agencies whose approval is required (e.g., permits):
<ul style="list-style-type: none">• South Coast Air Basin• Santa Ana Regional Water Quality Control Board - Region 8

3.2 - Environmental Factors Potentially Affected

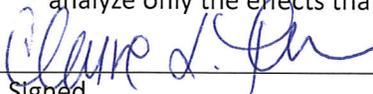
Environmental Factors Potentially Affected		
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant With Mitigation Incorporated," as indicated by the checklist on the following pages.		
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology/Soils
<input type="checkbox"/> Greenhouse Gas Emissions	<input checked="" type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Hydrology/Water Quality
<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	<input checked="" type="checkbox"/> Noise
<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation
<input type="checkbox"/> Transportation/Traffic	<input type="checkbox"/> Utilities/Services Systems	<input checked="" type="checkbox"/> Mandatory Findings of Significance

3.3 - Lead Agency Determination

Lead Agency Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4, Environmental Analysis, have been added. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposal MAY have a significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

 _____
 Signed Agency 

Claire L. Flynn, Assistant Director _____ 9/9/15
 Signatory's Name, Title Development Services Date

SECTION 4: ENVIRONMENTAL ANALYSIS

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

- 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 to impact 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.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.1 Aesthetics <i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

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

No Impact. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. There are no General Plan-identified scenic vistas/views located in the project area, as there are no officially designated scenic vistas in the City of Costa Mesa. Therefore, project implementation would not have any effect on a designated scenic vista/view.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

No Impact. The project site is not located along a designated State scenic highway, as there are no officially designated scenic highways in the City of Costa Mesa. Aside from ornamental landscaping located within the courtyard and parking areas of the existing motel, there are no protected tree species on the property (i.e. public, landmark, or street trees). 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) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. The existing visual character of the project site is primarily defined by a 236-suite motel, a central courtyard with a pool, and a large surface parking lot that wraps around

the motel. The existing visual character of the surrounding area is primarily defined by commercial businesses that are spread throughout the vicinity, as well as the Costa Mesa Country Club directly north of the site, and the residential areas to the southwest. The area does not exhibit distinct architectural character and there is no uniformity of architectural styles. No unique visual resources exist on the project site or in its surroundings. However, the Costa Mesa Country Club to the north does provide some visual relief from the large parking lots and commercial developments that characterize this segment of Harbor Boulevard.

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. As discussed, the project site is located in a mature commercial and residential area. The project involves construction of a 224-unit luxury apartment complex with associated amenities and parking structure, in place of a 236-unit motel, pool, and parking lot.

Project implementation would introduce a mid-rise scale to the existing mature commercial and residential neighborhood. Therefore, the project would be somewhat dissimilar in scale to the site's surroundings. However, the project would only be slightly dissimilar in character to the existing commercial uses within the vicinity, as they also utilize semi-modern architecture. Project implementation would enhance the character of the surrounding area through inclusion of high-quality architectural design in place of the existing motel. Projections are included to maximize usable outdoor space, and provide building articulation, texture and color variation throughout the project's design. The proposed architecture is a contemporary design, consisting of geometric layouts of wood, stone, and white paneling. The proposed colors consist of earthen tones of deep brown and light brown, with silver accents and white contemporary elements. The project proposes to use clear glass; fiber-reinforced cement siding; metal, limestone, and white smooth stucco finishes; metal fencing, metal wire mesh, and woven metal wire cloth. Private balconies are also proposed. Elevations of the proposed buildings are provided in Exhibit 8a and Exhibit 8b. A split-face CMU block wall would be located along the southern and western borders of the site, as well as the northeastern corner of the site, where the project abuts the existing commercial use. Therefore, the wall would partially block views from the existing residences to the west and south of the site, as well as the commercial use (Pal's Vacuum store) in the northeast corner. The project frontage would utilize a metal fence, and the northern border would contain a tubular steel fence. Thus, pedestrians and motorists along Harbor Boulevard would be able to view the proposed contemplation garden, both driveways, and the resident balconies located along the project frontage.

Current views of the motel from the residences to the west and southwest of the project site would change as a result of the project, by establishing luxury apartment buildings reaching 50 feet in height. While the current aesthetic of the project site would be altered, it would be enhanced and improved through various architectural components including texture, color, usable outdoor space, and design. The new residential use would also be more compatible with the adjacent residential uses than the existing commercial motel facility. Future residents of the project would be able to contribute to the existing neighborhood and utilize the nearby commercial resources in a more permanent and substantial manner as compared to the existing motel, which provides mostly short-term transient housing.

Shade and Shadow

The issue of shade and shadow pertains to the blockage of direct sunlight by project buildings, which may affect adjacent properties. Shading is an important environmental issue because the users or occupants of certain land uses, such as residential, recreational/parks, churches, schools, outdoor restaurants, and pedestrian areas have some reasonable expectations for direct sunlight and warmth from the sun. These land uses are termed “shadow-sensitive.” The residences to the west and southwest of the project site, as well as the recreational uses to the north (Costa Mesa Country Club) are considered “shadow-sensitive” land uses with the potential to be impacted by the project.

The City of Costa Mesa does not define any specific shade/shadow thresholds for development. However, thresholds utilized by local municipalities such as the City of Los Angeles can be useful in determining the degree of impact. The City of Los Angeles contains the following guidance in the L.A. CEQA Thresholds Guide (City of Los Angeles 2006) to aid in determining significance:

. . . shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

Pursuant to local policy, a project-specific Shade/Shadow Analysis (GMPA Architects 2015b) was conducted and is contained in Appendix A. The analysis includes exhibits illustrating the potential effects of shade/shadows on adjacent properties that may be created by the project buildings. The analysis studies the gradual movement of shadow lines casted by the proposed project during Summer and Winter Solstice (longest and shortest days of the year, respectively). The analysis illustrates the amount of time that adjacent areas (outside of the site) would stop receiving direct sunlight as a result of the proposed project buildings.

Summer Solstice

The Shade/Shadow Analysis indicates that direct sunlight reaches most surrounding areas outside of the site during summer solstice. Under project conditions, the areas receiving direct sunlight would include the Costa Mesa Country Club and bike trail, residential area, and commercial buildings. The only exception is the commercial building to the north (Pal’s Vacuum Sewing Center). However, only a small corner of the property’s parking lot would experience increased shade/shadow due to project implementation. Furthermore, this commercial use is not considered a shadow-sensitive use, and impacts would be negligible.

Winter Solstice

The Shade/Shadow Analysis indicates that direct sun light reaches most surrounding areas outside the site during winter solstice. Areas to the west would experience slightly greater shade/shadow coverage, but no longer than approximately an hour in the morning (9:00 a.m. to 10:00 a.m.). Thus, impacts in this regard would be less than significant. The adjacent areas to the east of the site would not experience significant impacts, as only the project frontage and right-of-way (Harbor Boulevard) would experience increased shade/shadow due to project implementation. Areas to the south of

the project site would not experience any increase in shade or shadow as a result of the project, and no impacts would occur in this regard.

The adjacent recreational areas to the north are projected to experience segmented sunlight obstructions. Furthermore, the analysis indicates that shade and shadows would be cast on the adjacent Costa Mesa Country Club and bike trail for a period of three hours or longer (9:00 a.m. to 3:00 p.m.), thereby exceeding established thresholds for shadow-sensitive uses. However, the comfort and safety of these users is largely maintained by the offset perimeter building line on the northern portion of the site. The proposed building envelope would pull away from the property line, thereby creating large open pockets of light.

The simulation shows that the segmented shadow lines do not reduce the overall usability, visual comfort, and safety levels of this area, as a result of offering large perimeter courtyards which would be open to the sky. The general shade and shadow impact on these areas would be marginal during winter time, with uninterrupted direct sunlight where the courtyards are located. In addition, the project proposes a metal fence along the Costa Mesa Country Club and bike trail, allowing direct sunlight to reach these areas. Thus, impacts are less than significant.

Although the project would alter the visual character of the project site (and is somewhat dissimilar to the surrounding commercial/residential/recreational land uses), the development would enhance the existing site by introducing attractive, high-quality building design, providing aesthetically appealing views onsite, and supplying substantial open space. The visual changes would not degrade the visual character or quality of the site or its surroundings. A less than significant impact would occur in this regard.

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

Light Impacts

Less than significant impact. 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, parking lot lighting, building illumination, security lighting, and landscape 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 project site is located within a commercial, residential, and recreational area. 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. The project site itself currently contains a 236-suite motel with associated landscaping, parking, and courtyard areas. As such, the site currently utilizes lighting consistent with residential uses. Light sensitive residential uses are located south and west of the project site. There are no additional sensitive land uses in the project's immediate vicinity, since Harbor Boulevard already contains substantial street lighting.

The project would create new sources of light due to light emanating from personal and communal building interiors, and light from exterior sources (e.g., building illumination, security lighting, and landscape lighting). These new sources of light would not substantially impact surrounding sensitive uses, as most of the light would be blocked by blinds/curtains or perimeter buildings. As discussed, there are light sensitive residential uses immediately south and west of the project site. These properties would not experience a substantial change in lighting conditions, as the existing motel currently utilizes similar lighting (landscape, security, interior). Although the proposed residential project would add additional lighting sources onsite, these new sources of lighting would be in keeping with existing lighting patterns in the area.

Furthermore, the project would be required to comply with City guidelines regarding lighting, including the City Municipal Code and Standard Condition SC 4.1-1. The Municipal Code includes the following lighting guidelines:

Chapter VI. Off-street Parking Standards, Article 3. Development Standards, Sec 13-93(d). – General Standards:

(d) Lighting. All required parking areas and driveways shall be illuminated under the direction of the planning division. Lights used to illuminate parking areas shall be directed away from any adjoining premises located in any residential zone under direction of the planning division.

Thus, all of the project lighting within parking areas and driveways (i.e. security, safety) would be implemented under supervision of the City's Planning Division, thereby ensuring that any potential light spillover impacts to sensitive uses would be less than significant. Any lighting associated with the parking structure would also be subject to compliance with the Municipal Code; thereby ensuring potential spillover impacts are less than significant.

Additionally, SC 4.1-1 requires preparation of a Lighting Plan and Photometric Study, in order to demonstrate that the project lighting meets minimum security lighting requirements and minimizes light/glare to residents. Therefore, compliance with City standards would reduce the project's potential spillover light impacts on sensitive adjacent uses to less than significant.

Solar Glare Impacts

Buildings with large facades constructed of reflective surfaces (e.g., brightly colored building façades, metal surfaces, and reflective glass) could increase existing levels of daytime glare.

The project would involve primarily non-reflective façade treatments and the minimization of unrelieved glass surfaces. Compliance with the City's Standard Condition, below, would ensure that the project would not create a new source of substantial glare that would adversely affect daytime views in the area. A less than significant impact would occur in this regard. Additionally, the project may include the use of solar panels on the fifth floor of the parking structure above the carports². Solar panels are reflective surfaces that could produce glare. However, if solar panels are utilized in

² The inclusion of solar panels is speculative at this time, but shall be analyzed herein for any potentially significant impacts.

the project design they will be required to comply with SC 4.1-1, below. SC 4.1-1 requires submission of a Lighting Plan and Photometric Study to the City, which would ensure that glare shields are utilized for any high glare producing surfaces. Thus, impacts are less than significant.

Standard Conditions

- 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.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>4.2 Agriculture and Forestry Resources <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i></p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>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))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and

forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

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

No impact. The project site is currently developed with an existing motel, pool, and surface parking lot. Additionally, it is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Dept. of Conservation 2015). Thus, project implementation would not result in the conversion of farmland to non-agricultural use.

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

No impact. The project site is zoned C1 – Local Business District. The project site and surrounding lands are not zoned for agricultural use or part of a Williamson Act Contract. Therefore, project implementation would not 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))?**

No impact. The project site is zoned C1- Local Business District. Therefore, project implementation would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

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

No impact. The project site is developed with an existing motel and surface parking lot. Thus, project implementation would not 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?**

No impact. The project site is developed with an existing motel and surface parking lot, and the surrounding area is designated for residential, recreational (Costa Mesa County Club), and commercial uses. There are no agricultural or forest uses in the vicinity. Therefore, project implementation would not involve changes in the existing environment that could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.3 Air Quality <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.</i> <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

The analysis in this section is supported by the Air Quality Modeling Data prepared by FirstCarbon Solutions, which is provided in Appendix B. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. The City of Costa Mesa identifies a list of Standard Conditions that the proposed project is required to comply with. These mandatory requirements have been incorporated into the analysis as part of the project. Standard Conditions relevant to the project are provided at the end of this section for reference.

Would the project:

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

Less than significant impact. The project site is located in the South Coast Air Quality Management District (SCAQMD). According to the 1993 SCAQMD Handbook, there are two key indicators of consistency with the Air Quality Management Plan (AQMP):

1. Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. A project would conflict with the AQMP if it will exceed the assumptions in the AQMP in 2010 or increments based on the year of project build-out and phase. The Handbook indicates that key assumptions to use in this analysis are population number and location, and a regional housing needs assessment. However, the parcel-based land use and growth assumptions and inputs used in the Regional Transportation Model which were used to generate the mobile inventory used by the SCAQMD for its AQMP are not available. Refer to the additional discussion below.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis uses the following criteria to address the project's potential air quality impact:

- Step 1: Project's contribution to air quality violations (SCAQMD's first indicator)
- Step 2: Assumptions in AQMP (SCAQMD's second indicator)
- Step 3: Compliance with applicable emission control measures in the AQMP.

Step 1: Project's Contribution to Air Quality Violations

According to the SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (SCAQMD AQMP 1993, page 12-3). As shown in Section 4.3 Impact a), the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Step 2: Assumptions in AQMP

As discussed above, the proposed project would be consistent with the applicable AQMP if the proposed project would not exceed the growth assumptions in the AQMP. One method in determining a project's consistency with the AQMP is to determine how a project accommodates the expected increase in population, and thereby the population related traffic. If a project results in the minimization of vehicle miles traveled (VMT) within the project area and consequently the minimization of air pollutant emissions, that aspect of the project is consistent with the AQMP. Because the AQMP relies upon the existing General Plan and associated land use designations and zoning, a comparison of the existing zoning versus the proposed zoning would demonstrate whether or not the project would increase VMT beyond the assumptions in the AQMP.

As shown in the City of Costa Mesa's Official Zoning Map, the project site is currently zoned C1 Local Business District (C1). CalEEMod modeling software was used to estimate the VMT of the project site at full buildout (retail shopping center) and the proposed project. At full build out, the retail shopping center was estimated to have approximately 8.9 million annual VMT while the proposed project would have approximately 5.0 million annual VMT. The proposed project would amount to a 43.8 percent decrease in annual VMT compared with the full build out of the City's existing zoning designation. Therefore, the proposed project is consistent with the growth assumptions in the AQMP.

Step 3: Control Measures

The proposed project would also comply with all applicable rules and regulations of the AQMP. Because of the nature of the proposed project, which includes earth-moving activity, SCAQMD 403 applies (SCAQMD 2005). Rule 403 governs emissions of fugitive dust during construction and operation activities. The rule requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites. The proposed project's compliance with SCAQMD Rule 403 would result in consistency with the applicable AQMP control measures. As such, emissions of fugitive dust during construction would be minimal.

Accordingly, the proposed project would not conflict with or obstruct implementation of the applicable AQMP, and the impact would be less than significant.

Summary

Analysis Step 1: The project would not contribute to air quality violations after implementing MM AQ-1 and MM AQ-2 because its construction emissions do not exceed the SCAQMD regional significance threshold for construction emissions. Therefore, the project is consistent with this criterion.

Analysis Step 2: The project proposes to change the General Plan designation from General Commercial (GC) to High Density Residential (HDR) and rezone from C1 to PDR-HD. These amended land use changes will reduce VMT. Therefore, the project is consistent with this criterion.

Analysis Step 3: The project would comply with all applicable rules and regulations. Therefore, the project is consistent with this criterion.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact. This impact relates to localized criteria pollutant impacts. Particulate matter emissions (PM₁₀) are of concern during construction because of the potential to emit fugitive dust during earth-disturbing activities. In addition, SCAQMD has set localized significance thresholds (LST) for project construction emissions. Because SCAQMD's LSTs for construction include a threshold for PM₁₀, fugitive dust emissions, impacts are assessed through the LST analysis. CO emissions are of concern during project operations because operational CO hotspots are related to increases in on-road vehicle congestion. Each is discussed separately below.

Localized Significance Thresholds

The SCAQMD Governing Board adopted a methodology for calculating localized air quality impacts through localized significance thresholds (LST). LSTs represent the maximum emissions from a

project that would not cause or contribute to an exceedance of the most stringent applicable state or federal ambient air quality standard. LSTs were developed in recognition of the fact that criteria pollutants such as CO, NO_x, and PM₁₀, and PM_{2.5} in particular, can have local impacts at nearby sensitive receptors in addition to regional impacts. The LSTs are developed for each source receptor area and are applicable to NO_x, CO, PM₁₀, and PM_{2.5}.

The SCAQMD has divided the Air Basin into 36 Source Receptor Areas. These Source Receptor Areas are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area. To facilitate the localized assessment process, the SCAQMD provides a series of look-up tables that contain LSTs for each Source Receptor Area within the Air Basin. The localized assessment methodology limits the emissions in the analysis to those generated from onsite activities. If onsite construction emissions exceed the LSTs, then the project would be considered to have a significant air quality impact. The project is located within Source Receptor Area 18. The nearest sensitive receptors along the project site are located approximately 33 feet to the west.

The SCAQMD has published a “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds” (South Coast Air Quality Management District 2011a). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the LST lookup tables, the CEQA document should contain in its project design features or its mitigation measures the following parameters:

- 1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
- 2) The maximum number of acres disturbed on the peak day.
- 3) Any emission control devices added onto off-road equipment.
- 4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

Table 3 shows the project’s maximum number of acres disturbed per day, based on its equipment mix.

Table 3: Maximum Number of Acres Disturbed per Day

Activity	Equipment	Number	Acres/8hr day	Total Acres
Grading	Graders	1	0.5	0.5
	Rubber Tired Dozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	3	0.5	1.5
Total per phase		—	—	2.5

Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011a.

As shown in Table 3, the maximum number of acres disturbed in a day would be 2.5 acres.

The localized assessment methodology limits the analysis of emissions to those generated from onsite activities. Onsite emissions from construction activities are compared with the localized significance thresholds summarized in Table 4. Onsite emissions are from fugitive dust during grading and off-road diesel emissions. As shown in Table 4, unmitigated emissions during construction do not exceed the LSTs.

Table 4: Localized Significance Analysis (Construction)

Activity	On-site Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Demolition	4.29	35.03	3.75	2.36
Grading	3.67	26.08	5.15	3.54
Building Construction	3.41	18.51	1.97	1.85
Paving (2016)	1.80	12.56	1.11	1.02
Paving (2017)	1.66	12.48	1.01	0.93
Architectural Coating	110.23	1.87	0.17	0.17
Maximum Daily Emissions	110.23	35.03	5.15	3.54
Localized Significance Threshold	131	962	7	5
Exceed Threshold?	No	No	No	No

Notes:
 NO_x = nitrogen oxides CO = carbon monoxide PM₁₀ and PM_{2.5} = particulate matter
 Based on Winter emissions, as they are higher than Summer emissions.
 Based on Onsite emissions only for LST analysis
 CalEEMod modeling results are located in Attachment A: Modeling Results.
 Source of thresholds: South Coast Air Quality Management District, 2009, for SRA 18, 25 meters, 2-acre site.

The localized construction analysis uses thresholds that represent the maximum project emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (SCAQMD 2008b). If the project results in emissions that do not exceed the LSTs, it follows that those emissions would not cause or contribute to a local exceedance of the appropriate ambient air quality standard. The localized construction analysis demonstrates that the project would not exceed the LSTs for CO, nitrogen dioxide, PM₁₀, or PM_{2.5}. Therefore, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

Carbon Monoxide Hot Spot Analysis

CO hot spot thresholds ensure that emissions of CO associated with traffic impacts from a project, in combination with CO emissions from existing and forecasted regional traffic, do not 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 parts per million (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.

A CO hot spot is a localized concentration of CO that is above the state or federal 1-hour or 8-hour CO ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. To provide a worst-case scenario, CO concentrations are estimated at project-impacted intersections, where the concentrations would be the greatest.

This analysis follows guidelines recommended by the CO Protocol (University of California, Davis 1997) and the SCAQMD. According to the CO Protocol, intersections with Level of Service (LOS) E or F require detailed analysis. In addition, intersections that operate under LOS D conditions in areas that experience meteorological conditions favorable to CO accumulation require a detailed analysis. The SCAQMD recommends that a local CO hot spot analysis be conducted if the intersection meets one of the following criteria: (1) the intersection is at LOS D or worse and where the project increases the volume to capacity ratio by 2 percent, or (2) the project decreases LOS at an intersection from C to D.

Overall, the traffic analysis conducted by Linscott Law and Greenspan Engineers, looked at two key intersections within the study area. The results of analysis found that within the study area, the Harbor Boulevard at Harbor Center and the Harbor Boulevard at Wilson Street intersections are projected to operate at acceptable LOS levels during peak hours, and would satisfy both criteria outlined previously. Because none of the intersections meet the threshold requirement for further CO hot spot analysis, impacts are less than significant.

Standard Conditions

SC-4.3-1 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 tires 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.

- c) **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?**

Less than significant impact with mitigation. This impact is related to regional criteria pollutant impacts. The non-attainment regional pollutants of concern are ozone, PM₁₀, and PM_{2.5}. Ozone is not emitted directly into the air but is a regional pollutant formed by a photochemical reaction in the atmosphere. Ozone precursors, VOC and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Therefore, the SCAQMD does not have a recommended ozone threshold, but it does have thresholds of significance for VOC and NO_x. This impact section includes analysis of, and significance determinations for those pollutants.

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The project area is in nonattainment for PM₁₀ and ozone. Therefore, if the project exceeds the regional thresholds for PM₁₀, then it contributes to a cumulatively considerable impact for those pollutants. If the project exceeds the regional threshold for NO_x or VOC, then it follows that the project would contribute to a cumulatively considerable impact for ozone. If the project exceeds the NO_x threshold, it could contribute cumulatively to nitrogen dioxide concentrations.

Regional emissions include those generated from all onsite and offsite activities. Regional significance thresholds have been established by the SCAQMD, because emissions from projects in the area can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. SCAQMD's significance thresholds for project construction and operation are provided within the respective analyses below.

Construction and operational emissions were modeled using CalEEMod version 2013.2.2, contained within Appendix B to this Initial Study.

Construction Emissions

The construction activities associated with the project include: demolition, grading, building construction, paving, and architectural coating. The project would be constructed over approximately 13 months, beginning January 2016. The CalEEMod phase lengths for all phases were

used in the analysis. Demolition of the existing motel’s 94,500 square footage was estimated by utilizing an aerial image from Google Earth. Table 5 summarizes construction-generated emissions. For the assumptions used in generating the emissions, please refer to Appendix B. The project would be required to adhere to standard SCAQMD regulations, such as implementing SCAQMD Rule 403, which would reduce fugitive dust emissions. The above regulation is represented in CalEEMod as mitigation; however, it is not considered mitigation for CEQA purposes, as it is required by regulation.

The information shown in Table 5 indicates that the SCAQMD regional emission thresholds would be exceeded for VOC (ozone precursor) during project construction. Because ozone is a secondary pollutant (it is not emitted directly but formed by chemical reactions in the air), it can be formed miles downwind of the project site. Project emissions of VOC may contribute to the background concentration of ozone and cumulatively cause health effects. Impacts may include the following: irritation to respiratory system; reduction of lung function; breathing pattern changes; reduction of breathing capacity; inflammation and damage to cells that line the lungs; making lungs more susceptible to infection; aggravating asthma; aggravating other chronic lung diseases; causing permanent lung damage and some immunological changes; increased mortality risk; and vegetation and property damage. Children who live in high ozone communities and who participate in multiple sports have been observed to have a higher asthma risk. This is a significant cumulative health impact associated with ground-level ozone concentrations.

Table 5: Construction Air Pollutant Emissions by Activity

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Demolition	4.62	49.85	38.84	0.01	4.24	2.53
Grading	3.72	38.52	26.90	0.03	5.32	3.59
Building Construction	4.18	31.31	29.80	0.06	3.97	2.41
Paving (2016)	1.87	18.43	13.66	0.02	1.34	1.08
Paving (2017)	1.72	16.88	13.48	0.02	1.24	0.99
Architectural Coating	110.33	2.32	3.47	0.00	0.53	0.27
Maximum Daily Emissions¹	110.33	49.85	38.84	0.06	5.32	3.59
Significance Threshold	75	100	550	150	150	55
Significant Impact?	Yes	No	No	No	No	No

Notes:
¹ The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the grading activities do not occur at the same time as the other construction activities; therefore, their emissions are not summed.
VOC = volatile organic compounds NO_x = nitrogen oxides CO = carbon monoxide
SO_x = sulfur oxides PM₁₀ and PM_{2.5} = particulate matter
Source of emissions: Appendix B, CalEEMod Output.
Source of thresholds: South Coast Air Quality Management District 2011a.

The mitigated construction emissions are shown in Table 6. After incorporating MM AIR-1, which includes requiring use of super-compliant architectural coatings (defined as 10 g/L or less of VOC), the project’s VOC emissions would be less than the regional construction threshold for VOC. Therefore, impacts would be less than significant.

Table 6: Mitigated Construction Air Pollutant Emissions by Activity

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Demolition	4.62	49.85	38.84	0.01	4.24	2.53
Grading	3.72	38.52	26.90	0.03	5.32	3.59
Building Construction	4.18	31.31	29.80	0.06	3.97	2.41
Paving (2016)	1.87	18.43	13.66	0.02	1.34	1.08
Paving (2017)	1.72	16.88	13.48	0.02	1.24	0.99
Architectural Coating	18.02	2.32	3.47	0.00	0.53	0.27
Maximum Daily Emissions¹	18.02	49.85	38.84	0.06	5.32	3.59
Significance Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Notes:
¹ The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the grading activities do not occur at the same time as the other construction activities; therefore, their emissions are not summed.
VOC = volatile organic compounds NO_x = nitrogen oxides CO = carbon monoxide
SO_x = sulfur oxides PM₁₀ and PM_{2.5} = particulate matter
Source of emissions: Appendix B, CalEEMod Output.
Source of thresholds: South Coast Air Quality Management District 2011b.

Mitigation Measure

- MM AQ-1** The following measures shall be applied to all projects during construction of the project:
- a) Use paints with a volatile organic compound (VOC) content 10 grams per Liter or lower for both interior and exterior surfaces, if painted.
 - b) Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
 - c) Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
 - d) For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean up water and take it to the hazardous waste center (www.cleanup.org).
 - e) Use compliant low VOC cleaning solvents to clean paint application equipment.
 - f) Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.

Operational Regional Emissions

Existing Use

The existing project site currently contains a 236-unit motel. CalEEMod was used to estimate the operational emissions that would occur with continuance of the existing land use. Emissions modeling utilized the trip generation rates provided in the Traffic Impact Analysis. Emissions from existing land uses are provided in Table 7.

Proposed Use

CalEEMod was used to estimate operational emissions that would occur with the proposed land uses. Emissions would be from motor sources and area sources (natural gas, hearth, landscape, consumer products, and architectural coating). Motor sources include 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 project would be required to adhere to SCAQMD regulations, such as implementing SCAQMD Rule 445, which would prohibit permanently installed wood burning devices into any new development. Standard Condition-3 requires compliance with Title 24 of the California Code of Regulations.

The emissions analysis utilized the trip generation rates from the project's Traffic Impact Analysis, with a trip generation average of 6.65 daily trips per dwelling unit. The project includes 224 units.

Operational emissions were estimated for the summer and winter seasons. Winter season emissions were greater than summer emissions. Therefore, operational emissions as derived from CalEEMod are shown in Table 7 for the winter season. Outputs for both seasons are found in Appendix B.

The information shown in Table 7 indicates that the SCAQMD regional emission thresholds would not be exceeded for operational emissions. Therefore, the long-term operational emissions are considered to have a less than significant regional impact.

Table 7: Operational Regional Pollutants

Source	Winter Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Project Emissions						
Area Sources	6.53	0.22	18.74	0.00	0.37	0.37
Energy Sources	0.06	0.49	0.21	0.00	0.04	0.04
Mobile Sources	5.27	12.98	58.28	0.16	11.87	3.28
Total	11.86	13.69	77.23	0.16	12.28	3.69
Existing Emissions						
Existing Emissions	6.07	9.34	41.43	0.09	6.48	1.84
Project Impact						
Net Increase In Emissions	5.79	4.35	35.80	0.07	5.80	1.85
Significance Threshold	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Notes: VOC = volatile organic compounds NO _x = nitrogen oxides CO = carbon monoxide SO _x = sulfur oxides PM ₁₀ and PM _{2.5} = particulate matter Source of emissions: Appendix B, CalEEMod Output. Source of thresholds: South Coast Air Quality Management District 2011b.						

Conclusion

The SCAQMD does not recommend quantified analysis of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. However, if an individual development project generates operational emissions that exceed the SCAQMD recommended daily thresholds, project-specific impacts would also cause a cumulatively considerable increase in emissions of those pollutants for which the Air Basin is in non-attainment.

As indicated in both Table 6 and Table 7 above, the project would not exceed SCAQMD thresholds during construction or operation after incorporation of MM AQ-1. Therefore, the project’s impacts would be considered less than significant with mitigation.

Standard Conditions

SC-4.3-2 SCAQMD Rule 445 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 an similarly enclosed, aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SC-4.3-3 The project shall comply with Title 24 of the California Code of Regulations established by the energy conservation standards. The project Applicant shall incorporate the following in building plans:

- Double paned glass or window treatment for energy conservation shall be used in all exterior windows;
- Buildings shall be oriented north/south where feasible.

SC 4.3-4 The Applicant shall contact the Air Quality Management District (AQMD) at (800) 288-7664 for potential additional conditions of development or for additional permits required by the AQMD.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation incorporated. Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (SCAQMD 2008a). Commercial and industrial facilities are not included in the definition because employees do not typically remain onsite for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide and carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors for those purposes. The closest sensitive receptors are residences located approximately 33 feet west of the project site.

Localized Significance Threshold Analysis

The localized construction analysis uses thresholds that represent the maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (SCAQMD 2008b). The thresholds are based on the ambient concentrations of that pollutant for each source receptor area and on the location of the sensitive receptors. If the project results in emissions under those thresholds, it follows that the project would not cause or contribute to an exceedance of the standard. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded at the sensitive receptor locations, it follows that the receptors would not be exposed to substantial pollutant concentrations.

As identified in Section 3, impact (b), the localized construction analysis demonstrated that the project would not exceed the localized thresholds for CO, nitrogen dioxide, PM₁₀, or PM_{2.5}. Therefore, during construction, the project would not expose sensitive receptors to substantial pollutant concentrations of CO, nitrogen dioxide, PM₁₀, or PM_{2.5}.

Criteria Pollutant Analysis

Emissions of NO_x and VOC (ozone precursors) during construction from the project alone would not expose sensitive receptors to substantial pollutant concentrations. (See the Section 3, impact ©, analysis for an assessment of the cumulative contribution of ozone precursors.)

A CO hot spot analysis is the appropriate tool to determine if project emissions of CO during operation would exceed ambient air quality standards. The main source of air pollutant emissions during operation are from offsite motor vehicles traveling on the roads surrounding the project. The CO hot spot analysis demonstrated that emissions of CO during operation would not result in an exceedance of the most stringent ambient air quality standards for CO. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded, then the sensitive individuals would not be significantly impacted. As shown in Section 3, impact (b), the project would not generate or substantially contribute to a CO hotspot. Therefore, according to this criterion, air pollutant emissions during operation would result in a less than significant impact.

Toxic Air Pollutants - Onsite Workers

A variety of state and national programs protect workers from safety hazards, including high air pollutant concentrations (California OSHA and CDC 2012).

Onsite workers are not required to be addressed through this health risk assessment process. A document published by the California Air Pollution Control Officers Association (CAPCOA 2009), Health Risk Assessments for Proposed Land Use Projects, indicates that onsite receptors are included in risk assessments if they are persons not employed by the project. Persons not employed by the project would not remain onsite for any significant period. Therefore, a health risk assessment for onsite workers is not required or recommended.

Toxic Air Pollutants - Construction

Construction of the project would involve the use of diesel-fueled vehicles and would emit diesel particulate matter (DPM), which the Air Resources Board (ARB) has identified as a carcinogen. However, the DPM emissions during construction are short-term in nature. Determination of risk from DPM is considered over a 70-year exposure time. Guidance published by the California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, does not include guidance for health risks from construction projects addressed in CEQA; risks near construction projects are expected to be included later when the toxic emissions from construction activities are better understood. Therefore, considering the short time frame for construction at 9 months, exposure to DPM during construction is anticipated to be less than significant.

Toxic Air Pollutants - Operation

The Air Resources Board (ARB) Air Quality and Land Use Handbook contains recommendations that will “help keep California’s children and other vulnerable populations out of harm’s way with respect to nearby sources of air pollution” (ARB 2005), including recommendations for distances between sensitive receptors and certain land uses. These recommendations are assessed as follows.

- Heavily traveled roads. ARB recommends avoiding siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. Epidemiological studies indicate that the distance from the roadway and truck traffic densities were key factors in the correlation of health effects, particularly in children. The project site is adjacent to Wilson Street to the south, which is estimated to currently have 20,990 vehicles

per day, and Harbor Boulevard to the east, which is estimated to currently have 44,081 vehicles per day (California Environmental Health Tracking Program 2011).

- Distribution centers³. ARB also recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center. The project site is not within 1,000 feet of a distribution center.
- Fueling stations. ARB recommends avoiding siting new sensitive land uses within 300 feet of a large fueling station (a facility with a throughput of 3.6 million gallons per year or greater). ARB recommends a 50-foot separation for typical gas dispensing facilities. The nearest gas station is approximately 431 feet from the project site to the south.
- Dry cleaning operations. ARB recommends avoiding siting new sensitive land uses within 300 feet of any dry cleaning operation that uses perchloroethylene. For operations with two or more machines, ARB recommends a buffer of 500 feet. For operations with three or more machines, ARB recommends consultation with the local air district. The nearest dry cleaning operation is approximately 977 feet from the project site.

Asbestos-Containing Materials

In the initial Asbestos National Emission Standards for Hazardous Air Pollutants rule promulgated in 1973, a distinction was made between building materials that would readily release asbestos fibers when damaged or disturbed (friable) and those materials that were unlikely to result in significant fiber release (non-friable). The EPA has since determined that severely damaged, otherwise non-friable materials can release significant amounts of asbestos fibers. Asbestos has been banned from many building materials under the Toxic Substances Control Act, the Clean Air Act, and the Consumer Product Safety Act. However, many uses of asbestos in building materials are still allowed. The EPA provides a list of asbestos containing materials that are not banned.⁴

Therefore, the potential source of asbestos exposure for the project is the demolition activity of the existing residential units.

SCAQMD's Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, and includes the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and land filling requirements for asbestos-containing waste materials (ACWM). The Rule further states that the SCAQMD shall be notified of the intent to conduct any demolition or renovation activity (SCAQMD 2007a).

Compliance with SCAQMD, federal, and state regulations reduces the potential of asbestos-containing material exposure to a less than significant impact.

³ A distribution center is a facility that is used for receipt, temporary storage, and redistribution of goods according to the orders as they are received.

⁴ <http://www2.epa.gov/asbestos/us-federal-bans-asbestos>.

Mitigation Measure

MM AQ-2 The project shall demonstrate compliance with the following Construction Emissions Minimization Practices prior to the issuance of building, or grading permits:

1. The construction contractor shall ensure that all equipment is properly sized and tuned to manufacturers' specifications at the manufacturers' recommended frequency.
2. The construction contractor shall establish an idling limit of 5 minutes per hour for equipment.

e) Create objectionable odors affecting a substantial number of people?

Less than significant impact. Odors can cause a variety of responses. The impact of an odor results from interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception.

Odor is typically a warning system that prevents animals and humans from consuming spoiled food or toxic materials. Odor-related symptoms reported in a number of studies include nervousness, headache, sleeplessness, fatigue, dizziness, nausea, loss of appetite, stomach ache, sinus congestion, eye irritation, nose irritation, runny nose, sore throat, cough, and asthma exacerbation (SCAQMD 2007b).

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations (SCAQMD 2007b). The SCAQMD's resolution activity for odor compliance is mandated under California Health & Safety Code Section 41700, and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

The SCAQMD indicates that the number of overall complaints has declined over the last 5 years. Over the last 4 years, odor complaints make up 50 to 55 percent of the total nuisance complaints. Over the past decade, odors from paint and coating operations have decreased from 27 to 7 percent and odors from refuse collection stations have increased from 9 to 34 percent (SCAQMD 2007).

Project Analysis

During construction, the various diesel-powered vehicles and equipment in use onsite would create localized odors. These odors would be temporary and would not likely be noticeable for extended periods of time beyond the project's site boundaries. The potential for diesel odor impacts is therefore less than significant. Land uses typically associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations; these types of land uses are

not located in the project's vicinity. The project does not contain land uses typically associated with emitting objectionable odors. During operation of the project, odors would primarily consist of vehicles traveling to the residential community and from the use of equipment during landscaping and facility maintenance. These occurrences would not produce a significant amount of odors; therefore, operational impacts are less than significant.

Standard Condition

Refer to Mitigation Measure AQ-1, AQ-2 and Standard Conditions SC 4.1-2 and SC 4.3-4.

SC 4.3-5 Trash facilities shall be screened from view, and designed and located appropriately to minimize potential noise and odor impacts to residential areas.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.4 Biological Resources <i>Would the project:</i>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project site is currently developed with a 236-unit motel building, associated parking, and courtyard. The project site is surrounded by urban development consisting of commercial, recreational, 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. The project

site is generally flat. The following analysis primarily relies upon analysis contained within the City's existing General Plan EIR.

Environmental Evaluation

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?**

No impact. The project site contains limited ornamental landscaping at the following locations: turf and trees within the central courtyard; turf along the Harbor Boulevard frontage; and a limited number of trees within the parking areas. The project site is fully developed/disturbed. According to the General Plan EIR (Exhibit 4.9-1), the property does not contain any sensitive biological habitat to support any special-status plant or wildlife species (City of Costa Mesa 2002b).

Red imported fire ants are both a nuisance and threat to area agriculture and wildlife. In the event they are present on the site, they could spread to other areas and become a concern. Any potential threat from these species would be addressed through Standard Condition 4.4-1. 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.

Standard Condition

SC 4.4-1 The Applicant shall comply with the requirements of the California Department of Food and Agriculture (CDFA) to determine if red imported fire ants exist on the property prior to any soil movement or excavation. Call CDFA at (714) 708-1910 for information.

- 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?**

No impact. 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) **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?**

No impact. The project 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) **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?**

No impact. The project site is fully developed as a motel in an urban setting. The site and surrounding areas do not provide habitat for the movement of any native resident or migratory fish or wildlife species. Therefore, there is no potential for the site to serve as a migration corridor for wildlife and no impact would occur.

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

No impact. The project site contains ornamental landscaping, but does not contain any protected biological resources or tree species that are considered sensitive. Project implementation would not conflict with any local policies or ordinances.

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

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

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.5 Cultural Resources				
<i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

FCS contacted the Native American Heritage Council (NAHC) on June 15, 2015, to conduct a Sacred Lands Search for the project site. No response was received from the NAHC and a second request for information was sent on July 1, 2015. A third request was sent on July 14, 2015. No responses have been received. Additionally, interested tribes shall be notified appropriately in compliance with AB 52.

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

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. Furthermore, City records indicate that the existing motel was built in 1974, which is less than 50 years ago, and would not qualify as a historical resource.

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

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

Less than significant impact. Ground disturbing activities, such as grading or excavation could disturb previously unidentified subsurface archaeological resources. However, the project site

consists of, and is surrounded by, developed land that has been permanently altered due to the construction of below and aboveground improvements (i.e., buildings, driveways, streets, hardscapes, and utilities). Additionally, the project site has already been subject to extensive disruption and contains artificial fill materials; refer to Response 4.6.b. Given the highly disturbed condition of the site, the potential for project implementation to impact an unidentified archeological resource is considered low. 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 to archaeological resources.

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

Less than significant impact. As noted above, the project site has already been subject to extensive disruption. Additionally, there is no evidence of unique geologic features on the project site. Given the highly disturbed condition of the site, the potential for the project to impact 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) Disturb any human remains, including those interred outside of formal cemeteries?

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 existing industrial land uses. 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 of human remains to 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.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.6 Geology and Soils <i>Would the project:</i>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Geotechnical Report prepared by Geotechnical Solutions, Inc. (GS), briefly summarizes the geotechnical constraints for the project and provides information to support the below analysis (GS 2015). The Geotechnical Report is contained within Appendix C.

Environmental Evaluation

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.**

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).

According to the map entitled, "State of California Special Studies Zones, Newport Beach Quadrangle," dated July 1, 1986, the project site is not located within an Alquist-Priolo Special Studies Zone. The nearest potentially active fault is the Newport-Inglewood Fault located near the coast, which is located approximately 3.25 miles west of the project site (USGS 1986). No faults are known to occur on or within the immediate vicinity of the project site. Therefore, there would be no impact.

- ii) **Strong seismic ground shaking?**

Less than significant impact. As with all areas of Southern California, the project would be subject to strong ground shaking associated with seismic activity. The project area is considered to have a ten percent chance of experiencing ground acceleration greater than 37 percent of the force of gravity, with an earthquake magnitude of 6.9 in over 50 years (GS 2015). As previously addressed in Impact 6a)i, the project site is not located within an earthquake fault zone. In addition, the project would involve all new structures and would be required to conform to the seismic design parameters of the California Building Code (CBC). Compliance with the seismic design parameters as outlined in the most recent CBC would ensure that impacts are less than significant.

Standard Condition

- SC 4.6-1** The Applicant shall comply with the requirements of the 2013 California Building Code, 2013 California Residential Code, 2013 California Electrical Code, 2013

California Mechanical Code, 2013 California Plumbing Code 2013 California Green Building Standards Code, and the 2013 California Energy Code (or the applicable adopted California Building Code, California Residential Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Green Building Standards, California Energy Code at the time of plan submittal or permit issuance), and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa. Areas of alteration and additions shall comply with 2013 California Green Building Standards Code section 5.303.2 and 5.303.2

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. Liquefaction describes the behavior of soils that, when loaded, suddenly suffer a transition from a solid state to a liquefied state, or having the consistency of a heavy liquid. Liquefaction can occur during vibratory conditions such as those induced by seismic event, under saturated conditions in soils, such as sand, in which the strength is purely frictional. A low relative density and loose consistency of the granular materials, shallow groundwater table, long duration and high acceleration of seismic shaking are some of the factors that can cause liquefaction. Presence of predominately cohesive or fine-grained materials and/or absence of saturated conditions can preclude liquefaction. Liquefaction hazards are usually manifested in the form of buoyancy forces expected on structures during liquefaction, increase in lateral earth pressures due to liquefaction, horizontal and vertical movements of structures resulting from lateral spreading, and post-earthquake settlement of the liquefied materials.

As indicated in the maps entitled “State of California Seismic Hazard Zones, Newport Beach Quadrangle” the site is not located within a mapped zone for seismic hazard due to liquefaction. In addition, groundwater was not encountered in the borings during the Geotechnical analysis. Groundwater is anticipated to be well in excess of 30 feet below grade.

The Newport Beach Quadrangle Map for Seismic Hazards Zones identifies that the project site is not located in an area susceptible to liquefaction due to the lack of liquefiable soils (California Department of Conservation, Released April 15, 1998). In addition, the Orange County Hydrology Map classifies the soil as being soil group D (infiltration rate approximately 0.20 in/hr) and in an area with low infiltration rates. The project must comply with Standard Condition SC 4.6-1, which requires compliance with the 2013 California Building Code (CBC). Standard Condition SC 4.6-2 must also be followed, which requires that prior to the implementation of the project, the project Applicant would prepare a geotechnical report for the proposed buildings, which would fully identify any site-specific risk for liquefaction, and would identify any specific construction design recommendations in accordance with the CBC. The Geotechnical Report included borings up to 50 feet, and associated soil testing (moisture, shear strength, consolidation, corrosivity, etc.) to determine any geotechnical constraints to development (GS 2015). Excavation for the site would generally be limited to 10 feet below ground surface, and groundwater depth is estimated at 30 feet below ground surface. The report did not identify any barriers to development, and provided specific grading and foundation design recommendations. Accordingly, impacts associated with this issue would be less than significant.

Standard Condition

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 with a 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.

iv) Landslides?

No impact. Due to the level topography, landslides are not anticipated to occur on the project site. The Seismic Hazard Zones Map illustrates the earthquake-induced landslide zones, which are areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation would be required. According to the Seismic Hazard Zones Map - Newport Beach Quadrangle (California Department of Conservation Released April 15, 1998), the project site is not located in an earthquake-induced landslide zone of required investigation. Therefore, project implementation would not expose people or structures to potential substantial adverse effects involving landslides.

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

Less than significant impact. The project site is currently a mostly developed 4.6-acre site. While the project would have a greater amount of pervious areas, these areas would take the form of trees and shrubs in private yards, as well as community gathering spaces, and vegetative groundcover. Thus, the increase of pervious areas does not pose a risk for erosion because they would be either vegetated and/or contained. All storm water flows would be directed to the existing municipal storm drain system towards the north and northwest or into vegetated pervious areas. In addition, a drip irrigation system would be implemented and designed in order to minimize the potential for soil erosion or loss of topsoil

The project would be subject to compliance with the National Pollutant Discharge Elimination System (NPDES) permitting process, since one or more acres of soil would be disturbed; refer also to Standard Condition 4.6-4. Following development of increased pervious landscaping and compliance with NPDES regulatory requirements, project implementation would result in a less than significant impact involving soil erosion or the loss of topsoil. Furthermore, the project site is currently developed with a commercial building that previously required grading and the removal of topsoil during construction. The project would require minimal grading because of the site's current use as a motel. Excavation for the footings of the parking structure would also be required, but impacts would be limited with the implementation of the following Standard Conditions. The project would

not result in substantial soil erosion or the loss of topsoil and therefore, impacts related to erosion would be less than significant.

Standard Conditions

- SC 4.6-3** The Applicant shall submit a soils report for this project. Soils Report recommendations shall be blueprinted on both the architectural and grading plans. For existing slopes or when new slopes are proposed, the Soils Report shall address how existing slopes or the new slopes will be maintained to avoid erosion or future failure.
- SC 4.6-4** 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.
- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

Less than significant impact. Refer to Responses 4.6.a.2 and 4.6.a.3 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.

Standard Condition

Refer to Standard Condition SC 4.6-1 above.

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

Less than significant impact. Expansive soils expand or contract with changes in the moisture content. Some of the geologic units in the City, including both surficial soils and bedrock, have fine-grained components that are moderate to highly expansive. The Geotechnical Report indicates that on-site clayey soils may have the expansion potential with an expansion index of 55, which is considered medium. As required for all new residential buildings, an evaluation of onsite soils will be required as part of building permit review in order to determine compliance with the CBC, and to identify any necessary measures to address potential expansive soil impacts.

As discussed above, prior to the implementation of the project, the Applicant will be required to prepare a geotechnical report. The project-specific geotechnical report will identify onsite soils and evaluate such soils for expansiveness. The final design of the project building would be based on the results of the geotechnical report, thereby ensuring that any impacts associated with this issue would be less than significant.

Standard Condition

Refer to Standard Conditions SC 4.6-2 and SC 4.6-3 above.

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

No impact. The project does not propose the use of septic tanks. The project would connect to the existing City sanitary sewer system for wastewater disposal. Therefore, no impacts to soils due to the use of septic systems are anticipated.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.7 Greenhouse Gas Emissions				
<i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

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

Less than significant impact. A variety of agencies have developed greenhouse gas emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects in the jurisdiction of the SCAQMD remain in flux.

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.

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration (“SCAQMD draft local agency threshold”); SCAQMD staff indicated that they hoped to bring the proposed greenhouse gas significance thresholds to the board for their December 2010 meeting; however, this did not occur. The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project’s construction emissions are averaged over 30 years and are added to a project’s operational emissions. If a project’s emissions are under one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 Million Metric Tons of Carbon Dioxide Equivalent (MTCO_{2e}) per year

- Based on land use type: residential: 3,500 MTCO₂e per year; commercial: 1,400 MTCO₂e per year; or mixed use: 3,000 MTCO₂e per year
- Tier 4 has the following options:
 - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
 - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO₂e/SP/year for projects and 6.6 MTCO₂e/SP/year for plans;
 - Option 3, 2035 target: 3.0 MTCO₂e/SP/year for projects and 4.1 MTCO₂e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD discusses its draft thresholds in the following excerpt (SCAQMD 2008b):

The overarching policy objective with regard to establishing a GHG [greenhouse gas] significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimately contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor's Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order's objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.

As described below, staff's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact.

Therefore, the policy objective of staff's recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

This assertion is based on the fact that staff estimates that these GHG emissions would account for less than one percent of future 2050 statewide GHG emissions target (85 MMTCO₂e/yr). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory.

In summary, the SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus, stabilizing global climate.

For this project, the 3,500 MTCO₂e per year threshold for residential development is used as the appropriate threshold of significance.

Project Impact

Project-related GHG emissions would include emissions from direct and indirect sources. The project would result in direct and indirect emissions of CO₂, N₂O, and CH₄. Direct project-related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from electricity consumption, water demand, and solid waste generation. Operational GHG emissions are based on energy emissions from natural gas usage and automobile emissions. CalEEMod was used to estimate GHG emissions from the existing land uses, project construction, and project operation. The operational emissions analysis utilizes trip rates from the project's Traffic Impact Analysis.

Table 8 contains the estimated greenhouse gas emissions for the project. As provided in Table 8, the project's estimated GHG emissions fall below the SCAQMD threshold of 3,500 MT CO₂e per year. Therefore, this impact would be less than significant.

Table 8: Estimated Greenhouse Gas Emissions

Source	Emissions (Metric Tons per year)
Project Emissions	
Area	53
Energy	327
Mobile	2,017
Waste	47
Water	102
Construction (total of 600 MT which would be amortized over 30 years)	20
<i>Project Emissions</i>	<i>2,566</i>
Existing Emissions	
<i>Existing Emissions</i>	<i>1,676</i>
Net Increase In Emissions	890
GHG Threshold (MTCO₂e)	3,500
Significant Impact?	No
Source of Emissions: Appendix B, CalEEMod 2013. Source of Threshold: SCAQMD 2008c.	

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

Less than significant impact. There are currently no adopted local or regional greenhouse gas reduction plans applicable to the project. Therefore, the AB 32 emission reduction goal and the Air Resources Board (ARB)-adopted AB 32 Scoping Plan will be used to determine consistency with an adopted plan, policy, or regulation for reducing greenhouse gases.

The Scoping Plan states, “The 2020 goal was established to be an aggressive, but achievable, mid-term target, and the 2050 GHG emissions reduction goal represents the level scientists believe is necessary to reach levels that would stabilize 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 discussed in Section 4.7a) above, the SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration, which the project does not exceed.

Project Construction

During project construction, greenhouse gases would be generated by short-term construction activities such as demolition, site clearing/preparation and grading/earthwork, the operation of construction vehicles and equipment, materials and debris hauling, and construction worker vehicle trips.

As shown in Table 8 above, construction activities would only generate 600 MTCO₂e, which is well below the SCAQMD draft threshold. Therefore, the project's construction emissions would not conflict with the Scoping Plan.

Project Operation

The project involves the replacement of an existing motel use which currently generates greenhouse gas emissions. The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors and are implemented through regulatory action by state agencies. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a statewide renewable energy mix of 33 percent.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

Passing the Senate on August 30, 2008, Senate Bill (SB) 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies. SB 375 has no requirements that apply to development

projects; however, the development proposed by the project will contribute to achieving SB 375 regional targets.

Because the project is limited to the redevelopment of a site for residential development, it is not a project subject to the Scoping Plan's recommended measures, which do not directly apply to the project. Additionally, the project involves the implementation of various sustainability measures that include: providing energy efficient lighting, energy efficient HVAC systems, design to maximize light and air, water efficient water fixtures, water efficient irrigation systems, and drought tolerant landscaping. Therefore, the project would not conflict with the Scoping Plan's recommended measures and, as such, would not impede implementation of the Scoping Plan.

In conclusion, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for reducing the emissions of GHGs because the project would generate low levels of GHGs (less than the SCAQMD's threshold (see Section 4.7a), above), and would not impede implementation of the Scoping Plan, or conflict with the policies of the Scoping Plan. Therefore, the impact would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.8 Hazards and Hazardous Materials <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Phase I Environmental Site Assessments (Phase I) was prepared for the project site by KCE Matrix, Inc. (KCE 2015), and included in Appendix D. Phase I ESAs are intended to identify potential environmental liabilities associated with the presence of hazardous materials, their use, storage, and

disposal on and in the vicinity of a property, as well as any previous regulatory noncompliance that may have occurred on 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. The ESA was prepared in accordance with the American Society of Testing and Materials (ASTM) standard practice ASTM 1527-13 standard.

Environmental Evaluation

Would the project:

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

Less than significant impact. During demolition and construction activities associated with the proposed project, potentially hazardous building materials (e.g. lead-based paint, asbestos, mercury), and small quantities of hazardous materials stored or used at the existing motel may be encountered. Removal of these materials, if present, by contractors licensed to remove and handle these materials in accordance with existing federal, State, and local regulations would ensure that risks associated with the transport, storage, use, and disposal of such materials would be reduced to less than significant.

In addition, the proposed project would result in the onsite use of common types of hazardous materials, such as cleaning and degreasing solvents, fertilizers, pesticides, and other materials used in the regular maintenance of residential developments. Thus, the project would result in an increase in the use of household cleaning products and other materials routinely used in building maintenance and landscaping. The future residential uses would be required to comply with existing hazardous materials regulations, and verification of compliance would be monitored by state (e.g., Occupational Safety and Health Administration in the workplace or Department of Toxic Substances Control for hazardous waste) and local agencies (e.g., the Costa Mesa Fire Department). According to CMMC Title 7 Chapter II, the City adopted the California Fire Code, 2013 Edition, for the purpose of prescribing regulations governing conditions hazardous to life and property from hazardous materials or explosions (as well as fire). Compliance with existing safety standards related to the handling, use, and storage of hazardous materials, and compliance with the safety procedures mandated by applicable federal, state, and local laws and regulations (i.e., CMMC Title 7 Chapter II, the Resource Conservation and Recovery Act, California Hazardous Waste Control Law, and principles prescribed by the California Department of Health Services, Centers for Disease Control and Prevention, and National Institute of Health) would be required.

These potentially hazardous materials, however, would not be of a type or occur in sufficient quantities to pose a significant hazard to the public and safety or the environment. These products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. Businesses are required by law to ensure employee safety by identifying hazardous materials in the workplace, providing safety information to workers that handle hazardous materials,

and adequately training workers. For these reasons, hazardous materials used during project operation would not pose any substantial public health or safety hazards related to hazardous materials. Therefore, project implementation would result in less than significant impacts.

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

Less than significant impact with mitigation incorporated. Construction activities would involve the demolition of the existing motel use, and the construction of 224 luxury apartment units. Based on the nature of the hazardous materials that would be used and stored during construction (e.g., diesel-fueled equipment, asphalt), and operation (e.g., household cleaners) of the project, it is unlikely that upset and accident conditions involving the release of hazardous materials into the environment would occur. As indicated in Impact 8a) above, all hazardous materials would be handled in accordance with applicable laws.

Buildings that were constructed prior to 1978 are likely to contain Asbestos-Containing Materials and lead-based paint. Based on the age of the existing motel that was first constructed in approximately 1973, Asbestos-Containing Materials and lead-based paint are likely to be present at the site. All such materials would be removed by properly licensed abatement contractors. Compliance with applicable rules and regulations would ensure impacts related to accidental release of hazardous materials into the environment during project construction would be less than significant.

The majority of the project site was vacant land from at least 1938 through 1972, and only a small portion located on the eastern side of the property along Harbor Boulevard was occupied by a few residential structures between 1938 and 1963. From approximately 1973 through present, the property has been occupied by the current motel structures. KCE Matrix preformed a Phase I Assessment, which revealed no evidence of a Recognized Environmental Condition (REC) in connection with the subject property.

However, KCE Matrix identifies the Chevron Gas Station Property, located approximately 300 feet to the southeast of the project site, as an environmental concern due to the observed groundwater monitoring wells. This property is currently in the “post-remediation” monitoring phase of work and has the potential to expose surrounding properties such as the project site to contamination. The Phase I Assessment recommends periodic monitoring of future work performed at the Chevron site should be conducted in order to verify if any subsurface contamination has migrated towards the subject site, and to verify that closure is granted by the appropriate regulatory agency (KCE Matrix 2015). Coordination with the appropriate regulatory oversight agency is recommended to confirm proper remediation of the Chevron site.

Compliance with the recommendations of the Phase I ESA, established regulations, Standard Conditions SC 4.8-1 through SC 4.8-5, and Mitigation Measure (MM) HAZ-1 would ensure that the 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. Therefore, the project would have a less than significant impact in this regard.

Standard Condition

- SC 4.8-1** Prior to demolition activities, removal and/or abatement of asbestos containing building materials, lead based paints, and hazardous materials associated with the existing building materials, an investigation shall be conducted by a qualified environmental professional in consultation with the Costa Mesa Fire Department. An asbestos and hazardous materials abatement plan shall be developed by the qualified environmental professional, in order to clearly define the scope and objective of the abatement activities.
- 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 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 4.8-3** 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.
- SC 4.8-4** Prior to investigations, demolition, or renovation, all activities shall be coordinated with Dig Alert (811).
- SC 4.8-5** 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;
- Implement required corrective actions, including remediation if applicable.

Mitigation Measures

- MM HAZ-1** Prior to grading and construction activities, the project applicant shall contact the oversight agency to confirm the regulatory status of the Chevron site to ensure that no new issues have arisen since the last check-in. The project applicant shall provide appropriate documentation to the City.

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

Less than significant impact. Wilson Elementary School is located 0.9 mile west of the project site, Pomona Elementary School is located 1.0 mile southwest of the project site, and College Park Elementary School is located 1.0 mile northeast of the project site. As explained in discussions in Impacts 8a) and 8b), the project is a residential development and would not involve the use of significant quantities of hazardous materials, and therefore would not have the potential to expose nearby schools to hazardous materials, substances, or wastes. Impacts would be less than significant. Due to the nature of the allowable uses, it is not anticipated that the future residential building would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste in reportable quantities. Therefore, project implementation would result in less than significant impacts involving hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25-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?

No impact. The California Department of Toxic Substances Control compiles a list, most commonly known as a Cortese List, of known sites containing hazardous materials. The project site is not listed as a known site containing hazardous materials; therefore, no impacts would occur.

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

Less Than Significant Impact. The project site is approximately 5 miles southwest of John Wayne Airport and outside of the Airport Impact Zones, and Airport Safety Zones. However, the project site, and the majority of the City, is located within the Federal Aviation Regulation (FAR) Part 77 Notification Area for John Wayne Airport and the AELUP Height Restriction Zone. FAR Part 77 Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Thus, the Applicant would be required to contact the FAA for project review (FAA 2014). The project is also located within the Airport Environs Land Use Plan (AELUP) Height Restriction Zone, and would be required to comply with the standards, criteria, and procedures promulgated by the FAA to ensure the stability of local air transportation. Upon approval, project implementation would not result in an airport-related safety hazard for people residing or working at the proposed residential development. Impacts would be less than significant.

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?

No impact. The project site is not located within the vicinity of a private airstrip. The nearest private airstrip is the South Coast Metro Center Heliport, located approximately 6 miles northeast of the

site. Therefore, project implementation would not result in an airstrip-related safety hazard for people residing or working at the proposed residential development.

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

No impact. The Costa Mesa Disaster Plan serves as the City's Emergency Operations Plan (EOP). The EOP provides guidance during emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. The Plan does not address normal day to-day emergencies or the well-established and routine procedures used in coping with such emergencies. Rather, the EOP analyzes potential large-scale disasters that require a coordinated and immediate response. The EOP considers the City's evacuation routes in its planning. General Plan Safety Element Exhibit SAF-9, *Emergency Evacuation Routes*, illustrates the City's emergency evacuation routes and indicates that Harbor Boulevard, located immediately west of the project site, is a designated emergency evacuation route. The project does not include any characteristics that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. These conditions preclude the possibility of the project conflicting with an emergency response or evacuation plan. No impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?

No impact. The project site is located within an urban area and not adjacent to wild lands. Therefore, project implementation would not expose people or structures to a significant risk involving wild land fires.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.9 Hydrology and Water Quality <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less than significant impact. Project-related impacts related to water quality could occur over three different periods:

- During demolition of existing uses, when risk of pollution exposure is present;
- During the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest;
- Following construction, before the establishment of ground cover, when the erosion potential may remain relatively high; and
- After project completion, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would remain similar to existing conditions.

A reduction of impervious surfaces would be considered a benefit to water quality, as impervious surfaces do not allow for rain and runoff to infiltrate into the ground. Infiltration reduces the amount of flow that is capable of washing off additional pollutants, and filters water, removing potential pollutants. These changes have the potential to affect long-term water quality.

The project site currently consists of one parcel totaling 4.15 acres. The project site currently includes a 236-suite motel and surface parking area. Currently, 86 percent of the project site is covered with impervious surfaces; there is only 0.6 acre of pervious surfaces currently onsite. The existing site is very flat and drains directly into grate inlets in the drive aisles, parking lots, and interior courtyards. The proposed landscaping will include drought tolerant shrubs and trees in the interior and perimeter landscaping, which will provide an increase in permeable surfaces on the site.

The existing storm drain flows from the south to north into an existing City owned 72" RCP storm drain north of the project. This storm drain then flows northerly and westerly through the Costa Mesa Country Club golf course property into a County owned trapezoidal channel, then into a reinforced concrete rectangular channel. Eventually, the water flows into the Santa Ana River.

According to the Preliminary Water Quality Management Plan (PWQMP) prepared by PSOMAS (2015; Appendix F), the project would result in approximately 81 percent of the site being covered with impervious surfaces. By removing the site's previous land use, which consisted of the Costa Mesa Motor Inn motel and paved parking lots, and incorporating landscaping throughout the interior and perimeter of the apartment building property, project implementation would increase site permeability by decreasing the total surface area covered by impervious surfaces by as much as 5%.

National Pollutant Discharge Elimination System

Under Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has established regulations under the National Pollution Discharge Elimination System (NPDES) program

to control direct storm water discharges from construction activities disturbing one acre or more of land. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The City is within the jurisdiction of the Santa Ana RWQCB (SARWQCB).

Short-term Construction

Dischargers whose projects disturb one or more acres of soil (or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres), are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. To obtain coverage for discharges under the General Construction Permit, dischargers are required to electronically file the Permit Registration Documents (PRDs), which include a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other compliance related documents required by the General Permit and mail the appropriate permit fee to the State Water Board.

The project would disturb one or more acres, and thus, would be required to obtain coverage under the Construction General Permit and prepare a SWPPP, pursuant to Standard Condition 4.6-4. The SWPPP is required to contain a site map(s), which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP is required to list Best Management Practices (BMPs)⁵ the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP 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.

Additionally, pursuant to CMMC Section 8-32, *Water Quality*, 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.

⁵ BMP means any program, technology, process, siting criteria, operational methods or measures, or engineered systems, which when implemented prevent, control, remove, or reduce pollution.

Additionally, the City enforces its Master Plan of Drainage, and CMMC Title 15 Chapter III addresses drainage protocols within the City during construction of new projects.

Overall, the project's demolition and construction activities would be subject to compliance with NPDES requirements, which include obtaining coverage under the General Construction Permit by filing the Permit Registration Documents (i.e., a NOI and SWPPP, among others), as well as the pertinent provisions of the CMMC. Compliance with the NPDES and CMMC requirements would ensure that the project's construction-related impacts to water quality are less than significant.

Long-Term Operations

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer (drain) systems (MS4s). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The MS4 permits 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 Orange County Flood Control District, the County of Orange, and the City of Costa Mesa, along with 51 other incorporated cities therein (Permittees) discharge pollutants from their MS4s. Storm water and non-storm water enter and are conveyed through the MS4s and are discharged to surface water bodies of the Orange Region. 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 Santa Ana Regional Water Quality Control Board adopts a new permit.

The Permit requires the development and implementation of a program addressing stormwater 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 statutory standard. The County Model Water Quality Management Plan (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. This WQMP contains a list of the minimum required BMPs that must be employed for a designated project. The Permittees are required to adopt the Program's requirements in their own water quality regulations. Developers must incorporate appropriate WQMP requirements into their project plans. Each Permittee must approve the project plan as part of their development plan approval process and prior to issuing Grading and Building Permits for projects covered by the model WQMP requirements.

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.” The project site is located in the North Orange County (NOC) Permit Area. A project is considered a Priority Project in the North Orange County (NOC) Permit Area, if it results in new development that creates 5,000 square feet or more of impervious surface. This category includes commercial, industrial, residential housing subdivision, mixed-use, and public projects on private or public property that falls under the planning and building authority of the Permittees. Because the project would reduce the amount of impervious surface by 8,840 square feet, it would not meet the criteria of a Priority Project.

As noted above, the project would be undertaken in accordance with the Orange County DAMP (refer to CMMC Section 8-32). Prior to issuance of a Grading or Building Permit for the project, the Development Services Department and Public Services Department would review the project plans and impose terms, conditions, and requirements on the project, as needed. Additionally, the project would be subject to compliance with the City’s Master Plan of Drainage, CMMC Title 15 Chapter III, and Standard Condition 4.9-1, which addresses compliance with the 2003 DAMP.

Based on project-specific PWQMP, the pollutants of concern associated with residential and commercial development are as follows: suspended solid/sediments, nutrients, pathogens, pesticides, oil & grease, and trash & debris (PSOMAS 2015). Site design BMPs and Low Impact Development (LID) BMPs are implemented in order to reduce development impacts on water quality and protect downstream hydraulic conditions, and reduce project -related storm water pollutants, respectively. The project site is not potentially susceptible to hydromodification impacts. The incorporation of LID BMPs into the project design requires evaluation of LID measures in the following order: infiltration, evapotranspiration, harvest/reuse and biotreatment.

Overall, the project would be subject to compliance with the Orange County DAMP, which includes preparation of a WQMP that specifies the proposed BMPs. Compliance with NPDES, DAMP, CMMC, and Standard Condition 4.9-1 requirements would ensure that the long-term project-related impacts to water quality would be less than significant.

Standard Condition

Refer to Standard Condition 4.6-4 above.

SC 4.9-1 In order to comply with the 2003 DAMP, the 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 Services 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) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)

Less than significant impact. According to General Plan EIR Exhibit 4.8-2, *Water Supply Agency Boundaries*, Mesa Consolidated Water District (Mesa Water) supplies water to the project site. 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. According to the UWMP, Mesa Water’s 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. Mesa relies on approximately 15,900 acre-feet of groundwater from the Orange County Basin each year. This local source of supply meets approximately 82 percent of Mesa’s total annual demand.

As concluded in Response 4.17.d, the project would result in a less than significant increase in water demand. The existing motel on the project site reflects an existing water use of approximately 42,244 gallons per day⁶. The project would replace the motel use with 224 residential units (587 people) and require a water demand of approximately 105,073 gallons per day⁷. Thus, the existing water use represents approximately 40% of the projected water demand, and the project would require the use of an additional 62,829 gallons per day.

However, the project would meet or exceed all building code requirements including Title 24 and CALGreen. The project would also utilize water efficient toilets, fixtures, and irrigation systems, as well as drought tolerant landscaping to reduce the project’s overall water demand.

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. 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, since project implementation would

⁶ Assumes full occupancy of 236-unit motel, with one person per room. (179 X 236= 42,244)

⁷ (179 X 587=105,073) Mesa Consolidated Water District. 2010 Urban Water Management Plan (page 2-10)

increase (not decrease) the permeable surface area of the site. Project implementation would therefore result in a less than significant impact to groundwater supplies.

- 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?**

Less than significant impact. The City's storm water collection system includes catch basins, drainage basins, pumping stations, and force mains. As part of the project, construction activities including demolition, grading, paving and site improvements may result in loose sediment, which can be picked up by surface water or wind into nearby storm drains and into waterways.

The existing site is very flat and drains directly into grate inlets in the drive aisles, parking lots, and interior courtyards. The storm drain flows from the south to north into an existing City owned 72" RCP storm drain north of the project. This 72" storm drain then flows westerly and northerly through the Costa Mesa Country Club golf course property into a County owned reinforced concrete trapezoidal channel (OCFCD Facility D04 - Fairview Channel), which then flows into a reinforced concrete rectangular channel (OCFCD Facility D03 - Greenville-Banning Channel) then flows southerly before connecting into the Santa Ana River.

The proposed drainage pattern is similar to the existing condition, except that the proposed site will runoff into a biofiltration BMPs before discharging into the storm drain system. According to the Orange County Hydrology Map, the project site is located in an area of low infiltration rates, which is why biofiltration BMPs are proposed. Drainage would be collected using roof downspouts, and flow directly into the top of filtration planter boxes and bioretention BMPs with underdrains. Once the stormwater passes through the planting material, the water will outlet from the base of the planter by curb drain to the street gutter. The proposed storm drain will have two main laterals - one lateral picks up the east half of the site and another one picks up the west half of the site. These laterals run through the proposed driveways before joining and then connecting to the existing City owned 72" RCP storm drain north of the project.

Standard Condition SC 4.9-2 requires preparation of a detailed Hydrology Study demonstrating that project implementation would not substantially alter the existing drainage pattern of the site or area. Further, no stream or river traverses the project site or is located in its vicinity. With implementation of Standard Conditions, the project would result in less than significant impacts to on- or offsite erosion and/or siltation.

Standard Condition

Refer to Standard Condition 4.6-3 above.

SC 4.9-2 Prior to the issuance of any Grading Permit, the Applicant shall:

- Prepared a detailed Hydrology Study, approved by the City Engineer.
- Design all storm drain facilities, approved by the City Engineer, for 25-year storm event protection.

- Design all storm drains in the public right-of-way to be a minimum of 24 inches by City of Costa Mesa requirements and in accordance with the Orange County Local Drainage Manual including a minimum spacing between manholes of 300 feet.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less than significant impact. Upon project implementation, drainage patterns would be similar to existing conditions, except that the proposed site will runoff into a biofiltration BMPs before discharging into the storm drain system. No stream or river traverses the project site or is located in the project vicinity. Project implementation would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. CMMC Section 15-64 notes that the City has adopted a Master Drainage Plan, which is currently in effect. The official copy of the Master Drainage Plan is on file in the offices of the City Engineer. The project drainage facilities would be subject to compliance with the Master Drainage Plan (pursuant to Standard Condition 4.9-2) and must be reviewed/approved by the City Engineer. Further, CMMC Section 15-65 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 upon such property, prior to, and as a condition of, approval being granted for such development or construction.” The project would result in a decrease in impervious surface areas on the site (by as much as 5 percent). The project would also be subject to compliance with the CMMC provisions, and thus, would result in less than significant impacts on drainage patterns and flooding.

Standard Conditions

SC 4.9-3 Prior to approval of Plans, the project shall fulfill the City of Costa Mesa Drainage Ordinance No. 06-19 requirements.

SC 4.9-4 The project Applicant shall submit grading plans, an erosion control plan, and a hydrology study.

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?

Less than significant impact. The project would be served by the City’s stormwater drainage system. Construction activities such as demolition, grading, and paving could introduce additional pollutants and sediment into water runoff and flow into nearby storm drains. As part of project, a SWPPP in compliance with the NPDES requirements of the Clean Water Act would be prepared. Projects that comply with NPDES requirements would not result in a significant impact related to changes in the quantity, rate, or quality of stormwater runoff from the site. Finally, continuous use and operation of the site would not create or contribute runoff water that would exceed the capacity of existing stormwater drains on the project site. Therefore, impacts would be less than significant.

f) Otherwise substantially degrade water quality?

Less than significant impact. Refer to Response 4.9.a. above.

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?

No impact. Flood hazard areas identified on the Flood Insurance Rate Map (FIRM) are identified as a Special Flood Hazard Area (SFHA). A Special Flood Hazard Area is defined as the area that will be inundated by the flood event having a one (1) percent chance of being equaled or exceeded in any given year. The one-percent annual chance flood is also referred to as the base flood or 100-year flood.

The project site is in Zone X (unshaded), pursuant to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 266, Map No. 06059C0266J Zone X (unshaded) is an area of minimal flood hazard. It includes the areas located outside the Special Flood Hazard Area and higher than the elevation of the 0.2-percent-annual-chance (or 500-year) flood. The project is not located within a Special Flood Hazard Area. Therefore, project implementation would not place housing within a Special Flood Hazard Area.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No impact. As previously addressed in Impact 9g), the project site is not located within the 100-year floodplain. Therefore, no impacts associated with placing structures within a 100-year flood hazard area would occur.

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?

No impact. The project site is not located within the inundation area of a levee or dam, or within the City's coastal areas that are subject to coastal storm surges, according to General Plan SAF 5. Until recently, the Santa Ana River had flood conditions expected to breach the levee resulting in widespread flooding into the City of Costa Mesa. However, the Santa Ana River Mainstem project is designed to provide flood protection to more than 3.35 million people living in Orange, Riverside, and San Bernardino Counties. Therefore, project implementation would not expose people or structures to a significant risk involving flooding associated with the failure of a levee or dam, or coastal storm surges. No impacts would occur.

j) Inundation by seiche, tsunami, or mudflow?

No impact. A seiche is an earthquake or slide-induced wave that can be generated in an enclosed body of water. There is no enclosed body of water in the project vicinity.

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 SAF 5 Exhibit, 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 would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.10 Land Use and Planning				
<i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

a) Physically divide an established community?

No impact. The proposed project is located at 2277 Harbor Boulevard, north of Wilson Street. It is bounded by the Costa Mesa Golf Course to the north, commercial uses to the south and residential uses to the west. The 4.15-acre site is zoned C1 (Local Business District), and has a land use designation of General Commercial. The small commercial building (PAL’s Vacuum & Sewing) at the northeast of the site is not part of the proposed development.

The project involves the complete demolition of the Costa Mesa Motor Inn. None of the proposed activities associated with project implementation would physically divide an established community. However, long-term tenants of the Costa Mesa Motor Inn will be displaced once the property is redeveloped into a new apartment complex. Both long-term and short-term tenants are considered transient occupants.

The property is currently developed with a 236-room two-story motel that was developed in 1972. Conditional Use Permit PA-98-73 originally permitted the motel to operate with up to 40 percent of the rooms rented as long term occupancy (over 28 days). Currently, there are 50 long-term occupants representing about 21 percent of the total motel units. Potential impacts related to displaced motel occupants are more fully addressed below in Section 4.13, Population and Housing.

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local bridge that would impact mobility within an existing community of between a community and

outlying area. The project does not involve any such features, and would not remove any means of access or impact mobility. Therefore, the project will not 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?**

Less than significant impact. of the following discretionary requests of a General Plan Amendment (Exhibit 5), Rezone (Exhibit 6), Zoning Code Amendment, and Master Plan. Most notably, the proposed project involves a request for base density of 40 du/acre and a density incentive for an additional 58 dwelling units. This document provides analysis of the environmental impacts of the proposed development. The City's discretionary review process will provide further detail and consideration of the land use policy implications of the proposed project, including the requested density incentive.

Environmental Analysis and Land Use Policy Decisions

The proposed project involves a change in the General Plan designation and zoning district which require both environmental and policy decisions by the City Council as the final decisionmaking body. The land use policy issues relate to the proposed residential density, building height, and traffic intensity of the development compared to the General Plan buildout scenario and the existing development scenario with the Costa Mesa Motor Inn. A significant policy issue relates to the suitability of the project site for a high density apartment project with an affordable housing component.

Density Incentive Request

Per the applicant's request, the proposed base density is 166 units (40 du/acre) with a density incentive for an additional 58 dwelling units, for an overall total of 224 apartment units. The applicant's justifications for the density incentive is to be justified by (a) Provision of 20 affordable units for moderate-income households and (b) Complete demolition of the Costa Mesa Motor Inn and redevelopment of the property to an upscale, highly amenitized apartment project.

Project site:	4.15 acres
Proposed Base Density:	40 dwelling units per acre / 166 units
Proposed Density Incentive:	58 additional units*
Total:	224 units

*The applicant is proposing a density incentive program to request additional density above the base density of 40 dwelling units per acre. As justifications for approval of the requested density incentive, the applicant is proposing:

- Affordable Housing Component:** 35 percent of the density incentive [20 units] shall have affordability covenants requiring that these units be marketed and leased to moderate-income households. These 20 affordable units shall not be offered at market rental rates while the affordability covenants are in place.

Significant Redevelopment Component: The complete demolition of the 236-room Costa Mesa Motor Inn is proposed. The marginal commercial property will be replaced with an upscale apartment building with full security, structured parking, and significant amenities. In addition to its location along Harbor Boulevard, the four acre site adjoins the Costa Mesa Country Club and City’s regional bike trail. Secured trail access for residents, views of the golf course, and pedestrian connectivity to Harbor Center shopping may make this property an excellent candidate for reuse. The demolition of a low-priced motel for transient occupants and significant reinvestment into the conversion of this property may justify the development incentive request.

Trip Generation

According to the trip generation forecast, the proposed 224-unit apartment complex would involve an 18% increase in average daily trips compared to the fully occupied 236-unit motel, as well as increased AM and PM Peak Hour trips (Table 9 below).

Table 9: Project Traffic Generation Forecast

ITE Land Use Code/ Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Rates							
ITE 220: Aparatment (TE/DU)	6.65	0.10	0.41	0.51	0.40	0.22	0.62
Empirical Rate: Motel (TE/Room)	5.33	0.11	0.17	0.28	0.26	0.24	0.50
Generation Forecasts							
<i>Proposed Project</i>							
Apartments (224 DU)	1,490	23	91	114	90	49	139
<i>Existing Occupied Floor Area</i>							
Existing Fully Occupied Motel (236 Rooms)	1,258	26	40	66	61	57	118
Total “Net” Project Trip Generation: Proposed Project Minus Existing Motel	232	-3	51	48	29	-8	21
Notes: TE/DU – Trip end per dwelling unit TE/Room = Trip ends per room							

In the Existing Plus Project Traffic Conditions and the Year 2018 Cumulative Plus Project Traffic Conditions, the traffic study concluded that traffic associated with the proposed project will not significantly impact the two study intersections (Harbor Boulevard at Harbor Center and Harbor

Boulevard at Wilson Street), when compared to the LOS standards and significant impact criteria of the report.

The environmental analysis in the IS/MND finds that there are no significant impacts that cannot be mitigated to below a level of significance. The larger policy decision relates to whether or not the City of Costa Mesa finds that the proposed General Plan amendment and Rezone would strengthen and reinforce the City’s land use vision for this area of Harbor Boulevard. If the General Plan Amendment and Rezone are approved, the proposed 224-unit development would feature a site-specific density in the high density residential land use designation. Additionally, the City’s standard development review and processing procedures would ensure that the site design for proposed residential development is compatible with existing development.

City of Costa Mesa 2000 General Plan

The Land Use Element of the General Plan directs long-range development in the City by indicating the location and extent of development to be allowed. The General Plan sets forth land use goals, policies and objectives that guide new development. The City of Costa Mesa General Plan Land Use Map identifies the land use designation of the project site as General Commercial. The General Commercial designation is intended to permit a wide range of commercial uses, which serve both local and regional needs.

According to the General Plan (p. LU-32 Land Use Element) “...These areas should have exposure and access to major transportation routes since significant traffic can be generated. General Commercial areas should be insulated from the most sensitive land uses, either through buffers of less sensitive uses or on-site mitigation techniques. The most intense commercial uses should be encouraged to locate on sites of adequate size to allow appropriate mitigation.

The proposed project involves a General Plan Amendment to change the General Commercial designation to High Density Residential, with a base density of 40 du/acre including a development incentive, for an overall site-specific General Plan density of 54 du/acre. The proposed Rezone of the property from C1 (Local Business District) to PDR-HD (Planned Development Residential—High Density) is also requested.

The following analysis evaluates the project for consistency with specific goals and objectives of the General Plan Land Use and Housing Elements. The proposed General Plan amendment and Rezone involve a policy decision by the final decision-making body. Because of the comprehensive nature of the General Plan, it cannot be expected that every goal and objective would apply to every project. Therefore, the following analysis focuses on those issues which are salient and relevant in considering the proposed project. Refer to Table 10 below.

General Plan Consistency

The Land Use Element indicates that since 1980, commercial acreage with the City has increased while industrial acreage has slightly declined (LU Element page LU-10). More recently with adoption of the West side Urban Plans, residential infill projects, including live/work projects have further accelerated the redevelopment of commercial and industrial properties to higher density residential use.

Though not located within an adopted Specific Plan or Mixed-Use Overlay area, the proposed project is generally consistent with this trend. The project would convert approximately 4 acres of General Commercial use to PDR-HD use. This represents a less than .05 percent reduction in the total General Commercial use Citywide (LU Element Table LU-1 Land Use Designation).

The project is consistent with General Plan goals, objectives, and policies, as follows:

- **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.
- **General Plan Land Use Objective LU-1A1:** Provide for the development of a mix and balance of housing opportunities, commercial goods and services, and employment opportunities in consideration of the needs of the business and residential segment of the community. The proposed residential development will contribute to jobs and housing balance within the community. The housing will be in close proximity to Harbor Boulevard commercial and transit corridor and major freeways.
- **Land Use Objective LU-2A:** Encourage new development and redevelopment to improve and maintain the quality of the environment.
- **General Plan Housing Objective HOU-3.1:** Encourage the conversion of existing marginal land to residential, where feasible and consistent with environmental conditions that are suitable for new residential development. The project site is a 1970s two-story motel building in the C1 Commercial zoning. The proposed residential development is located on a parcel that is bounded by the Costa Mesa Golf Course and medium density residential uses on the west; commercial uses to the south are separated by a wide driveways accessing the parking. The proposed project will replace the motel with residential development in an area that is not impacting low density residential uses and is in close proximity to transit corridors. In addition, proximity to the golf course and pedestrian/ bike trail makes this a desirable location for new residential development.
- **General Plan Housing Objective HOU-3.2:** Provide opportunities for the development of well planned and designed projects which, through vertical or horizontal integration, provide for the development of compatible residential, commercial, industrial, institutional, or public uses within a single project or neighborhood. The proposed project provides on-site amenities for the residents in an integrated structure. The residential units will be provided with private and common open space and recreation areas on a site in close proximity to employment opportunities and service uses.

Table 10: Land Use Designations

Land Use Designation	Residential Density DU/Acre	Floor Area Ratio	Acres Developed	Acres Undeveloped (1999)	Total Acres	% of City
Low-Density Residential	≤ 8	Same as Neighborhood Commercial	2,143.4	1.8	2,145.2	26.6%
Medium-Density Residential ^{1,6}	≤ 12	Same as Neighborhood Commercial	777.3	30.7	808.0	10.0%
High-Density Residential ^{1,6}	≤ 20 ²	Same as Neighborhood Commercial	824.1	42.0 46.2	866.1 870.3	10.7% 10.8%
Commercial-Residential	≤ 17.4	0.20/High Traffic 0.30/Moderate Traffic 0.40/Low Traffic	42.6	0.9	43.5	0.5%
Neighborhood Commercial ⁶	—	0.15/High Traffic 0.25/Moderate Traffic 0.35/Low Traffic 0.75/Very Low Traffic	42.4	2.5	44.9	0.6%
General Commercial ⁶	≤ 20	0.20/High Traffic 0.30/Moderate Traffic 0.40 Low Traffic 0.75/Very Low Traffic	605.1 600.9	20.8	625.9 621.7	7.7%
Commercial Center ⁶	≤ 20 ≤ 40 site specific density for 1901 Newport Blvd ³	0.25/High Traffic 0.35/Moderate Traffic 0.45 Low Traffic 0.75/Very Low Traffic 0.70 Site-Specific FAR for 1901 Newport Blvd ³	29.4	63.3	92.7	1.1%
Regional Commercial	≤ 20	0.652/0.89 ⁴	114.7	0.0	114.7	1.4%
Urban Center Commercial	≤ 28 ⁵ ≤ 100 Site Specific Density ⁵	1.0 FAR for Sakioka Lot 2 ⁵ 0.79 Site-Specific FAR for South Coast Metro Center ⁵	134.2	26.2	160.4	2.0%
Cultural Arts Center	Varies ⁷	1.77 ⁷	49.0	5.0	54.0	0.7%
Industrial Park	≤ 20	0.20/High Traffic 0.30/Moderate Traffic 0.40/Low Traffic 0.75/Very Low Traffic	696.5	17.7	714.2	8.8%
Light Industry ⁶	≤ 20	0.15/High Traffic 0.25/Moderate Traffic 0.35/Low Traffic 0.75/Very Low Traffic	375.5	6.6	382.1	4.7%
Public/Institutional	—	0.25	1,281.3	0.5	1,281.8	15.9%
Golf Course	—	<0.01	560.1	0.0	560.1	6.9%

Table 10 (cont.): Land Use Designations

Land Use Designation	Residential Density DU/Acre	Floor Area Ration	Acres Developed	Acres Undeveloped (1999)	Total Acres	% of City
Fairgrounds	—	<0.10	146.4	0.0	146.4	1.8%
Total			9.5	218.0	8,040.0	100.0%

Notes:

- ¹ Within the Medium- and High-Density Residential designation, existing residential units legally built in excess of the dwelling units per acre standard may be rebuilt at the same higher density subject to other zoning code standards. The allowable density or number of units to be redeveloped would be limited to the 1990 General Plan density with a 25% incentive bonus for Medium-Density or a 50% incentive bonus for High-Density; or the existing number of units, whichever is less.
- ² See High-Density Residential text regarding areas in North Costa Mesa where the density allowance exceeds 20 units per acre.
- ³ See Commercial Center text.
- ⁴ See Regional Commercial text.
- ⁵ See Urban Center Commercial text.
- ⁶ See text for Mixed-Use Development provisions.
- ⁷ See Cultural Arts Center text for additional discussion.

General Plan Amendment Screening

City Council Policy 500-2 sets forth the criteria to evaluate General Plan amendment requests. Council takes action on whether or not a proposal should be accepted for processing by using these criteria as guidance. The Policy establishes a procedure for processing privately initiated General Plan amendments. The policy also acknowledges these criteria are only guidelines and City Council may accept an application which does not meet the criteria if it finds there are overriding reasons to do so.

On May 20, 2014, the City Council approved the request for processing. The authorization to proceed with a proposal for a General Plan Amendment did not represent a commitment to approve the project. This action represents that Council would like to consider the request for processing, and subsequently evaluate the proposed development in further detail prior to making a final decision on the General Plan Amendment and Rezone.

Zoning Ordinance

The City’s Zoning Ordinance is the primary implementation tool for the City’s General Plan Land Use Element and the goals and policies contained therein. For this reason, the Zoning Map must be consistent with the General Plan Land Use Map. The General Plan Land Use Map indicates the general location and extent of future land use in the City. The Zoning Ordinance, which includes the Zoning Map, contains more detailed information about permitted land uses, building intensities, and required development standards.

The Zoning Ordinance designation for the project site is C1 (Local Business). The existing C1 zoning designation allows a FAR between 0.20-0.75 for high to very low traffic uses, respectively. The proposed request involves a rezone of the property to Planned Development Residential – High

Density. According to the City's Zoning Code (Costa Mesa Zoning Code, Section 13-57(a)(2)), the purpose of the Planned Development zoning is to provide a method by which appropriately located areas of the City can be developed utilizing more imaginative and innovative planning concepts than would be possible through strict application of existing zoning and subdivision regulations. It is intended that these developments will meet the broader goals of the General Plan and Zoning Code by exhibiting excellence in design, site planning, integration of uses and structures, and protection of the integrity of neighboring development. A variety of building products are encouraged in the design of projects in the Planned Development zones, thereby maximizing project excellence.

The proposed project would replace a marginal motel with a planned residential development. The proposed residential project would reduce traffic volumes on Victoria Avenue as compared with the existing commercial office use (see Trip Generation Assessment, Appendix G). The project reflects a quality design and includes contemporary architecture with varied building materials, textures and colors, attractive landscaped project common areas and project entries, and open space. The character of the surrounding area is defined by a mix of uses, including the Costa Mesa Golf Course, Fairview Developmental Center, medium-density residential land uses, and commercial uses. The project would not be incompatible with the mix of uses and character of its surroundings, and would maintain the quality of the environment.

The City's Zoning Ordinance allows use of PDR development standards in order to "provide a method by which appropriately located areas of the City can be developed utilizing more imaginative and innovative planning concepts than would be possible through strict application of existing zoning and subdivision regulations." The project's proposed planned development standards will be fully evaluated by the final decision making body.

Therefore, the project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No impact. The project site is located on a developed site within an urban area and is not located within any habitat conservation plan or natural community conservation plan. Refer to response 4.4.f.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.11 Mineral Resources <i>Would the project:</i>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Would the project:

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

No impact. The project site is classified as Mineral Resource Zone 3 (MRZ-3). The MRZ-3 designation represents “areas containing mineral deposits the significance of which cannot be evaluated from available data” (CA State Geologist, 1994). However, the project site is developed with commercial uses and is located within a developed urban area. Thus, the site does not support mineral extraction operations, thereby precluding the possibility of related impacts. No impacts would occur.

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

No impact. The Costa Mesa 2000 General Plan designates the site for commercial use, and mineral extraction is not permitted. In addition, the project site is developed with commercial uses and does not support mineral extraction operations. This condition precludes the possibility of related impacts. No impacts would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.12 Noise				
<i>Would the project result in:</i>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

The following analysis is based in part on ambient noise monitoring conducted by FCS and outputs from the Federal Highway Administration’s (FHWA) Roadway Construction Noise Model (RCNM v1.1), which are included as Appendix E.

Characteristics of Noise. Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the decibel (dB). The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect.

Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments, while a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans. The scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Furthermore, the A-weighted sound level is the basis for a number of various sound level metrics, including the day/night sound level (L_{dn}) and the Community Noise Equivalent Level (CNEL), both of which represent how humans are more sensitive to sound at night.⁸ In addition, the equivalent continuous sound level (L_{eq})⁹ is the average sound energy of time-varying noise over a sample period and the L_{max} is the maximum instantaneous noise level occurring over a sample period.

Existing Noise Sources

The project site is located in the City of Costa Mesa, California. Residential and commercial uses occur immediately to the south of the site, which includes an auto repair business and a Taco Bell at the northwestern corner of the Harbor Boulevard and Wilson Street intersection. The Ala Moana Apartments and several single family homes occur west of the commercial uses along Wilson Street, adjacent to the southern portion of the site. Multi-family homes occur immediately west of the site. The Costa Mesa Golf Course is located along most of the northern project boundary, with a small commercial property located to the northeast corner of the site. Harbor Center, a commercial shopping center, is located to the east of the site, along Harbor Boulevard.

The existing noise levels on the project site were documented through short-term ambient noise measurements taken on or near the project site in order to determine the existing ambient noise environment in the project vicinity.

The noise measurements were taken on Thursday, April 23, 2015 between 12:30 p.m. and 2:30 p.m. The noise measurement locations are shown in Exhibit 9; and the noise measurement data sheets are provided in Appendix E of this document. The noise monitoring locations were selected in order to document existing daytime ambient noise levels on the project site and to determine compatibility of the proposed residential land use development with the City’s land use compatibility standards. A summary of the results of the noise level measurements are provided below in Table 11.

Table 11: Noise Monitoring Summary

Site Location	Location Description – Primary Noise Sources	dBA L_{eq}	dBA L_{max}	dBA L_{min}
ST-1	Southeast corner of project site – traffic on Harbor Boulevard, cars in driveway, parking lot noise	60.5	75.4	50.6

⁸ L_{dn} is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. CNEL is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. Source: Harris, Cyril M. 1998. Handbook of Acoustical Measurement and Noise Control.

⁹ The City of Costa Mesa Municipal Code is not technically explicit. Therefore, in order to utilize the most conservative approach, and realistic interpretation of the code standards, the analysis s assumes that the noise metric refers to L_{eq} .

Table 11 (cont.): Noise Monitoring Summary

Site Location	Location Description – Primary Noise Sources	dBA L _{eq}	dBA L _{max}	dBA L _{min}
ST-2	Southwest corner of project site – parking lot noise, wind, birds	49.2	69.2	42.8
ST-3	Northwest of project site, adjacent to off-site residential uses – distant yard maintenance activity, wind, parking lot noise	53.7	61.4	45.3

Source: FirstCarbon Solutions, 2014.

Regulatory Framework

The City of Costa Mesa addresses noise in the Noise Element of their General Plan (City of Costa Mesa 2000 General Plan, January 2002) and in the Code of Ordinances (City of Costa Mesa, 2015).

The City has established noise and land use compatibility standards for new land use development, as shown in Table N-3 of the Noise Element. According to the policies of the General Plan, noise environments up to 65 dBA CNEL are considered “normally acceptable” for new multi-family residential land use developments. Environments with ambient noise levels from 65 dBA to 70 dBA CNEL are considered “conditionally acceptable” for new multi-family residential land use developments; as such, development may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features are included in the project design. Conventional construction, but with closed windows and a fresh air supply system or air conditioning will normally suffice as a noise insulation feature for these conditionally acceptable environments. However, the Noise Element also includes Goals and Objectives that provide further restrictions to these standards. For example, Objective N-1A.2, of the Noise Element of the General Plan states that the maximum acceptable exterior noise levels for residential areas is 65 dBA CNEL.

The other primary method of noise control is through enforcement of the City’s municipal Noise Ordinance. The ordinance is designed to control unnecessary, excessive and annoying sounds generated on one piece of property from impacting an adjacent property, and to protect residential areas from noise sources other than transportation sources. For example, it limits noise at residential properties to 55 dBA L_{eq} from 7:00 a.m. to 11:00 p.m. and to 50 dBA L_{eq} from 11:00 p.m. to 7:00 a.m. Furthermore, it is unlawful for any person to create noise, when measured on any residential property, which causes the sound level to exceed:

1. The noise standard for a cumulative period of more than thirty minutes in any hour;
2. The noise standard plus 5 dBA for a cumulative period of more than fifteen minutes in any hour;
3. The noise standard plus 10 dBA for a cumulative period of more than five minutes in any hour;
4. The noise standard plus 15 dBA for a cumulative period of more than one minute in any hour; or
5. The noise standard plus 20 dBA for any period of time.

Interior noise standards in residential dwellings are limited to 55 dBA L_{eq} from 7:00 a.m. to 11:00 p.m. and to 45 dBA L_{eq} from 11:00 p.m. to 7:00 a.m. Furthermore, it is unlawful for any person to create noise, when measured on any residential property, which causes the sound level to exceed:

6. The noise standard for a cumulative period of more than thirty minutes in any hour;
7. The noise standard plus 5 dBA for a cumulative period of more than fifteen minutes in any hour;
or
8. The noise standard plus 10 dBA for a cumulative period of more than five minutes in any hour.

In the event the ambient noise level exceeds the noise limit categories above, the cumulative period applicable to said category shall be increased to reflect the ambient noise level.

The City provides certain exemptions from these operational noise standards, including noise associated with construction activities that take place between the hours of 7:00 a.m. and 7:00 p.m., Mondays through Fridays and between 9:00 a.m. and 6:00 p.m. on Saturdays. Construction activities are not exempt from these noise performance requirements outside of these hours, including any time on Sundays or specified federal holidays.

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?**

Less-than-Significant with Mitigation Incorporated. Noise levels in the project area would be influenced by construction activities and from the ongoing operation of the project.

Short-Term Construction Impacts

Two types of short-term noise impacts could occur during the construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the project site. Although there would be a relatively high single event noise exposure potential causing intermittent noise nuisance, the effect on longer term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table 12 lists typical construction equipment noise levels, based on a distance of 50 feet between the equipment and a noise receptor. Because the noisiest construction equipment is earthmoving equipment, the site preparation phase is expected to be the loudest phase of construction. The site preparation construction phase is expected to require the

use of front-end loaders, compactors, hydraulic backhoes, and haul trucks. Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three or four minutes at lower power settings. Impact equipment such as pile drivers are not expected to be used during construction of this project.

Table 12: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Impact Device? ¹⁰ (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Pickup Truck	No	55
Pumps	No	77
Air Compressors	No	80
Backhoe	No	80
Front-End Loaders	No	80
Portable Generators	No	82
Dump Truck	No	84
Tractors	No	84
Auger Drill Rig	No	85
Concrete Mixer Truck	No	85
Cranes	No	85
Dozers	No	85
Excavators	No	85
Graders	No	85
Jackhammers	Yes	85
Man Lift	No	85
Paver	No	85
Pneumatic Tools	No	85
Rollers	No	85
Scrapers	No	85
Concrete/Industrial Saws	No	90
Impact Pile Driver	Yes	95
Vibratory Pile Driver	No	95

Source: FHWA 2006. Highway Construction Noise Handbook, August.

The demolition phase is expected to use concrete saws, excavators, and rubber tired dozers. The site preparation and grading phase of the project is expected to require the use of rubber tired dozers,

¹⁰ Impact devices are pieces of construction equipment that create high levels of noise and vibration such as jackhammers and pile drivers.

tractors, front-end loaders, backhoes, excavators, and graders. The paving phase of construction is expected to require the use of pavers, rollers, concrete mixer trucks, tractors, front-end loaders, and backhoes. The building construction phase is expected to require the use of cranes, forklifts, portable generators, tractors, front-end loaders, backhoes, and welder torches.

The Federal Highway Administration’s (FHWA) Roadway Construction Noise Model was used to calculate construction noise levels at nearby sensitive receptors surrounding the project site during each phase of construction. The modeled receptor locations represent the closest residential units to the west, south, east, and north of the project site. The modeled receptor locations are shown in Exhibit 9. The modeled construction phases included the demolition phase, the site preparation and grading phase, the building construction phase, and the paving of the internal roadways phase. Construction equipment assumptions are based on the default construction equipment list from the air quality impact analysis for this project. A worst case scenario was modeled assuming each piece of modeled equipment would operate simultaneously at the nearest reasonable locations to each modeled receptor. Overall average daily project construction noise levels would be much lower than this worst case scenario as all equipment would not always operate simultaneously and would also be lower as the equipment operates toward the center of the project site further from off-site receptors. A summary of the modeling results are shown in Table 13. The construction noise modeling assumptions and outputs are provided in Appendix E of this report.

Table 13: Construction Noise Model Results Summary (dBA)

Receptor Location	Demolition Phase		Site Preparation/ Grading Phase		Building Construction Phase		Paving Phase	
	L _{eq}	L _{max}	L _{eq}	L _{max}	L _{eq}	L _{max}	L _{eq}	L _{max}
R-1: Closest residence to western border	82.6	86.9	88.9	89.4	83.1	84.9	86.2	88.4
R-2: Closest residence to southern border	80.5	84.7	87.0	87.1	79.7	81.1	85.0	87.1
R-3: Closest Commercial Building to southern border	85.6	90.3	93.2	94.5	83.1	84.9	91.7	94.5
R-4: Closest Commercial Building to eastern border	74.4	78.1	76.6	74.5	72.4	73.1	73.6	74.5
R-5: Closest Commercial Building to northern border	85.8	90.5	91.1	92.0	81.6	83.2	89.4	92.0

Note: L_{max} is the loudest value of any single piece of equipment as measured at the modeled receptor location.
Source: FirstCarbon Solutions, 2015.

The City of Costa Mesa’s Code of Ordinances outlines the City’s standards for noise producing construction activities. Construction activities that would produce noise levels in excess of the noise performance standards are restricted to the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturday. Therefore, restricting construction activities to these stated time periods, as well as implementing the best management noise reduction techniques and practices outlined in Mitigation Measure (MM) NOI-1, would ensure that potential short-term construction noise impacts on sensitive receptors in the project vicinity would be reduced to less than significant.



Source: NAIP Aerial Imagery, 2014. FCS Field Survey and GIS Data, 2015.



Exhibit 9 Noise Monitoring Locations

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Standard Condition

- SC 4.12-1** Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited to between the hours of 7:00 am and 7:00 pm on Mondays through Fridays; to between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays; and shall not be permitted at any time on Sundays or federal holidays.

Level of Significance Before Mitigation

Potentially significant unless mitigation is incorporated.

Mitigation Measure

- MM NOI-1** Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.

Level of Significance After Mitigation

Less than significant impact.

Long-Term Operational Impacts

Mobile-Source Noise Impacts

Implementation of the project would result in a significant impact if it would expose the project to ambient noise levels in excess of the City’s conditionally acceptable noise and land use compatibility standards; this includes transportation noise sources. The City considers environments with a community noise exposure of 60 to 70 dBA CNEL to be conditionally acceptable for new residential low-density development, and environments with a community noise exposure of 65 to 70 dBA CNEL to be conditionally acceptable for new residential multiple-family development. For such environments, development may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features are included in the project design. Conventional

construction, but with closed windows and a fresh air supply system or air conditioning will normally suffice as a noise insulation feature for these conditionally acceptable environments.

The existing ambient noise environment was documented through the short-term ambient noise measurement effort. Existing ambient noise conditions were then compared for compliance with the City's land use compatibility standards for new residential land use development. Measured average ambient noise levels at the project site ranged from 49.2 dBA to 60.5 dBA L_{eq} , with maximum levels of approximately 62 dBA to 76 dBA L_{max} . There are no major noise sources in the project vicinity that would substantially affect the nighttime noise levels above those measured during the daytime peak noise hours. Therefore, the existing noise levels are within the City's "normally acceptable" range of below 65 dBA CNEL for new multi-family residential land use developments. Consequently, existing noise levels on the project site would result in a less than significant impact on the proposed land use development.

The projected future traffic noise levels adjacent to the project site were also analyzed to determine compliance with the City's noise and land use compatibility standards. Based on the traffic noise contours shown in Exhibit N-4 of the Noise Element of the General Plan, the future projected 65 dBA CNEL traffic noise contours of Harbor Boulevard extend to the eastern border of the project site. These traffic noise levels are considered "normally acceptable" for new multi-family residential land uses developments, and are below the maximum acceptable exterior noise levels for residential areas of 65 dBA CNEL, per Objective N-1A.2, of the Noise Element of the General Plan. Consequently, future projected traffic noise levels on the project site would result in a less than significant impact on the proposed land use development.

Level of Significance Before Mitigation

Less than significant impact.

Stationary-Source Noise

The City has established exterior and noise level standards for stationary (non-transportation) noise sources for receiving residential land uses. For example, it limits exterior noise as measured at receiving residential properties to 55 dBA L_{eq} from 7:00 a.m. to 11:00 p.m. and to 50 dBA L_{eq} from 11:00 p.m. to 7:00 a.m. The City's interior noise standards in residential dwellings are limited to 55 dBA L_{eq} from 7:00 a.m. to 11:00 p.m. and to 45 dBA L_{eq} from 11:00 p.m. to 7:00 a.m.

New stationary noise sources associated with implementation of the project would include new mechanical equipment, such as rooftop heating, ventilation, and air conditioning (HVAC) systems. At the time of preparation of this analysis, details of mechanical ventilation systems were not available; therefore, a reference noise level for typical HVAC systems was used. Noise levels from typical rooftop mechanical ventilation equipment are anticipated to range up to approximately 60 dBA L_{max} at a distance of 25 feet. Proposed HVAC systems could be located as close as 60 feet from the nearest off-site receptor (the closest residential land use west of the project site, represented by modeled receptor location R1 on Exhibit 9). Rooftop ventilation systems would not have a direct line of sight to off-site receptors due to set-backs from the edge of the roof and a low parapet wall, which would provide additional noise shielding. Therefore, noise generated by proposed mechanical ventilation systems would be expected to attenuate to less than 48 dBA L_{max} as measured at the

nearest off-site sensitive receptor. These noise levels are below the City's stationary noise source performance standards for receiving residential land uses including the nighttime standard of 50 dBA L_{eq} , and are also below the measured maximum recorded ambient noise levels at site locations ST-1, ST-2, and ST-3 as shown in Table 11. Therefore, noise levels from new stationary noise sources would be considered a less than significant impact.

The proposed project would also include new stationary noise sources such as typical parking lot activities associated with the proposed parking deck. These activities are potential point sources of noise that could affect noise-sensitive receptors in the project vicinity. Typical parking lot activities, such as people conversing, doors slamming, or vehicles idling, generate noise levels of approximately 60 dBA to 70 dBA L_{max} at 50 feet. The nearest off-site receptor to the proposed parking deck is the single-family residential land use indicated by modeled receptor location R2, located approximately 95 feet from the proposed parking deck. Due to distance attenuation and structural shielding provided by the parking deck parapet walls, noise from parking lot activities could range up to 50 dBA L_{max} at this nearest receptor location. Such noise producing parking lot activities would occur on a periodic basis as people arrive and leave the parking lot. As such, hourly average noise levels from such activities would not be expected to exceed even the nighttime noise performance standard of 50 dBA L_{eq} as measured at the nearest off-site sensitive receptor.

In addition, the proposed project would not be exposed to noise levels from off-site stationary noise sources that are in excess of the City's noise performance standards. As was documented through the ambient noise monitoring effort, the noise levels at sites ST-2 and ST-3, where noise levels from traffic on Harbor Boulevard were less dominant, show that daytime ambient noise levels ranged up to 49.2 and 53.7 dBA L_{eq} respectively. Therefore, even evaluating this as a worst case scenario that these noise levels were all from stationary noise sources in the project vicinity, they are below the daytime noise performance standard of 55 dBA L_{eq} for a receiving residential land use. Therefore, proposed outdoor active use areas, including any proposed balconies, would not be exposed to noise levels from existing stationary noise sources that would exceed the City's noise performance standards.

Therefore, stationary operational noise levels would not exceed the City's noise performance standards and would be considered less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving, and operating heavy earthmoving equipment. Construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). For purposes of this analysis, project related impacts are expressed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 14.

Table 14: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	RMS Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer-small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer-Large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam shovel drop	0.202	94
Vibratory Roller (large)	0.210	94
Pile Driver(impact-typical)	0.644	104

Table 14 (cont.): Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	RMS Velocity in Decibels (VdB) at 25 Feet
Pile Driver (impact-upper range)	1.518	112
Source: Compilation of scientific and academic literature, generated by FTA and FHWA.		

Propagation of vibration through soil can be calculated using the vibration reference equation of

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

PPV = reference measurement at 5 feet from vibration source

D = distance from equipment to property line

N = vibration attenuation rate through ground

According to Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment manual (2006), an “n” value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.

The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document (FTA 2006). The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 15.

Table 15: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced – Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non Engineer Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90
VdB=Velocity in Decibels Source: FTA, 2006.		

Out of the variety of equipment used during construction, the vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Impact equipment such as pile drivers is not expected to be used during construction of this project. Large vibratory rollers produce groundborne vibration levels ranging up to 0.210 inches per second (in/sec) peak particle velocity (PPV) at 25 feet from the operating equipment.

The nearest off-site receptor is the currently unoccupied, commercial structure at 2273 Harbor Boulevard immediately south of the project site, located approximately 40 feet from the nearest construction footprint where heavy construction equipment would potentially operate. At this distance groundborne vibration levels could range up to 0.104 PPV from operation of a large vibratory roller. This is below the industry standard vibration damage criteria of 0.2 PPV for this type of structure, a building of non-engineered timber and masonry construction (see Table 15). Therefore, construction-related groundborne vibration impacts would be considered less than significant.

Upon completion of construction, the project would not include any permanent sources of groundborne vibrations. As such, implementation of the proposed project would not expose persons within the project vicinity to excessive groundborne vibration levels. Therefore, project-related groundborne vibration impacts would be considered less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. A significant noise impact to off-site receptors would occur if the project would result in a substantial increase in ambient noise levels compared to noise levels existing without the project. As noted previously, changes of 3 dBA or less are only perceptible in laboratory environments. A change of 3 dBA is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Primary new permanent noise sources associated with implementation of the project would be project related traffic and new stationary noise sources such as parking lot activity and new mechanical equipment such as rooftop ventilation systems. As shown in Table 14, the greatest increase in traffic noise levels along modeled roadway segments in the project vicinity would be 0.1 dBA CNEL, with implementation of the project. This is well below the 3 dBA increase that is considered to be perceptible in outdoor environments. Therefore, project-related traffic would not result in a perceptible permanent increase in existing ambient noise levels along any roadway segment in the project vicinity, and project-related traffic noise impacts on off-site sensitive land uses would be less than significant.

As shown in the stationary-source noise impact discussion under 12a), noise levels from project-related stationary noise sources such as parking lot activities and operation of new mechanical ventilation equipment could range up to 50 dBA L_{max} at the nearest sensitive receptor location, represented by modeled receptor location R1. These noise levels are below the measured maximum recorded ambient noise levels at this location, ST-3, as shown in Table 11. Therefore, noise levels from new stationary noise sources would not result in a substantial permanent increase in ambient noise levels in the project vicinity compared to conditions existing without the project. Therefore, implementation of the project would result in a less than significant permanent increase in noise 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?

Less-than-Significant with Mitigation Incorporated. As addressed in Impact 12a), project-related construction activities could result in high intermittent noise levels at the closest noise sensitive land uses surrounding the project site. The modeled construction noise levels for each phase of construction are shown in Table 13. These noise levels would result in increases in daytime ambient noise levels above those existing without the project. Therefore, implementation of MM NOI-1 including standard construction noise reduction measures and compliance with the City's permissible hours of construction noise in excess of stationary noise standards would be required in order to reduce short-term construction impacts to a less-than-significant level.

Level of Significance Before Mitigation

Potentially significant unless mitigation is incorporated.

Mitigation Measure

Mitigation Measure MM-NOI-1 is required.

Level of Significance after Mitigation

Less than significant impact.

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?

Less Than Significant Impact. The closest airport to the project site is the John Wayne Airport, located approximately 2.6 miles east of the project site. The project site is located outside of the 60 dBA CNEL airport noise contours of this airport. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working in the project area to excessive noise levels. Therefore, impacts associated with public airport noise would be less than significant.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located in the vicinity of a private airstrip. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby private airstrip activity would not expose people residing or working in the project area to excessive noise levels. Therefore, no impacts associated with private airstrip noise would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.13 Population and Housing				
<i>Would the project:</i>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

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

Less than significant impact. A project could induce population growth in an area, either directly (for example, by proposing new homes and/or business) or indirectly (for example, through extension of roads and/or other infrastructure). The project involves construction of a 224-unit, luxury apartment development in place of the existing motel. As discussed in 4.10.a, the existing use only provides temporary housing as a commercial motel use, and does not provide any permanent housing or contribute directly to the City’s population.

According to the 2013 American Communities Survey (U.S. Census), the persons per household ratio for a multi-family apartment complex is 2.62 persons per unit. Thus, at full occupancy, the proposed 224-unit apartment complex would create a population of approximately 587 persons. Additionally, because the proposed project would contain luxury apartments, it is likely that the proposed residential units would have a smaller household size than traditional units. However, to provide a conservative analysis, the average household size will be used to evaluate impacts.

The project would induce population growth through the establishment of additional housing. However, the potential population growth would be nominal, representing less than one-tenth of one percent (less than 0.1%) increase over the City’s existing 2015 population of approximately 113,455 persons (U.S. Census 2015). Therefore, project implementation would not induce substantial population growth within the City.

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

Less than significant impact. The City of Costa Mesa adopted its updated Housing Element on January 21, 2014, which covers the 2013-2021 planning cycle and sets forth the City's obligations with regard to the Regional Housing Needs Assessment allocations, including the number of very-low, low- moderate- and above-moderate income dwelling units that should be provided within the City. As it progresses toward meeting these goals, the City continues to promote the on-going use of Housing Choice Vouchers through the Orange County Housing Authority (OCHA). As of March 2013, 442 very- low income households in Costa Mesa were receiving rental assistance. The City also continues to pursue funding and partner with affordable housing developers. Between 2008-2011, a total of 618 affordable units were constructed. Through the Community Development Block Grant (CDBG), the City provides funding to support services for homeless individuals, low-income persons at risk of homelessness, individuals with disabilities and seniors (City of Costa Mesa Housing Element, p. HOU 5-7).The project site is currently developed with a 236-unit motel, and is designated General Commercial under the City's General Plan. The motel is considered a commercial use, which is not intended to be used as housing, and is not recognized as housing by the City. The majority of the units are occupied on a transient basis involving less than a 30-day stay, and the motel owner collects a transient occupancy tax for those stays in accordance with the provisions of the Municipal Code. However, up to 50 units (21%) are used on a longer-term basis. Because the project has the potential to displace longer-term occupants, up to 50 units are being evaluated as housing for CEQA purposes.

The project would result in the demolition of the existing motel and development of a new apartment complex, thereby displacing existing motel occupants, including the long-term occupants of up to 50 units. The majority of the motel occupants would leave by attrition as they vacate the units, and no new units would be advertised as vacant. Thus, the remaining number of occupants at the time of closure is expected to be minimal. The project applicant would also be required to comply with standard conditions to provide a relocation consultant to any occupants, as needed, and to provide at least 60 days' notice to vacate; see Standard Conditions below.

Thus, the project would result in some localized displacement, but not in substantial amounts as to warrant the need for replacement housing. Further, the specific impacts of the displacement are speculative because the City cannot predict whether individuals would relocate within the City or elsewhere. In addition, a relocation consultant would be available to provide housing information/consultation for any remaining occupants.

Standard Conditions

- SC 4.13-1** The applicant will hire a relocation consultant to offer relocation services to existing occupants. Existing occupants shall receive a written notice (printed in both English and Spanish, as well as any other language spoken by a majority of the occupants) of the availability of this service, which shall be delivered to each occupied unit and posted in conspicuous locations throughout the property. The notice shall contain the name and contact information for the relocation consultant, and shall provide

the date(s) of at least (1) on-site visit, during which the relocation consultant will be available on-site for a specified timeframe to assist with walk-in inquiries.

Occupants will be provided at least 60 days' written notice to vacate the property. This notice shall be delivered to each occupied unit and posted in conspicuous locations throughout the property. The notice shall be printed in both English and Spanish, as well as any other language spoken by a majority of the occupants.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Less than significant impact. Project implementation would include the demolition of a 236-suite motel and associated features, as well as the construction of a new residential development. The motel currently offers temporary, limited stay options, and does not represent a permanent housing use. Most occupants stay at the motel for less than 30 days, and are therefore defined as transients subject to the City's transient occupancy tax. However, up to 50 units (21%) are used on a longer-term basis. Impacts to these individuals have been analyzed under Section 4.13 b), above. Current occupants will receive adequate notice (60 days) to vacate the premises, and will receive access to a relocation consultant to assist them with finding replacement housing. The specific impacts of the displacement are speculative because the City cannot predict whether individuals would relocate within the City or elsewhere. However, even if localized displacement occurred, it would not occur in substantial amounts as to warrant the need for replacement housing that would have a significant effect on the environment. Thus, displacement of a commercial motel use would not result in the displacement of a substantial number of people. Impacts would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.14 Public Services				
<i>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:</i>				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

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?

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 is one paramedic engine company with four personnel, a 100-foot aerial ladder truck company¹², an urban search and rescue squad¹³, and three Battalion Chiefs¹⁴, with at least one chief on duty 24-hours a day, seven days a week. These fire personnel respond from six fire stations strategically located within the City¹⁵. The closest station to the project is the Placentia Fire Station, located at 2300 Placentia Avenue, approximately 1.0 mile west of the project site. Depending on the nature, size, and location of the alarm, units from multiple stations will respond.

¹² City of Costa Mesa Fire Department 2015 100-Foot Aerial Ladder Truck Website: <http://costamesaca.gov/index.aspx?page=1452> Accessed: August 18, 2015

¹³ City of Costa Mesa Fire Department 2015 Urban Search and Rescue Website: <http://costamesaca.gov/index.aspx?page=1453> Accessed August 18, 2015

¹⁴ City of Costa Mesa Fire Department 2015 Organization Chart Website: <http://costamesaca.gov/modules/showdocument.aspx?documentid=6377> Accessed: August 18, 2015

¹⁵ City of Costa Mesa Fire Department 2015 Station Locations Website: <http://costamesaca.gov/index.aspx?page=230> Accessed: August 18, 2015

There are 39 fire fighters in order to operate 24 hours a day, 7 days a week at the Fire Station. There are also 21 Fire Captains, and 24 Fire Engineers. 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 224-unit, residential development in place of a motel. 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 2013 California Fire Code (and all amendments), including the provision of fire sprinkler systems throughout building, 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.

Compliance with the City's discretionary review process and CMMC requirements would ensure that project implementation would result in a less than significant impact to fire protection services.

Standard Conditions

- SC 4.14-1** 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.
- SC 4.14-2** Projections, including eaves, shall be one-hour fire resistive construction, heavy timber or of noncombustible material if they project into the 5 ft setback area from the property line. They may project a maximum of 12 inches beyond the 3 ft setback. CRC Tables R302.1(1) and R302.1(2).
- SC 4.14-3** The final master plan for development of the project shall provide sufficient capacity for fire flows required by the City of Costa Mesa Fire Department.
- SC 4.14-4** Vehicular access shall be provided and maintained serviceable throughout construction to all required fire hydrants.
- SC 4.14-5** The project shall provide approved smoke detectors to be installed in accordance with the 2007 Edition of the Uniform Fire Code.
- SC 4.14-6** 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 4.14-7** The project shall provide a fire alarm system.

SC 4.14-8 The project shall provide individual numeric signage for proposed residences with minimum 6 inches height.

b) Police protection?

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 three divisions: Administration; Field Operations; and Support Services¹⁶. 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 organization¹⁷. 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 persons¹⁸.

The project does not propose new or physically altered police protection facilities. The project involves construction of a 224-unit apartment building with a parking structure in place of a 236 suite motel that exists on the property. As discussed in Response 4.13.a, project implementation would result in a net increase of 224 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 4.14-9, 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 that 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 Condition

SC 4.14-9 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 and rooftop building identification shall be readily apparent from police helicopters for emergency response agencies.

¹⁶ City of Costa Mesa Police Department 2015 Department Division Website: <http://38.106.5.76/index.aspx?page=971> Accessed: August 18, 2015

¹⁷ City of Costa Mesa Police Department 2015 Department Division Website: <http://38.106.5.76/index.aspx?page=971> Accessed: August 18, 2015

¹⁸ City of Costa Mesa Police Department 2015 Department Division Website: <http://38.106.5.76/index.aspx?page=971> Accessed: August 18, 2015

- Landscaping requirements (e.g. minimize use of hedges, use of low height shrubs for greater visibility).
- Emergency vehicle parking areas shall be designated within proximity to buildings.
- Prior to the issuance of a Building Permit, the City of Costa Mesa Police Department shall review and approve the developer's project design features to satisfy local requirements. The applicant shall then pay the appropriate fee in effect to mitigate the project's proportionate impact to additional demands on police protection services, if any.

c) Schools?

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 Adams Elementary School (grades K-6), Tewinkle Middle School (grades 7 and 8), and Estancia High School (grades 9-12) service areas, with school enrollments of approximately 449 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 224-unit, luxury apartment development in place of the existing motel and associated features onsite. Project implementation would result in a net increase of 224-dwelling units, with a corresponding 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 58.24 students. As the project is anticipated to generate an 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. Thus, less than significant impacts to school facilities would occur.

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 (City of Costa Mesa 2015)¹⁹. The project Applicant would be subject to payment of this development fee pursuant to Standard Condition SC 4.14-10, which would fully mitigate any potential impact to NMUSD school facilities. Therefore, project implementation would result in a less than significant impact in this regard.

¹⁹ Development Fees Information. Updated June 2015. City of Costa Mesa. Website: <http://www.costamesaca.gov/modules/showdocument.aspx?documentid=218>. Accessed: August 2015.

Standard Condition

SC 4.14-10 Prior to issuance of building permits, the Developer shall pay applicable school impact fees for residential development.

d) Parks?

Less than significant impact. There are approximately 1,707 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. The project involves construction of a 224-unit, attached residential development in place of general commercial uses that exist on the property. While the project does not contain any formal parkland, the proposed luxury apartment complex would provide substantial amenities that could offset the future resident's reliance on City recreation facilities. A complete list of amenities is included in Table 2, and some are listed below:

- Swimming pools and spa
- 2-story fitness center gym/recreation room with cardio equipment and weights
- Barbeque areas and a fire pit
- Sun decks/ courtyards
- Dog walking areas
- Exercise circuit and exercise deck
- Grass court with badminton and multi-purpose court

Project implementation would result in a net increase of 224 dwelling units, with a resultant population increase of approximately 587 persons. Based on a parkland demand factor of 4.26 acres per 1,000 residents, project implementation would generate a demand for approximately 2.5 acres of parkland.

However, the City of Costa Mesa does not currently have an approved parkland fee schedule for multi-family rental properties without a residential subdivision. The current park fees were adopted in May 2005. These current park fees only apply to residential projects with a residential subdivision map and do not apply to apartments without a subdivision map. The recently adopted 2015 park fees shall not be in effect until November 30, 2015.

The current park fee schedule is based on residential subdivisions only. Therefore, under the current fee methodology, less than significant parkland impacts are identified for the proposed apartment project due to the provision of on-site amenities that may offset parkland impacts.

According to the Quimby Act of 1975, the municipal responsibility to set aside parkland and open space for its residents is additionally burdened by future development, and therefore, Cities have been authorized since the passage of the 1975 Quimby Act to pass ordinances that require

developers to set aside land, donate conservation easements, or pay fees for park acquisition or improvements. The City Council approved the park fees for new residential subdivisions at \$13,572 for single family homes per unit and \$13,829 for multi-family homes per unit.

Because the environmental analysis relies on the methodology of the current park fee program in place, less than significant parkland impacts are identified for apartment projects. If the project is approved by City Council prior to November 30, 2015, it shall not be subject to the new park fee for apartments. At this time, under the existing fee program, less than significant parkland impacts are identified for the proposed apartment project. Furthermore, the project would provide approximately 81,334 sq ft of open space/landscaping. The provision of onsite open space would further minimize potential impact to recreational facilities. Thus, parkland development fees would not apply to the project, and impacts are less than significant.

It should be noted that the City has recently adopted new parkland impact fees of \$5,000 per unit for new apartment projects. The proposed project will be subject to the new park fee if the entitlement is approved on or after the effective date of November 30, 2015. If park impact fees are applicable to the project, a total of \$1,120,000 shall be collected pursuant to the Costa Mesa Municipal Code requirement.

e) Other public facilities?

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 Technology Library located less than a mile southwest, at 2263 Fairview Avenue, Costa Mesa.

The project does not propose new or physically altered library facilities. Project implementation would result in a net increase of 224-dwelling units, with a resultant population increase of approximately 587 persons. Given the project's nominal growth in population (less than one tenth of one percent over existing conditions), construction of new or physically altered library facilities would not be required.

The project site is located within the boundaries of the Orange County Public Library, Costa Mesa Branch. The branch maintains generation rates of 0.3 sq ft of facility space and 2.44 volumes per capita. Based on a project population of 240, this equates to 72 sq ft of facility space and 585.6 volumes. According to the Orange County Public Library, within the City of Costa Mesa there is a current facility space deficit of 6,294 sq ft.

The Costa Mesa General Plan anticipates growth in the City from 113,134 residents to 128,483 residents by the Year 2025, an increase of over 15,000 residents. As discussed, the project would generate approximately 587 new residents and would contribute less than one percent of the anticipated growth.

The 2000 General Plan EIR identified the current standard set by the Orange County Public Library system for 0.2 sq ft per capita of library space. While the library facilities in the City currently do not meet this standard under the existing condition, the City is seeking to build a new two-story Donald Dungan 20,000 sq ft library at Lions Park, and replace the existing 8,000 square foot library with a new Neighborhood Community Center. The library proposal is to include 95,000 volumes.

Furthermore, the 2000 General Plan EIR analyzed impacts assuming the future establishment of only 1,500 square feet of library space and determined that impacts to library services would be less than significant. For these reasons, project impacts on library services are considered less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.15 Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

- 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?**

Less than significant impact. Project implementation would not increase the use of existing recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Any increased demands for recreational facilities would be mitigated through compliance with CMMC requirements and the provision of onsite landscaping; refer to Response 4.14.a.

The project does not propose new or physically altered park facilities. However, the project would provide substantial onsite amenities, such as a pool, spa, and indoor gym. Refer to Table 2 for detailed description of onsite amenities.

The project involves construction of a 224-unit apartment complex. Project implementation would result in a net increase of 224 dwelling units, with a resultant population increase of approximately 587 persons. Based on a parkland demand factor of 4.26 acres per 1,000 residents, project implementation would generate a demand for approximately 2.5 acres of parkland. According to the City of Costa Mesa Parkland Impact Fee Schedule, there are currently no established fees for multi-family residential (rental) projects. Thus, parkland fees do not apply to the project.

Additionally, the project would provide approximately 82,574 SF of open space, landscaping, and interior communal areas. The provision of onsite open space would further minimize potential impacts to recreational facilities. Impacts would be less than significant.

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?

Less than significant impact. The project would include a private multi-use space that would serve residents. Project amenities include a swimming pool, a fitness center, barbeque area, multi-purpose grass court, exercise circuit, and exercise deck. The project does not include or require construction or expansion of recreational facilities; refer to Response 4.14.a. Impacts would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.16 Transportation/Traffic				
<i>Would the project:</i>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section is based on the Traffic Impact Analysis Report prepared by Linscott Law and Greenspan (LL&G, 2015), which is included as Appendix G, Transportation and Traffic Data. The Traffic Impact Analysis Report evaluates the trip generation for the project and determines the effect of the project trips on the level of service (LOS) for two study area intersections.

Existing Conditions

The project site is currently developed as a 236-room motel totaling approximately 180,795 square feet, and includes an associated parking lot. Please note that during the existing counts, the motel

only had 159 rooms occupied. Existing AM peak hour and PM peak hour traffic data were collected at the two (2) key study intersections located in the City of Costa Mesa were obtained from the manual turning movement counts conducted by National Data and Surveying Services in March 2015. Therefore, the existing counts have been adjusted to account for a fully operational motel with 236 rooms. Existing traffic counts are included in the traffic report.

Environmental Evaluation

Would the project:

- a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Less than significant impact. Table 16, Land Use and Trip Generation Summary, summarizes the trip generation for the existing site and the project. The trip generation potential of the project was estimated using the average rates for ITE Land Use 220: Apartments published in the Trip Generation, 9th Edition, Institute of Transportation Engineers. For the existing motel, daily counts were conducted in March 2015 at the existing driveways to derive daily, AM, and PM peak hour trip rates.

Table 16, below, depicts the trip generation rates used to forecast existing and proposed trips, summarizes the project’s daily, AM peak hour, and PM peak hour trip generation potential, and compares these estimates to the existing trip generation “budget” assuming full occupancy of the site.

The project would generate up to 1,490 daily trips, including up to 114 trips produced in the AM peak hour and up to 139 trips in the PM peak hour. The existing motel, assuming full occupancy, is forecast to generate approximately 1,258 daily trips, including 66 trips in the AM peak hour and 118 trips in the PM peak hour. Overall, the project would generate up to 232 additional daily trips, including an additional 48 AM peak hour trips and an additional 21 PM peak hour trips, than currently occur under existing conditions.

Table 16: Land Use and Trip Generation Summary

Generation Rates Category	Daily 2-Way	AM Peak Hour	PM Peak Hour
		Total	Total
ITE 220: Apartment (TE/DU)	6.65	0.51	0.62
Empirical Rate: Motel (TE/Room) ¹	5.33	0.28	0.50
Project			
Apartments (224 DU)	1,490	114	139
Existing Use			
Existing Fully Occupied Motel (236 Rooms) ²	1,258	66	118

Table 16 (cont.): Land Use and Trip Generation Summary

Generation Rates Category	Daily 2-Way	AM Peak Hour	PM Peak Hour
		Total	Total
Total “Net” Project Trip Generation: Project Minus Existing Use	232	48	21

Notes:
TE/DU= trip end per dwelling unit, TE/Room= trip end per room
Source: LL&G 2015.
¹ Trip rates for the existing motel are based on driveway counts conducted at the existing site on Thursday, March 5, 2015. Please note that during the counts the existing motel had an occupancy of 159 rooms.
² Trip ends for the existing motel were calculated using the empirically derived rate applied to the full occupancy (236 rooms).

Based on the City of Costa Mesa, level of service (LOS) D is the minimum acceptable level of service that should be maintained during the weekday AM peak hour and weekday PM peak hour. Under these criteria, a project is considered to have a significant impact if the following conditions at signalized intersection are met:

The intersection capacity utilization (ICU) value under with project conditions is 0.91 or greater (LOS E or F), and the ICU increase attributable to the project is 0.01 or greater.

Volume/capacity calculations were performed at two (2) key intersections for existing plus project and near-term (Year 2018) traffic conditions. Existing AM peak hour and PM peak hour traffic volumes for the two (2) key study intersections located in the City of Costa Mesa were obtained from manual turning movement counts conducted by National Data and Surveying Services in March 2015.

Existing Plus Project Traffic Conditions

As shown in Table 17, below, project-related traffic will not significantly impact either of the 2 key study intersections. These two key study intersections would continue to operate at an acceptable LOS during the AM and PM peak hours with project implementation.

Table 17: Existing Plus Project Peak Hour Intersection Capacity Analysis

Key Intersection	Time Period	Existing Traffic Conditions		Existing Plus Project Traffic Conditions		Significant Impact	
		ICU/ HCM (s/v)	LOS	ICU/ HCM (s/v)	LOS	Increase (s/v)	Yes/No
1. Harbor Boulevard at Harbor Center	AM	0.338	A	0.346	A	0.008	No
	PM	0.536	A	0.537	A	0.001	No
2. Harbor Boulevard at Wilson Street	AM	0.469	A	0.485	A	0.016	No
	PM	0.621	B	0.629	B	0.008	No

Notes:
The existing volumes have been adjusted to account for the fully operational Costa Mesa Motor Inn motel. With project conditions assumes implementation of a northbound U-turn lane.
Bold ICU/LOS or HCM/LOS values indicate adverse service levels based on the City’s LOS standards.
s/v = seconds per vehicle
Source: LL&G 2015.

Year 2018 Cumulative Plus Project Traffic Conditions

As shown in Table 18, below, project-related traffic will not significantly impact any of the 2 key study intersections. Both of the key study intersections would operate at an acceptable LOS during the AM and PM peak hours in the Year 2018, with project implementation.

Table 18: Year 2018 Cumulative Peak Hour Intersection Capacity Analysis

Key Intersection	Existing Traffic Conditions				Year 2016 Cumulative Traffic Conditions				Year 2016 Cumulative Plus Project Traffic Conditions				Significant Impact		
	AM		PM		AM		PM		AM		PM		Increase (s/v) AM	Increase (s/v) PM	Yes/No
	ICU/ HCM (s/v)	LOS	ICU/ HCM (s/v)	LOS	ICU/ HCM (s/v)	LOS	ICU/ HCM (s/v)	LOS	ICU/ HCM (s/v)	LOS	ICU/ HCM (s/v)	LOS			
1. Harbor Boulevard at Harbor Center	0.338	A	0.536	A	0.371	A	0.569	A	0.379	A	0.569	A	0.008	0.000	No
2. Harbor Boulevard at Wilson Street	0.469	A	0.621	B	0.492	A	0.657	B	0.521	A	0.664	B	0.029	0.007	No

Notes:
 The existing volumes have been adjusted to account for the fully operational Costa Mesa Motor Inn motel.
 With project conditions assumes implementation of a northbound U-turn lane.
 Bold ICU/LOS or HCM/LOS values indicate adverse service levels based on the City's LOS standards.
 s/v = seconds per vehicle
 Source: LL&G 2015.

The project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The project would result in less than significant impacts on traffic/circulation and the surrounding roadway network. The project would be subject to compliance with Standard Condition SC 4.16-1 and SC 4.16-2, which requires payment of traffic impact fees and approval of a Construction Access and Circulation Plan. No mitigation is required. Please 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).
- SC 4.16-2** Prior to the start of construction, a Construction Access and Circulation Plan shall be prepared and approved by the City Traffic Engineer to ensure that construction traffic will not impact Harbor Boulevard and other public roadways in the site vicinity.
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

Less than significant impact. The 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 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 discussed above, under Response 4.16.a, the project would generate up to 232 additional daily trips, including an additional 48 AM peak hour trips and an additional 21 PM peak hour trips, than currently occur under existing conditions. The project would generate a total of 1,258 daily trips, and thus would not meet the criteria for a CMP TIA. Project-related impacts on applicable CMPs and other established standards are considered less than significant.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

No impact. The project involves an 224-unit residential development. Due to the nature and scope of the proposed developed, project implementation would not result in a change in air traffic patterns.

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

Less than significant impact. Access to the project site will be provided via a right-turn in/ right-turn out driveway on the north (Project Driveway A), and a right-turn in/ right-turn out only driveway on the south (Project Driveway B). Based on conversations with City staff, due to the location of Project Driveway A, left-turn ingress at the midblock of Harbor Boulevard, between Wilson Street and Harbor Center, will be restricted.

To facilitate ingress to the site, median modifications are proposed as project design features.

The first will include median modifications midblock to restrict northbound left-turn/U-turn movements from Harbor Boulevard. The second will include median modifications at Harbor Boulevard and Harbor Center to provide a U-turn only lane in the northbound direction along with signal modifications to provide proper signal phasing.

These recommended improvements for the project will be subject to the review and final approval of the City of Costa Mesa Transportation Services Division. Based on the two proposed project access design features, an adjustment to background traffic patterns is expected, and has been accounted for under future traffic conditions with development of the project. The two access design features will be constructed as part of the project and are intended to prevent project-significant traffic impacts.

The future 224-unit apartment complex would be reviewed under the City's discretionary review process, upon their request for various project entitlements and their application for a Certificate of Occupancy. The City's review would verify compliance with applicable development standards pertaining to land use compatibility. Thus, upon review of the project site plan, the City would ensure that the project would not substantially increase hazards due to incompatible uses. Impacts are less than significant.

e) Result in inadequate emergency access?

Less than significant impact. Refer to Responses 4.8.g. and 4.16.a.

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?

Less than significant impact. The project site is served by the Orange County Transportation Authority (OCTA), a multi-modal transportation agency serving Orange County. OCTA provides countywide bus and paratransit service and Metrolink rail service, among other services. Several OCTA bus stops and bus routes are located within walking distance of the project site.

The nearest bus line to the project site is located along Harbor Boulevard, just 141 feet east of the project site. In addition, four existing OCTA bus routes are within walking distance of the project site, including Route 43, Route 47, Route 55, and Route 173. Table 19 shows four bus stops that are located within the project vicinity as well as access to a variety of bus routes.

Table 19: Bus Stops within the Project Vicinity

Bus Stop	Distance From Project Site	Bus Access
Harbor-Wilson	141 feet east	Routes 43, 47, and 55
Wilson-Harbor	0.1 mile south	Routes 47 and 55
Harbor-Ent 2300 Harbor Center	0.2 mile north	Route 43
Victoria-Harbor	0.4 mile south	Routes 47 and 173

The City of Costa Mesa includes four types of bicycle facilities. Bike trails are classified as a Class 1 facility. These bikeways are paved routes, typically eight feet in width, and reserved exclusively for bicycle use as they are physically separated from vehicular roadways. Bike lanes are classified as a Class 2 facility. These bikeways typically consist of a painted stripe reserving at least five feet nearest the curb for bicycle use on an existing street or roadway in addition to lanes used by motorized vehicles. Bike routes are classified as a Class 3 facility and are primarily useful to bridge short distances between other more established bike lanes or trails. These routes are typically designated with signs and only used on low volume, residential streets. Regional Trail facilities primarily serve as a transportation route for bicycle commuters. The project site has access to bicycle facilities within the immediate area, which includes a variety of bikeway classifications as seen in Table 20.

Table 20: Bikeways within the Project Vicinity

Bike Location	Distance From Project Site	Type
West Wilson Street	0.2 mile south	Bike Lane (Class 2)
Harbor Boulevard	0.8 mile west	Bike Trail (Class 1)
Golf Course Drive	1.5 miles northwest	Bike Route (Class 3)
Banning Channel Bikeway	2.5 miles southwest	Regional Trail
Source: Costa Mesa General Plan,		

In addition, sidewalks are located along Harbor Boulevard and West Wilson Street, as well as the majority of other streets in the area. The project would not alter the conditions of, or access to these existing transportation facilities. Impacts would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.17 Utilities and Service Systems				
<i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

- a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

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 project would result in an increase in wastewater generation, and related treatment demand. However, the current capacity of local sewers is unknown and additional study is required, pursuant to District requirements²⁰.

In order to determine the available sewer capacity for the proposed project, a sewer flow study of the 18" sewer line in Harbor Boulevard is required. Flow studies typically consist of checking the master planned flows versus existing capacity along with installing flow meters in the pipe to check the level of existing flows. Once the flow study is completed, the District will determine if additional sewer capacity is necessary for the proposed project. In the event where additional capacity of the 18" sewer is required, the Applicant shall pay a proportional fair share cost as determined by the Costa Mesa Sanitary District.

The project is also subject to comply with an on-site sewer cleaning requirements. Regular cleaning is a requirement under the State of California, State Water Resources Control Board Order No. 2006-0003, and Statewide General Waste Discharge Requirements (WDR) for Wastewater Collection Agencies, adopted on May 2, 2006.

Therefore, the project would comply with all requirements of the District, and ultimately project implementation would not cause an exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Standard Conditions

- SC 4.17-1** Applicant will be required to construct sewers to serve the project, at his/her 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** Applicant will be required to coordinate with the Costa Mesa Sanitary District to comply with all recommended studies and improvements, prior to issuance of a building permit.

²⁰ FCS contacted the Cost Mesa Sanitary District regarding the proposed project, and received a response containing aforementioned sewer capacity information, dated May 25, 2015.

- b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Less than significant impact.

Water

The project site is located within the Mesa Consolidated Water District (Mesa Water) service area and specifically within their Division Area 4. Mesa Water provides water service to more than 108,000 residents in an 18-square-mile area including the City of Costa Mesa, parts of Newport Beach, and parts of unincorporated Orange County. The project site would be served by existing public utilities (pipes) located within Harbor Boulevard.

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 seven active wells within the Orange County Basin and imported water from Metropolitan Water District of Southern California (MWDSC) through Municipal Water District of Orange County.

The project involves demolition of the existing 236-suite motel in order to develop a four story, 224-unit luxury apartment complex. Project implementation would result in a net increase of 224 dwelling units located on 4.15 acres and result in a population increase of approximately 587 persons. As discussed, the existing motel on the project site reflects an existing water use of approximately 42,244 gallons per day²¹. The project would replace the motel use with 224 residential units (587 people) and require a water demand of approximately 105,073 gallons per day²². Thus, the existing water use represents approximately 40% of the projected water demand, and the project would require the use of an additional 62,829 gallons per day.

The Mesa Water District has the capacity to treat 64.8 million gallons per day (mgd) of water. Project implementation would generate a demand for approximately 105,014 gallons of water per day²³, and would therefore increase the demand for water supplies and treatment facilities. However, the Mesa Water District facility has sufficient capacity available to accommodate the project. 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. Additionally, the Applicant will be required to submit a Will-Serve Letter to the Mesa Water District to confirm their ability to accommodate the additional water demand associated with the proposed project.

²¹ Hotel provides one and two person rooms. Calculation estimates assume full occupancy of 236-unit motel, with one person per room (to be conservative). (179 X 236= 42,244)

²² (179 X 587=105,073) Mesa Consolidated Water District. 2010 Urban Water Management Plan (page 2-10).

²³ Based on water use factors of 178.9 gallons per capita per day for residential uses and 0.22 gallons per day per square foot of commercial uses.

Additionally, the project would utilize water efficient toilets, fixtures, and irrigation as well as drought tolerant landscaping; thereby reducing the overall project water demand.

Water Treatment

According to the UWMP, Mesa Water's main sources of water supply are groundwater pumped from seven active wells within the Orange County Basin and imported water from Metropolitan Water District of Southern California (MWD) through Municipal Water District of Orange County. Five of these wells pump "clear" groundwater directly into the distribution system, following disinfection with chloramines. The two wells that pump colored groundwater are treated first at the Mesa Water Reliability Facility (MWR) and then pumped into the distribution system. Prior to 2011, the colored water was treated at the Colored Water Treatment Facility (CWTF), which has since been replaced by the MWR. As of January 2013 when the MWR came on-line, Mesa Water has not needed to import water in order to meet demand.

Water Conveyance

As concluded above, the project would result in an increase in water demand. However, the Mesa Water District has the capacity in order to meet these demands. Therefore, the proposed project would result in a negligible impact on the existing water conveyance facilities. The applicant would be responsible for construction of all water conveyance facilities pursuant to current Uniform Codes, City Ordinances, Public Services standards, and Water Division criteria. Therefore, the project would not require the construction of new water conveyance facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. A less than significant impact would occur in this regard.

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 and currently provides sanitary sewer service to the property at 2277 Harbor Boulevard, Costa Mesa. The Sanitary District provides collection and transmission while the Orange County Sanitation District (OCS) provides treatment, recycling, and disposal.

Wastewater Generation

The Sanitary District's sewer master plan assumes the ultimate land use of the parcel is commercial, which allows a wastewater generation rate of 5,000 gallons per acre per day. When at full capacity, the existing motel located on the project site has the potential to generate 20,750 gallons of wastewater per day. The proposed 224 units would equate to a wastewater generation rate of approximately 10,000 gallons per acre per day. Therefore, the proposed project would generate a demand for approximately 41,500 gallons of wastewater per day.

Wastewater from 2277 Harbor Blvd flows to the north along the west side of Harbor Boulevard, into the District's sewer system, and all the way to Baker Street where it enters an OCS trunk sewer. The District's line in Harbor Blvd does not have the sewer capacity to handle flows above the master planned flows.

Even though the existing development at 2277 Harbor Blvd is a 236-unit motel and might appear to have similar flows to the proposed 224-unit apartment development, the motel was constructed when flows in the tributary area to the line in Harbor Blvd were extremely low. Additionally, current flows from the motel have continued to remain low due to partial occupancy. Regardless of its pre-existence, there is insufficient capacity for wastewater conveyance and treatment facilities on the project site for the proposed development.

To determine whether there is available sewer capacity for the proposed project, a sewer flow study of the 18" sewer line in Harbor Boulevard is required, as well as regular cleaning of sewer lines. Refer to 4.17.a, above for detailed information.

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 project would increase the demand for wastewater generation. The applicant would be responsible for construction of all wastewater conveyance facilities pursuant to current Uniform Codes, City Ordinances, and Public Services 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 project. 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 in this regard.

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 of the wastewater generated within their 572-square mile service area. These facilities also include two treatment/reclamation plants and 15 off site pump stations in order to serve more than 2.5 million residents within the 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 210 million gallons of wastewater daily (average). County Sanitation operates under an NPDES ocean discharge permit issued by the California Regional Water Quality Control Board. The project's increase in wastewater generation has a potentially significant impact, since the project is not consistent with the site's existing General Plan land use designation, and City General Plans form the basis for issuance of the NPDES wastewater discharge permits. Project implementation has the potential to cause the treatment plants' operating capacities to be exceeded. Therefore, the implementation of standard conditions and mitigation measures (refer to 4.17.a) would reduce the impact to a less than significant level.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than significant impact. The project would include the development of onsite drainage facilities and would not include the construction of offsite drainage facilities. Refer to Response 4.9.d.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than significant impact.

Senate Bill 610

SB 610 requires a detailed report regarding water availability and planning for additional water supplies to 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. 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 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 does not meet any of the above thresholds; therefore, no further evaluation is required pursuant to SB 610.

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 condition every tentative map for an applicable subdivision on the applicant by 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 in this regard. FCS contacted the Mesa Water District directly to gain an understanding of their current capacity, demand, and facilities. FCS received a response on May 21, 2015. The District tentatively confirmed service, contingent upon the results of the required District Plan Check and consultation with the District. The applicant will also be required to provide a will-serve letter from the District.

As discussed, the project represents an increase in water demand, compared to the existing motel use. However, the project would utilize water efficient fixtures, toilets, and irrigation as well as drought tolerant landscaping thereby reducing impacts.

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

Less than significant impact. Refer to Response 4.17.b.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

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 was generated by the City of Costa Mesa in 2012.

Project implementation would result in the development of 224 apartment units with a resultant population increase of approximately 587 persons. Demolition and construction activities associated with the project 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 project would generate approximately 896 tons of solid waste per year. The proposed waste generation would be similar in volume to the waste generated by the existing 236-suite motel. In addition, implementation of the proposed project would generate 0.81 percent of the total waste generated in the City of Costa Mesa.

The City would continue to comply with the existing regulatory framework for reducing solid waste disposal volumes. The landfill serving the project site would have the necessary capacity to accommodate the project's waste disposal needs as this project would generate a nominal increase in total waste. Additionally, the project would be subject to compliance with Standard Condition SC 4.17-5, which addresses District consultation. A less than significant impact would occur in this regard.

Standard Conditions

SC 4.17-5 Applicant will be required to coordinate with the Costa Mesa Sanitary District to comply with all recommended studies and improvements, prior to issuance of a building permit.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

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.

The Applicant is currently working with Waste Management, Inc. to establish service for the project and will be required to integrate City requirements into the project design (e.g. established locations for trash carts and bulky pickup, sufficient clearance and appropriate routing for trucks).

Participation in the City’s recycling programs during project construction and operation including CalRecycle’s requirements, would ensure that the project would not conflict with federal, state, and local statutes and regulations related to solid waste. Furthermore, the project would meet or exceed standards set forth in CALGreen as well as Title 24. A less than significant impact would occur in this regard. Refer also to Response 4.17.f.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.18 Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

- 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?**

Less than significant impact. As concluded in Section 4.4, Biological Resources, the project proposes a residential development. The project site and its surroundings are fully developed, and there are no biological resources present in the area. Therefore, the project does 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. Given the highly disturbed condition of the site, the potential for project implementation to impact a yet unidentified archeological resource is considered remote. Therefore, project implementation would not eliminate important examples of the major periods of California 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)?**

Less than significant impact with mitigation incorporated. The project would result in several potentially significant project-level impacts in the following areas: Air Quality, Hazards and Hazardous Materials, and Noise. However, mitigation measures have been identified that would reduce each of these impacts to less than significant. Standard conditions will also be imposed upon the project, including the payment of fair-share development impact fees, design standards, etc. Other new development projects within the City would also be subject to these requirements.

All other impacts of the project were determined either to have no impact, or to be less than significant without the need for mitigation. Cumulatively, the project would not result in any significant impacts that would substantially combine with impacts of other current or probable future impacts. Therefore, the project, in conjunction with other future development projects, would not result in any cumulatively considerable impacts.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than significant impact with mitigation incorporated. Previous sections of this Initial Study/Mitigated Negative Declaration reviewed the project’s potential impacts related to air quality, geology/soils, hazards/hazardous materials, and noise, among other environmental issue areas. As concluded in these previous discussions, the project would result in less than significant environmental impacts with implementation of the standard conditions and recommended mitigation measures. Therefore, with implementation of the specified mitigation, the project would cause less than significant adverse effects on human beings.

Standard Conditions

Refer to Sections 4.1 through 4.17 above.

Mitigation Measures

Refer to Sections 4.1 through 4.17 above.

SECTION 5: INVENTORY OF STANDARD CONDITIONS AND MITIGATION MEASURES

5.1 - Standard Conditions

5.1.1 - 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.

5.1.2 - Air Quality

SC-4.3-1 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 tires 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.

SC-4.3-2 SCAQMD Rule 445 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 a 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-4.3-3 The project shall comply with Title 24 of the California Code of Regulations established by the energy conservation standards. The project Applicant shall incorporate the following in building plans:

- Double paned glass or window treatment for energy conservation shall be used in all exterior windows;
- Buildings shall be oriented north/south where feasible.

SC 4.3-4 The Applicant shall contact the Air Quality Management District (AQMD) at (800) 288-7664 for potential additional conditions of development or for additional permits required by the AQMD.

SC 4.3-5 Trash facilities shall be screened from view, and designed and located appropriately to minimize potential noise and odor impacts to residential areas.

5.1.3 - Biological Resources

SC 4.4-1 The Applicant shall comply with the requirements of the California Department of Food and Agriculture (CDFA) to determine if red imported fire ants exist on the property prior to any soil movement or excavation. Call CDFA at (714) 708-1910 for information.

5.1.4 - 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.

5.1.5 - Geology and Soils

- SC 4.6-1** The Applicant shall comply with the requirements of the 2013 California Building Code, 2013 California Residential Code, 2013 California Electrical Code, 2013 California Mechanical Code, 2013 California Plumbing Code 2013 California Green Building Standards Code, and the 2013 California Energy Code (or the applicable adopted California Building Code, California Residential Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Green Building Standards, California Energy Code at the time of plan submittal or permit issuance), and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa. Areas of alteration and additions shall comply with 2013 California Green Building Standards Code section 5.303.2 and 5.303.2
- 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 with a 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 Applicant shall submit a Soils Report for this project. Soils Report recommendations shall be blueprinted on both the architectural and grading plans. For existing slopes or when new slopes are proposed, the Soils Report shall address

how existing slopes or the new slopes will be maintained to avoid erosion or future failure.

SC 4.6-4 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.

5.1.6 - Hazards and Hazardous Materials

SC 4.8-1 Prior to demolition activities, removal and/or abatement of asbestos containing building materials, 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. An asbestos and 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

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 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 4.8-3 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.

SC 4.8-4 Prior to investigations, demolition, or renovation, all activities shall be coordinated with Dig Alert (811).

SC 4.8-5 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;

Implement required corrective actions, including remediation if applicable.

5.1.7 - Hydrology and Water Quality

Refer to Standard Condition 4.6-4 above.

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 Services 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 the issuance of any Grading Permit, the Applicant shall:

- Prepared a detailed Hydrology Study, approved by the City Engineer.
- Design all storm drain facilities, approved by the City Engineer, for 25-year storm event protection.

- Design all storm drains in the public right-of-way to be a minimum of 24 inches by City of Costa Mesa requirements and in accordance with the Orange County Local Drainage Manual including a minimum spacing between manholes of 300 feet.

SC 4.9-3 Prior to approval of Plans, the project shall fulfill the City of Costa Mesa Drainage Ordinance No. 06-19 requirements.

SC 4.9-4 The project Applicant shall submit grading plans, an erosion control plan, and a hydrology study.

5.1.8 - Noise

SC 4.12 -1 Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited to between the hours of 7:00 am and 7:00 pm on Mondays through Fridays; to between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays; and shall not be permitted at any time on Sundays or federal holidays.

5.1.9 - Population and Housing

SC 4.13-1 The applicant will hire a relocation consultant to offer relocation services to existing occupants. Existing occupants shall receive a written notice (printed in both English and Spanish, as well as any other language spoken by a majority of the occupants) of the availability of this service, which shall be delivered to each occupied unit and posted in conspicuous locations throughout the property. The notice shall contain the name and contact information for the relocation consultant, and shall provide the date(s) of at least (1) on-site visit, during which the relocation consultant will be available on-site for a specified timeframe to assist with walk-in inquiries.

Occupants will be provided at least 60 days' written notice to vacate the property. This notice shall be delivered to each occupied unit and posted in conspicuous locations throughout the property. The notice shall be printed in both English and Spanish, as well as any other language spoken by a majority of the occupants.

5.1.10 - Public Services

SC 4.14-1 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.

SC 4.14-2 Projections, including eaves, shall be one-hour fire resistive construction, heavy timber or of noncombustible material if they project into the 5 ft setback area from the property line. They may project a maximum of 12 inches beyond the 3 ft setback. CRC Tables R302.1(1) and R302.1(2).

SC 4.14-3 The final master plan for development of the project shall provide sufficient capacity for fire flows required by the City of Costa Mesa Fire Department.

- SC 4.14-4** Vehicular access shall be provided and maintained serviceable throughout construction to all required fire hydrants.
- SC 4.14-5** The project shall provide approved smoke detectors to be installed in accordance with the 2007 Edition of the Uniform Fire Code.
- SC 4.14-6** 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 4.14-7** The project shall provide a fire alarm system.
- SC 4.14-8** The project shall provide individual numeric signage for proposed residences with minimum 6 inches height.
- SC 4.14-9** 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 that 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 and rooftop building identification shall be readily apparent from police helicopters for emergency response agencies.
 - Landscaping requirements.
 - Emergency vehicle parking areas shall be designated within proximity to buildings.
 - Prior to the issuance of a Building Permit, the City of Costa Mesa Police Department shall review and approve the developer’s project design features to satisfy local requirements. The applicant shall then pay the appropriate fee in effect to mitigate the project’s proportionate impact to additional demands on police protection services, if any.
- SC 4.14-10** Prior to issuance of building permits, the Developer shall pay applicable school impact fees for residential development.

5.1.11 - 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 the start of construction, a Construction Access and Circulation Plan shall be prepared and approved by the City Traffic Engineer to ensure that construction

traffic will not impact Harbor Boulevard and other public roadways in the site vicinity.

5.1.12 - 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** Applicant will be required to coordinate with the Costa Mesa Sanitary District to comply with all recommended studies and improvements, prior to issuance of a building permit..

5.2 - Mitigation Measures

5.2.1 - Air Quality

- MM AQ-1** The following measures shall be applied to all projects during construction of the project:
- Use paints with a volatile organic compound (VOC) content 10 grams per Liter or lower for both interior and exterior surfaces, if painted.
 - Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
 - Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
 - For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean up water and take it to the hazardous waste center (www.cleanup.org).
 - Use compliant low VOC cleaning solvents to clean paint application equipment.
 - Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.
- MM AQ-2** The project shall demonstrate compliance with the following Construction Emissions Minimization Practices prior to the issuance of building, or grading permits:

1. The construction contractor shall ensure that all equipment is properly sized and tuned to manufacturers' specifications at the manufacturers' recommended frequency.
2. The construction contractor shall establish an idling limit of 5 minutes per hour for equipment.

5.2.2 - Hazards and Hazardous Materials

MM HAZ-1 Prior to grading and construction activities, the project applicant shall contact the oversight agency to confirm the regulatory status of the Chevron site to ensure that no new issues have arisen since the last check-in. The project applicant shall provide appropriate documentation to the City.

5.2.3 - Noise

MM NOI-1: Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.

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SECTION 6: CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in this Initial Study, we recommend that the City of Costa Mesa prepare a Mitigated Negative Declaration for the 2277 Harbor Boulevard Project. We find that the project could have a significant effect on a number of environmental issues, but that the specified mitigation measures would reduce such impacts to a less than significant level. We recommend that the second category, which specifies preparation of a Mitigated Negative Declaration, be selected for the City's determination; refer to Section 3.3, Lead Agency Determination.

Date: September 10, 2015

Signed:



Liz Westmoreland, Environmental Planner
FirstCarbon Solutions
Environmental Services

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