

SCREENCHECK DRAFT
Initial Study/Negative Declaration
2850 Mesa Verde Drive East Project
City of Costa Mesa, Orange County, California

Prepared for:

City of Costa Mesa

Development Services Department

77 Fair Drive

Costa Mesa, CA 92626

714.754.5000

Contact: Mel Lee, Senior Planner

Prepared by:

FirstCarbon Solutions

250 Commerce, Suite 250

Irvine, CA 92602

714.508.4100

Contacts: Frank Coyle, Project Director

Kim Burnell, Project Manager

Date: September 6, 2016

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Section 1: Introduction	1
1.1 - Statutory Authority and Requirements	1
1.2 - Purpose.....	1
1.3 - Incorporation by Reference.....	2
Section 2: Project Description	5
2.1 - Project Location.....	5
2.2 - Environmental Setting	5
2.2.1 - General Plan and Zoning	5
2.3 - Project Features.....	6
2.4 - Project Approvals	6
Section 3: Initial Study Checklist.....	21
3.1 - Background.....	21
3.2 - Environmental Factors Potentially Affected	22
3.3 - Lead Agency Determination	22
Section 4: Environmental Analysis.....	23
4.1 Aesthetics	24
4.2 Agriculture and Forestry Resources	28
4.3 Air Quality.....	31
4.4 Biological Resources	40
4.5 Cultural Resources	43
4.6 Geology and Soils	46
4.7 Greenhouse Gas Emissions	52
4.8 Hazards and Hazardous Materials	56
4.9 Hydrology and Water Quality	62
4.10 Land Use and Planning	70
4.11 Mineral Resources	74
4.12 Noise.....	75
4.13 Population and Housing	79
4.14 Public Services	81
4.15 Recreation	86
4.16 Transportation/Traffic.....	88
4.17 Utilities and Service Systems	93
4.18 Mandatory Findings of Significance	100
Section 5: Inventory of Standard Conditions	103
5.1 - Standard Conditions	103
5.1.1 - Aesthetics	103
5.1.2 - Air Quality.....	103
5.1.3 - Biological Resources.....	104
5.1.4 - Cultural Resources.....	104
5.1.5 - Geology and Soils	105
5.1.6 - Hazards and Hazardous Materials.....	106
5.1.7 - Hydrology and Water Quality	107
5.1.8 - Noise.....	108
5.1.9 - Public Services	108
5.1.10 - Transportation/Traffic	109

5.1.11 - Utilities and Service Systems 109

Section 6: References 111

Section 7: Report Preparation Personnel 117

Appendix A: Phase I Environmental Site Assessment

Appendix B: Trip Generation Analysis Letter

List of Tables

Table 1: Residential Noise Standards 76

Table 2: Land Use and Trip Generation Summary 89

List of Exhibits

Exhibit 1: Regional Location Map 9

Exhibit 2: Local Vicinity Map, Aerial Base 11

Exhibit 3: Existing Site Layout 13

Exhibit 4: General Plan Land Use Map 15

Exhibit 5: Zoning Map 17

Exhibit 6: Conceptual Site Plan 19

SECTION 1: INTRODUCTION

The City of Costa Mesa has determined the proposed 2850 Mesa Verde Drive East Project (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 an 11-lot residential subdivision and the demolition of existing commercial office buildings at 2850 Mesa Verde Drive East in Costa Mesa, California. The proposed project involves the following discretionary requests:

- General Plan Amendment to change the land use designation from General Commercial to Low Density Residential.
- Rezone to change the zoning classification from C1 (Local Business District) to R1 (Single Family Residential).

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 City Council 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/Negative Declaration (IS/ND) 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 2015-2035 General Plan (Adopted June 2016). The Costa Mesa General Plan establishes the long-range planning and policy direction that guides change and preserves the qualities that define our community. The 2035 General Plan sets forth the Vision for Costa Mesa for the next two decades. This Vision recognizes that Costa Mesa's focus remains on protecting and enhancing Costa Mesa's diverse residential neighborhoods, accommodating an array of businesses that both serve local needs and attract regional and international spending, and continuing to provide cultural, educational, social, and recreational amenities that contribute to the quality of life in the community. Over the long term, General Plan implementation will ensure that development decisions and improvements to public and private infrastructure are consistent with the goals, objectives, and policies contained in this Plan.

City of Costa Mesa 2015-2035 General Plan Environmental Impact Report. The City of Costa Mesa 2015-2035 General Plan Environmental Impact Report analyzed the potential environmental impacts that would result from implementation of the City of Costa Mesa 2035 General Plan. General Plan EIR Table 6-1, SCAG 2008-2035 Growth Forecast, forecast population, household, and employment growth for Costa Mesa. The environmental impact analysis contained in the General Plan EIR

assumes and increase in population from 109,100 in 2008 to 114,000, a 4 percent change. Households will increase from 39,700 in 2008 to 40,900 in 2035, a 3 percent change. Furthermore, employment will decrease from 94,200 in 2008 to 88,800, a 6 percent change. The General Plan EIR concluded that impacts in the following areas would be significant and unavoidable (see General Plan EIR Section 6.5):

- Air Quality
- Greenhouse Gas Emissions

The General Plan and General Plan EIR were used in this IS/ND as a source of baseline data.

City of Costa Mesa 2013-2021 Housing Element. The State of California has declared that “the availability of housing is of vital statewide importance and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.” In addition, government and the private sector should make an effort to provide a diversity of housing opportunities and accommodate regional housing needs through a cooperative effort, while maintaining a responsibility toward economic, environmental and fiscal factors and community goals within the general plan.

Further, State Housing Element law requires “An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs.” The law requires:

- An analysis of population and employment trends.
- An analysis of the City’s fair share of the regional housing needs.
- An analysis of household characteristics.
- An inventory of suitable land for residential development.
- An analysis of governmental and non-governmental constraints on the improvement, maintenance and development of housing.
- An analysis of special housing needs.
- An analysis of opportunities for energy conservation.
- An analysis of publicly-assisted housing developments that may convert to non-assisted housing developments.

The purpose of these requirements is to develop an understanding of the existing and projected housing needs within the community and to set forth policies and programs that promote preservation, improvement and development of diverse types and costs of housing throughout Costa Mesa.

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.

SECTION 2: PROJECT DESCRIPTION

2.1 - Project Location

The project site is located in the northwestern portion of the City of Costa Mesa, in the County of Orange; refer to Exhibit 1. Specifically, the site is located east of Mesa Verde Drive East and north of Adams Avenue, at 2850 Mesa Verde Drive East; refer to Exhibit 2. The site is located approximately 3.7 miles northeast of the Pacific Ocean.

Regional access to the site is provided via the San Diego Freeway (Interstate 405 [I-405]) and Harbor Boulevard, which is located approximately 1.0 mile to the north. California State Route 55 (SR-55), which is located approximately 2.1 miles east of the site, and California SR-73, which is located approximately 2.0 miles east of the site, also provide regional access. Local access to the site is provided via Mesa Verde Drive East.

2.2 - Environmental Setting

The project site (Assessor's Parcel Number 139-313-09) consists of one parcel totaling approximately 2.05 acres.

The majority of the project site was vacant from at least 1938 to at least 1953. The project site is currently occupied by commercial office buildings totaling 24,267 square feet. The current structures were constructed at the site in 1963 (Building A) and 1985 (Building B). The existing commercial office buildings consist of single-story buildings and associated surface parking with approximately 90 spaces; refer to Exhibit 3. Tenants on the subject property have included various commercial tenants including medical and dental offices, real estate offices, insurance agencies, consulting firms, and a printing facility since 1963.

2.2.1 - General Plan and Zoning

General Plan

According to the City of Costa Mesa General Plan Land Use Map (Exhibit 4), the site is currently designated GC (General Commercial). The General Commercial designation is intended for a variety of commercial uses. Allowed floor area ratios are dependent on the level of traffic present within the project area.

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 5.

Existing Surrounding Land Uses

The immediately surrounding properties consist of residential development to the north and northeast across Andros Street; an area under construction with residences to the northwest; a

parking lot to the southeast; and commercial development to the southwest across Mesa Verde Drive East.

2.3 - Project Features

The project involves the demolition of the existing commercial office buildings, and the construction of 11 residential lots ranging in size from 6,150 square feet to 7,957 square feet, as shown on Exhibit 6. The proposed project involves the following:

- **General Plan Amendment** to change the land use designation from General Commercial to Low Density Residential.
- **Rezone** to change the zoning classification from C1 (Local Business District) to R1 (Single Family Residential).

Site Access

The project would utilize a full access driveway at Mesa Verde Drive East. Additionally, a fire department turnaround would be located at the terminus of the internal roadway.

Construction Activities and Grading

The project includes demolition and removal of the existing commercial office buildings located on the project site, which would include the demolition of approximately 24,267 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 on-site, with no need to import/export soils.

Utilities

The project would connect to the existing sewer lines. 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/Negative Declaration;
- City Council approval of a General Plan Amendment to change the land use designation from General Commercial to Low Density Residential

- City Council approval to Rezone the site (C1) to R1 (Single Family Residential);
- Demolition Permits for on-site structures and other improvements;
- Grading and Building Permits to grade and construct the project;
- Approval of a Construction Management Plan; and
- Design Review for the project

THIS PAGE INTENTIONALLY LEFT BLANK



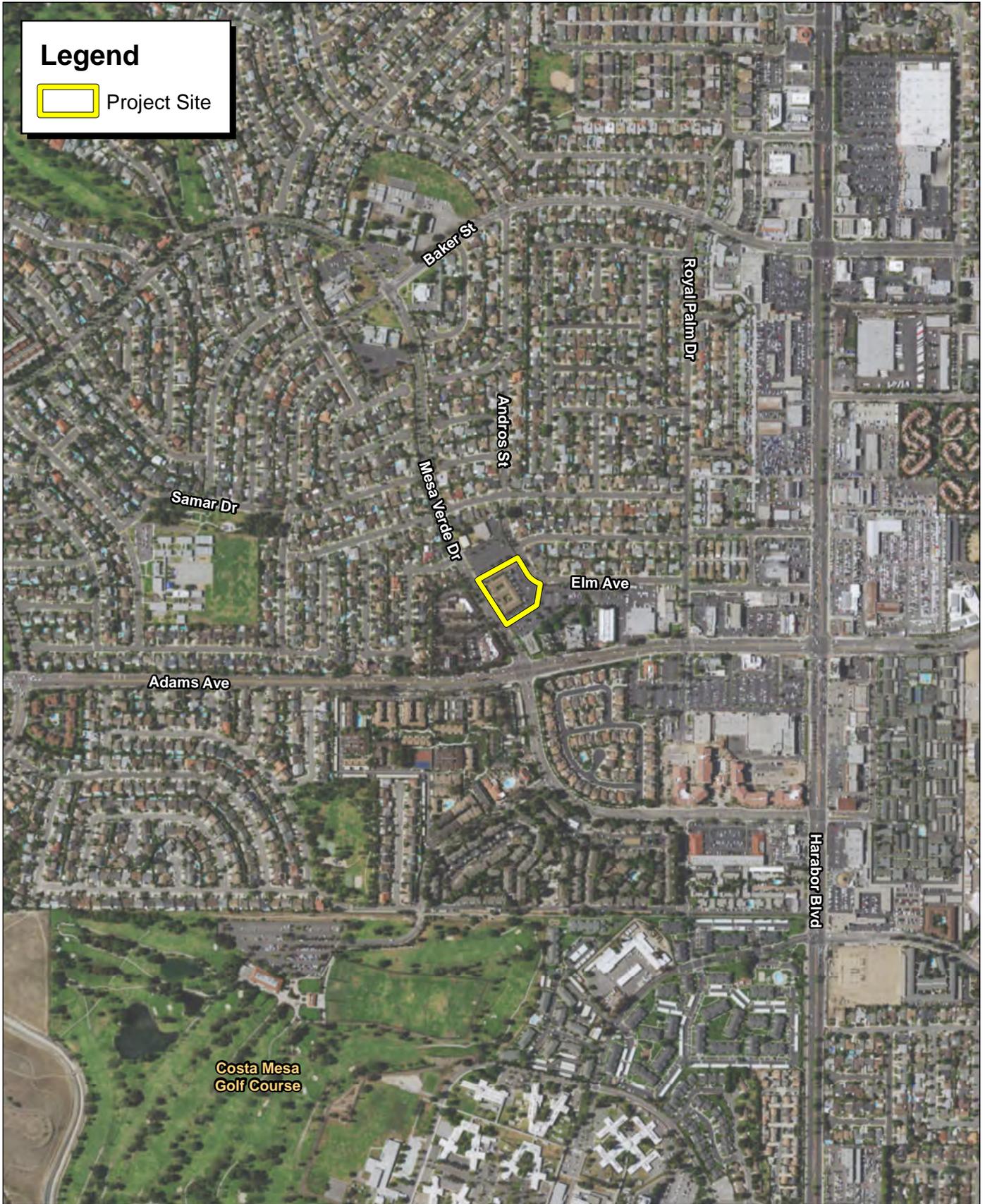
Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

FIRSTCARBON
SOLUTIONS™



Exhibit 1 Regional Location Map

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Imagery, 2015

Exhibit 2

Local Vicinity Map

Aerial Base



THIS PAGE INTENTIONALLY LEFT BLANK



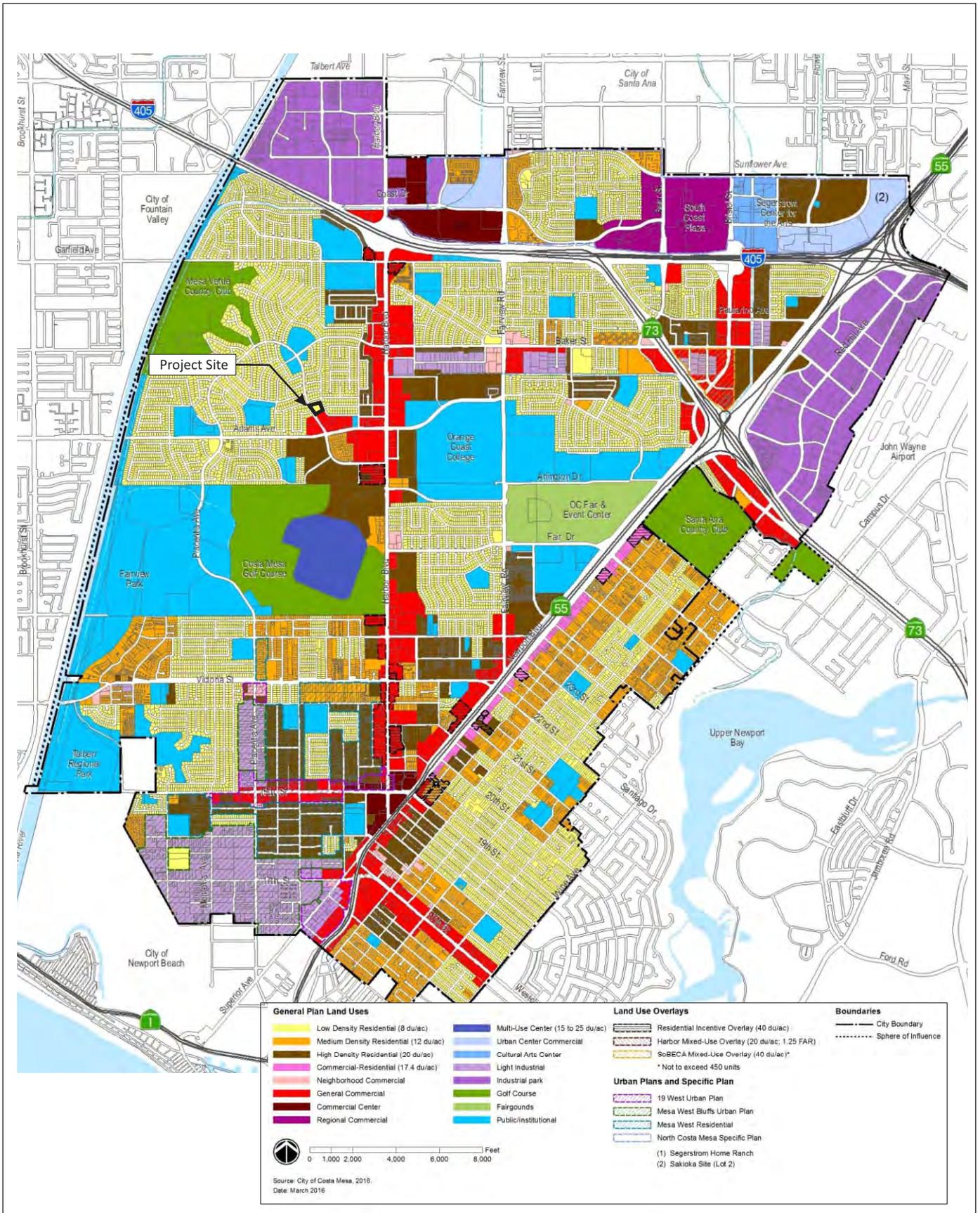
Source: ESRI Imagery, 2015

FIRSTCARBON
SOLUTIONS™



Exhibit 3 Existing Site Layout

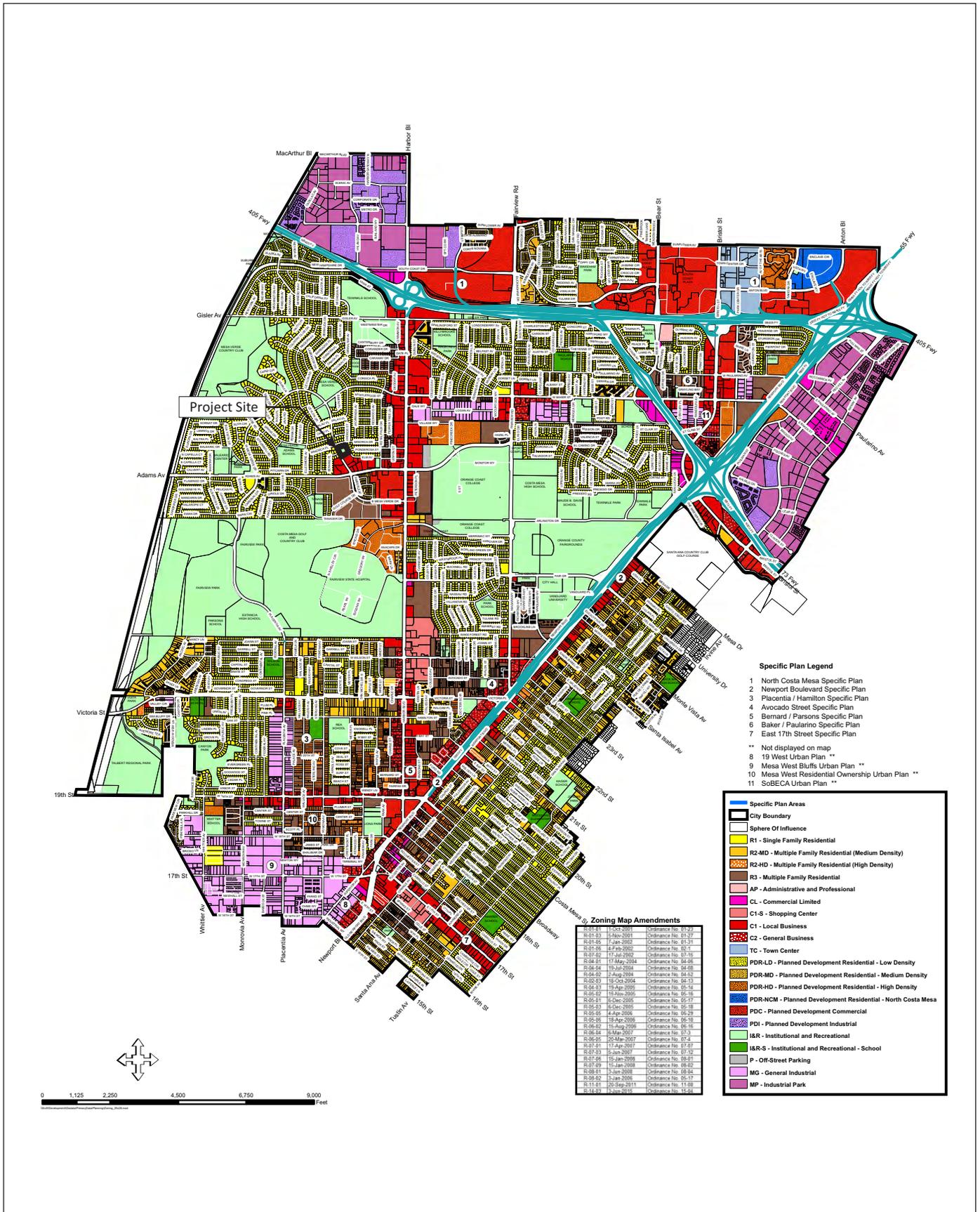
THIS PAGE INTENTIONALLY LEFT BLANK



Source: City of Costa Mesa, 2016



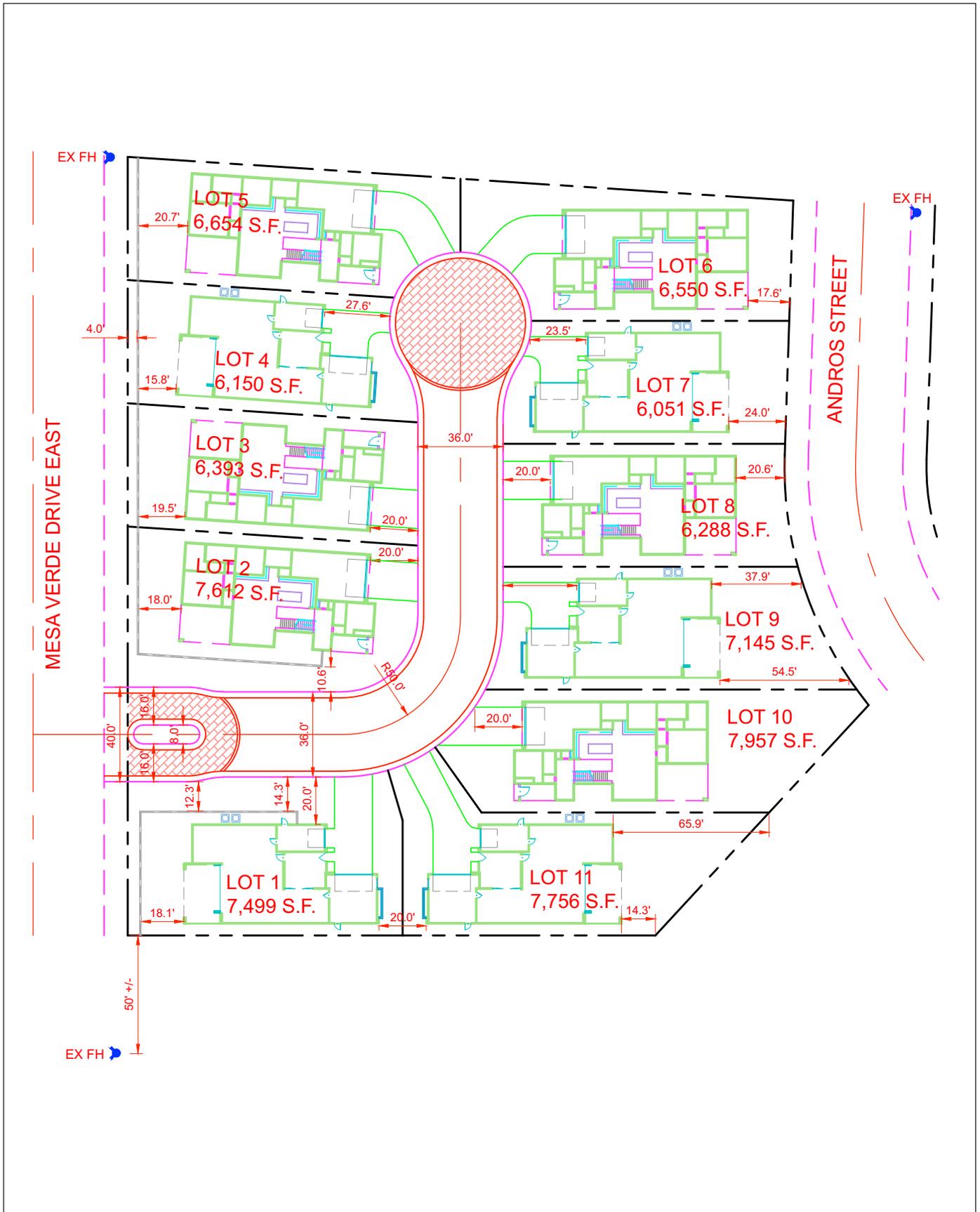
THIS PAGE INTENTIONALLY LEFT BLANK



Source: City of Costa Mesa, 2004



THIS PAGE INTENTIONALLY LEFT BLANK



Source: City of Costa Mesa, 2004



THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 3: INITIAL STUDY CHECKLIST

3.1 - Background

1. Project Title:
2850 Mesa Verde Drive East 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:
Mel Lee Senior Planner 714.754.5611 Email: MEL.LEE@costamesaca.gov
4. Project Location:
2850 Mesa Verde Drive East Costa Mesa Orange County, CA 92626
5. Project Sponsor's Name and Address:
Pinnacle Residential 2 Venture, Suite 200 Irvine, CA 92618
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 type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards/Hazardous Materials
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Services Systems
<input type="checkbox"/>		<input type="checkbox"/>	Air Quality
<input type="checkbox"/>		<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>		<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>		<input type="checkbox"/>	Noise
<input type="checkbox"/>		<input type="checkbox"/>	Recreation
<input type="checkbox"/>		<input 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

Signatory’s Name, Title

Date

SECTION 4: ENVIRONMENTAL ANALYSIS

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

The City of Costa Mesa planning area is almost completely urbanized. The City is approximately 1 mile from the Pacific Ocean and sits atop a plateau. Its proximity to the Pacific Ocean gives the City a distinctive visual background. The City is surrounded by the Pacific Ocean to the west, views of Upper Newport Bay to the east, and the San Gabriel Mountains and Santa Ana Mountains to the northeast. The City comprises primarily residential neighborhoods, with several commercial districts and light industrial districts scattered around the City. The City also has open space areas throughout which include the river-adjacent parks, city parks, and three golf courses.

Scenic vistas are generally defined as areas where natural landscapes from views of unique flora, geologic, or any other natural features that can be viewed without urban intrusions. The City's General Plan does not identify any scenic vistas/views in the City of Costa Mesa, although the views of the Santa Ana River and Mountains, and Pacific Ocean play a large role in the way the community defines itself. Scenic highways follow the same guidelines as scenic vistas. The City's General Plan identifies Highway 1, which runs parallel to the Pacific Ocean, but generally does not afford views toward Costa Mesa, is an eligible State Scenic Highway which has not yet been designated.

The Existing Visual Character of Costa Mesa is divided into three sub-areas, or districts, that carry their own visual pattern: Residential Districts, Commercial Districts, and the Industrial Districts. Each district has its own sub-areas as well. The project site is located in between the Mesa Verde Residential District and the Harbor Boulevard Commercial District. These districts consist of residential uses to the north, east, and west with commercial uses to the south. The existing character of the project site is made up of commercial uses such as offices, a property management agency, and a church. There is also an L-shaped parking lot located along the southern and eastern

borders of the project site. The existing lighting around the project site comes from street lamps along Mesa Verde Drive and Andros Street, as well as regular lighting from the commercial uses.

Would the project:

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

No impact. As described above, 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. There are no protected tree species on the property or within the surrounding area. No historic buildings or rock outcroppings are located at the project site. Therefore, no impacts would occur with respects to state scenic highways.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. As described above, the existing visual character of the project site comprises commercial uses with a parking lot. The project proposes to build an 11-unit detached residential community with approximately 50 parking spaces. The project would not degrade the quality of the site or its surroundings, but would instead enhance the area by evolving the site to be more compatible with the surrounding residential uses. The project would be similar in scale and character to the site's surroundings.

The Community Design Element of the City's General Plan identifies the following for Quality Residential (page CD-28):

- **Objective CD-7.1:** Encourage excellence in architectural design.
- **CD-7A:** Ensure that new and remodeled structures are designed in architectural styles which reflect the City's eclectic quality, yet are compatible in scale and character with existing buildings and the natural surroundings within residential neighborhoods. Continue to update and maintain the Costa Mesa residential Guidelines.
- **CD-7B:** Preserve the character and scale of Costa Mesa's established residential neighborhoods where possible; when new residential development is proposed, require that new structures are consistent with the prevailing character of existing development in the immediate vicinity, and that new development does not have a substantial adverse impact on adjacent areas.

The project would be consistent with the above-mentioned architectural design by including traditional architecture with varied building materials, textures, and high-quality landscaping. In addition, the project would be consistent with the City's design guidelines and residential

development standards. The project would require the review and approval of a Design Review to ensure conformance with the Zoning Code and Residential Design Guidelines; changing the site's land use designation from "General Commercial" to "Low Density Residential"; and a Zone Change from "C1—Local Business" to "R1—Single Family Residential." As such, the standard review, conditions, and requirements completed during the review process would reduce impacts to aesthetics to less than significant levels.

- 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). 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 commercial uses and a parking structure that emit sources of light from indoors. As such, the site currently utilizes lighting consistent with residential uses. 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 from light emanating from the 11 residential units and private driveways throughout the project site. 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. Although the proposed residential project would add additional lighting sources on-site, 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 the City's 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.

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. The project does not propose any large-scale developments that would increase solar glare exposure to significant levels.

Therefore, all project lighting within parking areas and driveways (for security, safety, etc.) would be implemented under supervision of the City's Planning Division, thereby ensuring that any potential light spillover impacts to sensitive uses and solar glare would be 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 Department 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 (ARB).

Prime Farmland or Farmland of Statewide Importance must meet the following two criteria; must have been used for irrigated agricultural production at some time during the 4 years prior to the important farmland map date; The soil must meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service. The project site is not currently used for farmland; however, the project site was used as agricultural/fallow land from at least 1938 to 1953 according to the Phase I Environmental Site Assessment (ESA) prepared for the project.

The Williamson Act allows county governments to enter into contracts with private landowners who agree to restrict parcels of land to agricultural uses or uses compatible with agriculture for at least 10 years. The City's 2035 General Plan EIR explains that there are no active Williamson Act contracts within the city limits.

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 existing commercial uses and an L-shaped parking lot. Additionally, the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Department of Conservation 2015). Thus, no impacts would occur.

- 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. As described above, there are no Williamson Act contracts within the City of Costa Mesa. Therefore, no impacts would occur.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined 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. There are no lands zoned for forest land, timberland, or timberland production within the vicinity of the project site. Therefore, no impacts would occur.

- 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 existing commercial uses and an L-shaped parking lot and does not contain forest land. Thus, no impacts would occur.

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

No impact. The project site is developed with existing commercial uses with an L-shaped parking lot, and the surrounding area is designated for residential and commercial uses. There are no agricultural or forest uses in the vicinity. Therefore, no impacts related to farmland or forest land would occur.

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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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

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 consists of an 11-unit detached residential development, replacing two commercial office buildings totaling 24,267 square feet. The project site is located in Orange County, which is located in the South Coast Air Basin (Air Basin). The regional agency responsible for air quality within the Air Basin is the South Coast Air Quality Management District (SCAQMD). The area is designated nonattainment for the state 1-hour and 8-hour ozone, 24-hour and annual respirable particulate matter (PM₁₀), and annual fine particulate matter (PM_{2.5}) standards. The area is also designated nonattainment for federal standards for 8-hour ozone, and 24-hour PM_{2.5}. The area is designated as maintenance for the federal PM₁₀ standard.

The applicable Air Quality Plan (AQP) is the 2012 Air Quality Management Plan for the South Coast Air Basin (AQMP 2012). According to the SCAQMD CEQA Air Quality Handbook, the project is consistent with the AQP if the project addresses two main criteria (and associated questions):

Criterion 1

Questions 1 and 2. Would the project result in an increase in the frequency or severity of existing air quality violations? Would the project cause or contribute to new air quality violations?

Answers 1 and 2: Given the size and current developed conditions of the project site, and the fact that the project will generate fewer vehicle trips than the existing commercial uses on site, the project would result in less than significant operational carbon monoxide (CO) and other emissions. In addition, due to the limited grading and the fact that the future proposed residential development would not involve subsurface grading for underground structures, project construction emissions would not exceed SCAQMD's LST criteria with incorporation of the Standard Conditions listed below. Therefore, the project would not increase the frequency or severity of existing air quality violations in the project's vicinity. The project would be consistent with the first and second questions of Criterion 1.

Question 3. Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQP?

Answer 3. Given the size and current developed conditions of the project site, and the fact that the project will generate fewer vehicle trips than the existing commercial uses on site, the project would result in less than significant impacts with regard to localized pollutant concentrations and regional pollutant contributions with incorporation of the Standard Conditions listed below. The project would not delay the timely attainment of air quality standards or 2012 AQMP emissions reductions. The project is consistent with the third question of Criterion 1.

Criterion 2

Question 1. Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

Answer 1: In order to be consistent with the growth assumptions in the AQMP, the project must be consistent with the City of Costa Mesa 2035 General Plan (General Plan), the SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG), and SCAG's 2016 Regional Transportation Plan (RTP). The General Plan map indicates that the project is currently located within the City's General Commercial designation, but a General Plan Amendment will be proposed as part of the project to change the designation to Low Density Residential. The Low Density Residential designation is a less intense designation than General Commercial, and allows for 8 du/acre. The proposed project will consist of only 5.5 du/acre, and will

therefore be consistent with the proposed General Plan designation and the dwelling unit projections that were analyzed within the General Plan EIR. Therefore, the project is consistent with the City-wide plan for population growth. The project is also consistent with the RCPG's types, intensity, and patterns of land use designated for the area in and around the project site. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City and are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into the 2012 AQMP, it can be concluded that the project would be consistent with the projections. Therefore, the project is consistent with the first question of Criterion 2.

Question 2. Would the project implement all feasible air quality mitigation measures?

Answer 2: The project would result in less than significant impact with all feasible air quality standard conditions incorporated and would therefore be consistent with the second question of Criterion 2.

Question 3. Would the project be consistent with the land use planning strategies set forth in the AQMP?

Answer 3: The project is located within a developed portion of the City with proximity to transit and a mix of other uses, therefore the project would not conflict with the City's or SCAG's policies. The project is consistent with the third question of Criterion 2.

In summary, the project would not result in a significant localized or regional impact on the region's ability to meet state and federal air quality standards. In addition, the project would be consistent with the growth forecasts in the AQMP, and is consistent with the land use strategies set forth in the AQMP. Therefore, this impact is less than significant.

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

Less than significant impact. Given the size and current developed conditions of the project site, and the fact that future proposed residential development would not involve subsurface grading for underground structures, short-term construction air quality impacts are expected to be less than significant. The long-term, operational air quality impacts are also expected to be less than significant because proposed residential development would involve a reduction of average daily vehicle trips compared to the existing office use (Kunzman 2016). Less than significant impacts related to this environmental topic will occur as a result of the zone change and development. In addition, the City of Costa Mesa requires that projects meet certain Standard Conditions. They are requirements, and are therefore incorporated into the analysis rather than included as mitigation. Standard Conditions relevant to the project are provided below. In summary, because of the limited size of the project and nature of construction and considering that construction and operation of the

proposed project will follow all Standard Conditions, both construction and operational air quality impacts are expected would be less than significant.

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

Less than significant impact. The 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 cumulative considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment.

The project would generate up to 105 daily trips, including up to 8 trips in the AM peak hour and up to 11 trips in the PM peak hour. Under existing conditions, the project site generates approximately 268 daily trips, including 38 trips in the AM peak hour and 36 trips in the PM peak hour. Overall, the project would generate a reduction of 163 daily trips, including 30 fewer AM peak hour trips and 25 fewer PM peak hour trips than occur under existing conditions.

Given the size and current developed conditions of the project site, the reduction of daily trips and the fact that future proposed residential development would not involve subsurface grading for underground structures, the project would not exceed SCAQMD thresholds during construction or operation. Therefore, the project's impacts would be considered less than significant.

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.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. 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 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 on-site 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 100 feet east of the project site.

Naturally Occurring Asbestos (NOA)

Asbestos is a fibrous mineral which is both naturally occurring in ultramafic rock (a rock type commonly found in California), and used as a processed component of building materials. Because

asbestos has been proven to cause a number of disabling and fatal diseases, such as asbestosis and lung cancer, it is strictly regulated because of its natural widespread occurrence and as a building material. In addition, the ARB approved an Air Toxic Control Measure for construction, grading, quarrying and surface mining operations to minimize emissions of NOA. The regulation requires application of best management practices to control fugitive dust in areas known to have NOA and requires notification to the local air district prior to commencement of ground-disturbing activities.

The California Department of Conservation, Division of Mines and Geology (DMG) has a published guide for generally identifying areas that are likely to contain NOA (DMG 2011). The DMG map indicates NOA is not known to occur within the project area. Therefore, disturbance of NOA during project construction is not a concern for the project. The project would result in no impact from exposure of sensitive receptors to NOA.

Asbestos-containing Materials (ACMs)

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 United States Environmental Protection Agency (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. Therefore, the potential source of asbestos exposure for the project is the demolition activity of the existing structures, which were constructed in the 1960s and 1980s.

SCAQMD's Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, includes the removal and associated disturbance of ACMs. 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. The rule further states that the District shall be notified of the intent to conduct any demolition or renovation activity (SCAQMD 2012).

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

Construction: Localized Construction Impacts

As shown above, the project would not exceed the localized significance thresholds for construction generated criteria pollutants with implementation of Standard Conditions. Therefore, the project would not expose receptors to substantial criteria pollutant concentrations from construction activities. Impacts would be less than significant.

Construction: Diesel Particulate Matter

The project would generate diesel exhaust, a source of diesel particulate matter, during project construction. Diesel particulates are typically 2.5 microns (PM_{2.5}). On-site emissions of both diesel

particulate matter occur during construction from the operation of heavy-duty construction equipment and from vendor trucks that operate on project sites.

Project activities that would generate diesel particulate matter emissions are short-term in nature. Moreover, the current methodological protocols required by SCAQMD and ARB when studying the health risk posed by diesel particulate matter assume the following: (1) 24-hour constant exposure; (2) 350 days a year; (3) for a continuous period lasting 70 years. Therefore, considering the dispersion of the emissions and the short time frame of project construction, exposure to diesel particulate matter is anticipated to be less than significant.

Construction: Toxic Air Pollutants—On-site Workers

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

On-site 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 on-site receptors are included in risk assessments if they are persons not employed by the project. Persons not employed by the project would not remain on-site for any significant period. Therefore, a health risk assessment for on-site workers is not required or recommended. Impacts would be less than significant.

Operation: Toxic Air Pollutants

The ARB Air Quality and Land Use Handbook (2005) 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,” including recommendations for distances between sensitive receptors and certain land uses. These recommendations are assessed as follows.

- Heavily traveled roads. ARB recommends avoiding 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 is adjacent to Mesa Verde Drive, which currently has an average daily traffic volume of 6,000 under Existing traffic conditions according to the City of Costa Mesa General Plan EIR. Therefore, the project would not expose onsite sensitive receptors to significant health risk from heavily traveled roads.
- Distribution centers. ARB also recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center. The closest existing or proposed distribution center to the project is located more than 1,000 feet from the project. Therefore, the project would not expose onsite sensitive receptors to significant health risk from distribution centers.
- Fueling stations. ARB recommends avoiding 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). A 50-foot separation is recommended for typical gas dispensing facilities. The nearest fueling

station is 0.6 miles from the project site. Therefore, the project would not expose onsite sensitive receptors to significant health risk from fueling stations.

- 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 operations from the project site are 1.2 miles to the east of the project site. Therefore, the project would not expose onsite sensitive receptors to significant health risk from dry cleaning operations.

Operation: CO Hotspot

The project would consist of residential uses and would not create a localized CO hotspot. Therefore, the project would not expose receptors to substantial CO concentrations from operational activities.

Conclusion

The project would not expose receptors to substantial quantities or significant concentrations of asbestos from demolition or soils disturbance, construction-generated localized criteria pollutant concentrations, construction-generated diesel particulate matter, operational toxic air contaminants, or CO hotspots. Therefore, the project would result in a less than significant impact.

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

The proposed project will include construction of 11 single-family dwelling units. During construction, the various diesel-powered vehicles and equipment in use on-site 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, and the project would comply with Standard Condition 4.3-5, which would require appropriate design of trash receptacles to avoid odor impacts; therefore, operational impacts are less than significant.

Standard Condition

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 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.
- 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 commercial building and an “L-shaped” parking lot. The project site is surrounded by urban development consisting of commercial and residential uses. Average temperatures range from January low of 46.9°F to August highs of 73.4°F. Average annual precipitation is approximately 11 inches; precipitation falls primarily as rain with most precipitation occurring between the months of November and April. 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 with commercial buildings and an “L-shaped” parking lot. According to the General Plan, (Figure CON-1), the property does not contain any sensitive biological habitat to support any special-status plant or wildlife species.

One species that has been reported to be both a threat and a nuisance to agriculture and wildlife are red imported fire ants. 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, no impacts would occur.

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, no impacts would occur.

- 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. There are no wetlands, marshes, and vernal pools on the project site or within its vicinity. 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. As stated above, the project site is fully developed with commercial buildings and an “L-Shaped” parking lot in an urban setting. The site and surrounding areas do not provide a suitable habitat for the movement of any native resident or migratory fish or wildlife species. Therefore, no impacts 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 located within the middle of the commercial buildings, but does not contain any protected biological resources or tree species that are considered sensitive, as stated above. Thus, no impacts would occur.

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

No impact. The City of Costa Mesa has not adopted a Habitat Conservation Plan or Natural Community Conservation Plan. The project site does not fall within any land of an adopted Habitat Conservation Plan or Natural Community Plan. Therefore, no impacts would occur.

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

The history of Costa Mesa is the story of three communities of the past; an old boomtown called Fairview, a farming colony named Paularino, and the Village of Harper. During the year 1887, the town of Fairview was introduced. It only lasted until 1889 because of the land boom of Southern California’s fall. The farming community of Paularino did not amount to more than a name with a few scattered farmhouses, one public school building, and a railroad siding. Finally, Harper came after the decline of Paularino. Harper would be renamed Costa Mesa in 1920.

The City of Costa Mesa has gathered a Historical Resources Inventory that can be found within the City’s General Plan EIR on page 4.5-4, Table CUL-1. The table outlines 31 historical resources that are either eligible for the National, State, or Local Register Listings. The project site is not located on or within the vicinity of any site listed on that table. However, any phase of this project will be conducted in compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, which require lead agency consultation with California Native American tribes for projects that involve an amendment to a general plan or specific plan, for the purpose of preserving or mitigating impacts to tribal cultural resources.

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 Table CUL-1, Historic Resources Inventory, as described above. The project site is not identified as a historically/culturally significant resource. Furthermore, City records indicate that the existing

buildings were built as functional buildings for a church and have not made a significant contribution to the broad patterns of history. Additionally, the church is not recognized locally and is not associated with a person(s) significant in the past. Therefore, no impacts would occur with respects to §15064.5.

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

Less than significant impact. During the construction phase of the project, ground-disturbing activities such as grading or excavation could disturb previously unidentified subsurface archaeological resources. However, as described in previous sections, the project site consists of developed land that has been permanently disturbed by the construction of belowground and aboveground improvements (buildings, driveways, streets, hardscapes, and utilities). Given the highly disturbed condition of the site, the potential 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, compliance with Standard Condition 4.5-1 would reduce impacts to a less than significant level.

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 or unique paleontological resources on the project site (rocks, buildings, statues, etc.). Given the highly disturbed condition of the site, the potential to impact an unidentified paleontological resource is considered low. 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, compliance with Standard Condition 4.5-2 would reduce impacts to a less than significant level.

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. As noted above, the project site has been significantly disturbed and developed. Therefore, the potential for the disturbance of any human remains is considered low. However, 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. If the Coroner determines the human remains are 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 (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 impacts involving the disturbance of human remains to less than significant levels.

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 checked="" type="checkbox"/>	<input 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"/>

The project site is located within a seismically active region that contains active earthquake faults, including the San Andreas, Newport-Inglewood, and the Yorktown faults. The site is not located within an Alquist-Priolo Fault-Rupture Hazard Zone established by the State geologist. According to Figure 4.6-6, Geologic Hazards Map, in the General Plan EIR, the project is adjacent to the approximate location of the Newport-Inglewood Fault Zone: Bolsa-Fairview fault. The site is not located in a State Seismic Hazard Zone for liquefaction identified on the City’s General Plan EIR Liquefaction Map, Figure 4.6-8.

A geologic study was not conducted for the project. However, a Phase I ESA was prepared for the project by Partner Engineering and Science, Inc. The project site is located within the Orange County Coastal Plain, which consists of a relatively flat physiogeographic expression of alluvial fans and floor plains. It was concluded that soils of Mesozoic and older igneous and metamorphic rocks were overlain by Tertiary semi-consolidated sediments, Pleistocene and Recent alluvium. According to the USDA Natural Resources Conservation Service, the project site is mapped as Cropley clay. These soils consist of deep, well drained, moderately low to moderately high permeable soils that formed in alluvium derived from shale. Slopes range from 2 to 9 percent. Subsurface groundwater is present beneath the project site but is not utilized for domestic purposes.

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.**

Less than significant impact. As described above, the site is not located within an Alquist-Priolo Fault-Rupture Hazard Zone established by the State Geologist. As such, the project would not expose substantial numbers of people or structures to significant risk of loss, injury, or death due to rupture of a known fault. Thus, impacts would be less than significant.

- 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, especially since it is near faults with the potential to cause moderate to large earthquakes. 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 reduced to less than significant levels.

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 whereby a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress, usually strong ground shaking during an earthquake. 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. According to the California Geologic Survey, the site is located within an area with low liquefaction potential. According to the Phase I ESA conducted for the project, subsurface groundwater exists beneath the project site but is not used for domestic purposes.

The project must be compliant with Standard Condition 4.6-1, which requires compliance with the California Building Code. The project must also be compliant with Standard Condition 4.6-2, which requires that the applicant, prior to project implementation, must prepare a geotechnical report for the proposed buildings that fully identifies any site-specific risk for liquefaction. The geotechnical report would also outline certain building recommendations in accordance with the CBC. Providing a geotechnical report for the project would identify the liquefaction potential and thus reduce the impacts to a less than significant level.

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 on-site 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. As stated above, the project is located within a relatively flat area with slopes ranging from 2 to 9 percent. Therefore, landslides are not anticipated to occur on the project site. The California Geologic Survey 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 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, no impacts would occur with respects to landslides.

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

Less than significant impact. The project site is currently developed with commercial buildings and an L-shaped parking lot. During the construction phase of the project, the area may be exposed to soil erosion or the loss of topsoil. However, the project would comply with CBC requirements and use cover whenever possible during storms to reduce that potential. The project would have a greater amount of pervious areas, which would take the form of trees and shrubs in private yards, as well as community gathering spaces, and vegetative groundcover. The increase of pervious areas does not pose a risk for erosion because they would be either vegetated and/or contained. All stormwater flows would be directed to the existing municipal storm drain system towards the north and northwest, vegetated pervious areas, and the storm drain systems located along the new private roadway within the community. In addition, a drip irrigation system would be implemented and designed 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; also refer to Standard Condition 4.6-4. Following development of increased pervious landscaping and compliance with NPDES regulatory requirements, project implementation would reduce the impact involving soil erosion or the loss of topsoil to less than significant levels.

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. As described above, the site is relatively flat, with 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. Thus, impacts would be less than significant.

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 contain significant amount of clay particles that swell and shrink periodically when exposed to liquid and then dried. 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 soils located on-site could have the potential to be expansive, according to the California Geologic Survey. As required for all new buildings, an evaluation of on-site soils will be required as a part of the building permit review. 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 on-site soils and evaluate such soils for expansiveness. The final design of the project buildings would be based on the results of the geotechnical report, thereby ensuring that impacts would be reduced to less than significant levels.

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 would occur.

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. Project-related greenhouse gas (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. Most project emissions are generated by motor vehicle travel. The long-term, operational GHG impacts are also expected to be less than significant because proposed residential development would involve a reduction of average daily vehicle trips compared to the existing commercial office use (Kunzman 2016) and a net decrease in GHG emissions from existing conditions.

Less than significant impact. The SCAQMD has prepared recommended significance thresholds for GHGs for local lead agency consideration (“SCAQMD draft local agency threshold”). 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 (MTCO₂e) 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 3,000 MTCO₂e per year threshold for residential development is used as the appropriate threshold of significance. Thus, impacts would be less than significant.

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 GHG reduction plans applicable to the proposed project. However as discussed in Section 4.7a) above, the Air District is in the process of preparing recommended significance thresholds for GHGs for local lead agency consideration which the proposed project does not exceed.

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.

Project Construction

Construction of the proposed project is estimated to generate GHGs. Construction emissions were quantified for demolition, grading, trenching, building construction, paving, and the application of architectural coatings. GHG emissions produced during the construction phase of the project are from construction vehicle exhaust. SCAQMD assessment methodology allocates the GHG emissions generated over the construction period and amortizes them over the life of the project (30 years). The combination of construction and operations phase emissions are then evaluated against the SCAQMD GHG significance threshold. Therefore, construction emissions would not conflict with the AB 32 Scoping Plan.

Because the project is limited to the development of a single-family residence development, it is not a project subject to the Scoping Plan's recommended measures. As such, the Scoping Plan's recommended measures do not directly apply to the project. In other words, there are no specific actions or measures to incorporate into the project in order to comply with the Scoping Plan. 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, and would not impede implementation of the Scoping Plan, or conflict with the policies of the Scoping Plan. Therefore, the impacts would be less than significant. Standard Conditions that reduce GHG emissions are provided below.

Standard Conditions

- SC 4.3-2** Prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.
- SC 4.3-3** 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.

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 type="checkbox"/>	<input checked="" 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 ESA was prepared for the project site by Partner Engineering and Science, Inc. (2016), and included in Appendix A. 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 (lead-based paint, asbestos, mercury, etc.), and small quantities of hazardous materials stored or used at Building A 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 on-site 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 agencies (such as the Occupational Safety and Health Administration in the workplace or Department of Toxic Substances Control for hazardous waste) and local agencies (such as 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 (e.g., 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, and would be limited to residential use. These products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. 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. Construction activities would involve the demolition of the existing commercial office buildings, and the construction of 11 single-family detached residential 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 ACMs and lead-based paint. Because of the age of Building A, there is a potential that ACMs are present. Overall, all suspect ACMs were observed in good condition and do not pose a health and safety concern to the occupants of the subject property at this time. Suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants. If ACMs are identified and need to be disturbed, repaired or removed, a licensed abatement contractor should be consulted. Suspect ACMs can also be managed under the auspices of an Operations and Maintenance (O&M) plan. 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.

According to available historical sources, the subject property was formerly undeveloped as early as 1932; agricultural/fallow land from at least 1938 to at least 1953; vacant land and developed with Building A in 1963; and developed with Building B in 1985. Tenants on the subject property have included such commercial tenants as medical and dental offices, real estate offices, insurance agencies, consulting firms, and a printing facility since 1963. Partner Engineering and Science, Inc. performed a Phase I Assessment, which revealed no evidence of a Recognized Environmental Condition in connection with the subject property.

Compliance with the recommendations of the Phase I ESA, established regulations, and Standard Conditions SC 4.8-1 through SC 4.8-5 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 related impact.

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.

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. Adams Elementary School is located 0.4 mile west of the project site, Kline Private School is located 0.1 mile southeast of the project site, Renaissance School International Orange County Private School is located 0.4 mile northwest of the project site, and Early College High School is located 0.5 mile north 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. Because of 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 3.4 miles west of John Wayne Airport and is not within any Airport Impact Zone or Airport Safety Zone. 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 Airport Environs Land Use Plan (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 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 2.9 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 Figure S-7, *Emergency Evacuation Routes*, illustrates the City's emergency evacuation routes and indicates that Adams Avenue, located immediately south of the project site, and Harbor Boulevard, located west of the project site, are designated emergency evacuation routes. 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. The project site currently consists of one parcel totaling 2.05 acres. The project site currently includes two commercial office buildings. Project-related impacts to water quality could occur over four 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 it filters water, thereby removing potential pollutants. These changes have the potential to affect long-term water quality.

National Pollutant Discharge Elimination System

Under Section 402 of the Clean Water Act, the EPA has established regulations under the NPDES program to control direct stormwater 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 (RWQCBs) to preserve, protect, enhance, and restore water quality. The City is within the jurisdiction of the Santa Ana RWQCB.

Short-term Construction

Dischargers whose projects disturb one or more acres of soil (or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 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 1 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 or maps that show the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography required to list Best Management Practices (BMPs) the discharger will use to protect stormwater both before and after construction, and drainage patterns across the project site. 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 stormwater 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. 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 (an 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 stormwater 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. Stormwater and non-stormwater 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 RWQCB 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 stormwater program requirements are to (1) effectively prohibit non-stormwater discharges; and (2) reduce the discharge of pollutants from stormwater conveyance systems to the MEP statutory standard. The County Model Water Quality Management Plan (WQMP) was developed as part of the municipal stormwater program to address stormwater 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 the development plan approval process and prior to issuing Grading and Building Permits for projects covered by the model WQMP requirements.

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.

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, Figure CON-4 Water Districts, 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 Water 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 Water'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 project would replace the present commercial office buildings with 11 single-family homes (approximately 29 people) and would require a water demand of approximately 5,191 gallons per day.

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 it is 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. 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 stormwater 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 to the street which then flows towards a storm drain located north of the project site. The water drainage from the project site flows from south to north into an existing, locally owned, 32-inch storm drain north of the project. This 32-inch storm drain then flows westerly into a County owned reinforced concrete rectangular channel (OCFCD Facility D03—Greenville-Banning Channel Channel), flowing southerly before connecting to the Santa Ana River.

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 off-site 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. Project implementation would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. 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 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. 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 are identified as a Special Flood Hazard Area. 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 Flood Insurance Rate Map (Map Number 0602160266H, December 3, 2009). 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 Figure S-5: Tsunami and Sea Level Rise Hazard Areas. Only a small portion of the City of Costa Mesa is located within the Prado Dam inundation area, and is limited to the area closest to Newport Bay. 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 S-5 Figure: Tsunami and Sea Level Rise Hazard Areas, 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 (mudslide, debris flow) does not exist within the project area, as steep slopes are not located on or close 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 2850 Mesa Verde Drive East, north of Adams Street. It is bounded by residential development to the north and northeast across Andros Street, an area under construction with residences to the northwest, a parking lot to the southeast, and commercial development to the southwest across Mesa Verde Drive East.

The 2.05-acre site is currently zoned C1 (Local Business District), and has a land use designation of General Commercial.

The project involves the complete demolition of two commercial office buildings currently at the project site. None of the proposed activities associated with project implementation would physically divide an established community.

The property is currently developed with two buildings, Building A built in 1963, and Building B built in 1985.

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. Any discretionary request for a zone changes involves a policy decision of the City Council as to the highest and best use for the subject property and appropriate zoning classification.

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 environmental analysis in the IS/ND 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 the City. 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 2035 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 currently 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-24 Land Use Element), “. . . Low-Density Residential areas are generally intended to accommodate detached single-family residences. Other housing types include attached housing that provide a greater portion of recreation or open space than typically found in multi-family developments and clustered housing which affords the retention of significant open space. Low-Density Residential areas are intended to accommodate outdoor living activities (front yards and backyards) in open space adjacent to dwellings. To avoid land use conflicts, these areas should be located away from or protected from the more intense nonresidential areas and major travel corridors.”

The proposed project involves a General Plan Amendment to change the General Commercial designation to Low Density Residential. The proposed Rezone of the property from C1 (Local Business District) to R1 (Single Family Residential) is also requested. These approvals will serve to reconcile any inconsistencies between the existing land use designations and the proposed project, which is considered a self-mitigating aspect of the project. Upon the approval of the requested land use entitlements, the proposed project would be consistent with the adjacent residential development and with the development pattern of the surrounding area.

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 that are salient and relevant in considering the proposed project.

General Plan Consistency

The Land Use Element indicates that Costa Mesa is 99 percent built out, of which 47 percent of land consists of residential neighborhoods, 14 percent of the land area is designated as commercial, and 10 percent of land is designated as industrial. With the adoption of the West side Urban Plans in April 2006, 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 2.05 acres of General Commercial use to Low Density Residential use.

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

- **General Plan Objective LU-1A:** Establish and maintain a balance of land uses throughout the community to preserve the residential character of the City at a level no greater than can be supported by the infrastructure.
- **General Plan Policy LU-1.1:** 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.
- **General Plan Policy LU-1.2:** Balance economic gains from new development while preserving the character and densities of residential neighborhoods.
- **Housing Element 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.
- **Housing Element 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.

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 floor area ratio between 0.20 and 0.75 for high to very low traffic uses, respectively. The proposed request involves a rezone of the property to Single Family Residential.

The proposed project would replace an established commercial office building with a residential development. The character of the surrounding area is defined by a mix of uses, residential and commercial land 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 proposed project's 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 City’s General Plan does not identify the project site as a mineral resource zone. As described in previous sections, the site is fully developed/disturbed by commercial buildings and an L-shaped parking lot. 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. As stated above, the City’s General Plan does not identify the project site as a mineral resource zone. In addition, the project site is fully developed/disturbed with commercial buildings and an L-shaped parking lot. Therefore, the site does not support mineral extraction operations. Thus, 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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

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.¹ In addition, the equivalent continuous sound level (L_{eq})² 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.

Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. Various noise guidelines and standards have been promulgated at the federal, state, and local levels. The City of Costa Mesa maintains a comprehensive Noise Ordinance, which sets standards for noise levels citywide and provides the means to enforce the reduction of obnoxious or offensive noises. The basic noise standards contained in Table 2, City Noise Ordinance Standards-Residential (Table 1), below, are for the daytime period (7:00 a.m. to 11:00 p.m.) and apply to both outdoor and indoor residential areas. Between the hours of 11:00 p.m. and 7:00 a.m., the noise standards are 5 dBA more stringent for exterior areas and 10 dBA more stringent for indoor areas. 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.

Table 1: Residential Noise Standards

Exterior Noise Standards	Time
55 dba	7:00 a.m.–11:00 p.m.
50 dba	11:00 p.m.–7:00 a.m.
55 dba	7:00 a.m.–11:00 p.m.
45 dba	11:00 p.m.–7:00 a.m.

¹ 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.

² 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 assumes that the noise metric refers to L_{eq} .

The Municipal Code specifies outdoor and indoor noise limits for various land uses impacted by transportation noise sources. The noise limits specified in the City’s Municipal Code are in terms of the Community Noise Equivalent Level (CNEL). The Municipal Code identifies the following noise criteria for transportation noise sources: For residential land uses, the exterior noise exposure level shall not exceed 65 CNEL and the interior noise exposure level shall not exceed 45 CNEL.

Short-term Construction Impacts

Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers, and portable generators, can reach high levels. Grading and construction activities present the highest potential for noise impacts. For short periods of time, grading equipment noise could impact the residential uses located to the north, west, and east of the project site. These grading activities would generate noise levels in excess of the City’s Municipal Code noise limits. However, noise generated by construction activities during daytime hours is exempt from the Noise Ordinance standards. Therefore, if construction is limited to those hours specified by the Noise Ordinance, construction-related noise impacts are considered less than significant. The following standard condition will minimize any short-term construction related noise impacts to below a level of significance:

Standard Condition

SC 4.11-1 Grading materials delivery, equipment operation, and other construction-related activity shall be limited to be-tween the hours of 7 a.m. and 8 p.m., Monday through Friday, and 8 a.m. to 6 p.m. Saturday. Construction is prohibited on Sundays and federal holidays. Exceptions may be made for activities that will not generate noise audible from off-site, such as painting and other quiet interior work.

Long-term Impacts

According to the 2035 General Plan, existing (Year 2015) and expected (Year 2035) noise contours, the proposed residential units are located outside the 60 CNEL traffic noise contours of adjacent roadways. These noise contours were based on the average daily traffic volume (ADT) noise levels as measured at 100 feet from the roadway centerline. This noise data does not take into account noise barriers or topography that may affect ambient noise levels. In addition, a 7-foot-high wall is proposed along Mesa Verde Drive. This wall will provide additional noise protection for proposed units adjacent to Mesa Verde Drive. Since the project site is outside the 60 to 70 CNEL noise contours from major roadways and the project would include a seven-foot high soundwall along Mesa Verde Drive, no significant noise impacts to the proposed project are anticipated. The primary source of noise is from motor vehicle noise on Mesa Verde Drive. No additional noise impacts are anticipated from existing commercial land uses located to the south of the property nor from the residential uses to the east, west and north.

On-site residential uses would be required to comply with the City’s daytime 55 dBA L_{eq} exterior and 50 dBA L_{eq} exterior operational noise standards for residential land uses, as shown in Table 1

above. New stationary noise sources associated with implementation of the project would include new mechanical equipment, such as 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 residential mechanical ventilation systems range up to approximately 60 dBA L_{max} at a distance of 25 feet. Noise generated by proposed mechanical ventilation systems would be expected to attenuate to less than 50 dBA L_{max} as measured at the nearest off-site sensitive receptor. Typical residential ventilation systems operate only periodically within an hour. Therefore, when averaged over hourly periods (L_{eq}), these noise levels would be below the City's stationary noise source performance standards for receiving residential land uses including the nighttime standard of 50 dBA L_{eq} .

Because the City's Noise Ordinance regulates both exterior and interior noise levels, and the fact that short-term construction of the project is limited to those hours specified by the Noise Ordinance, exposure of persons to long-term noise levels and short-term noise levels, including ground borne vibration or ground borne noise levels, will be considered less than significant.

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

Less than significant impact. The project site is located approximately 4.1 miles southwest of John Wayne Airport (nearest airport). While aircraft noise is occasionally audible on the project site, due to the distance from area airports and the orientation of runways and flight patterns, the project site does not lie within the 55-dBA CNEL noise contours of any airport. Therefore, the impact of noise levels from aviation sources 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. Therefore, no impacts 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 an 11-unit, single-family residential homes in place of two existing commercial office buildings. As discussed in Impact 4.10.a, the existing project site does not provide any permanent housing or contribute directly to the City’s population.

According to the 2010–2014 American Communities Survey (U.S. Census), the persons-per-household ratio for a residential dwelling is 2.63 persons per unit. Thus, at full occupancy, the proposed 11-unit, single-family residential home development would create a population of approximately 29 persons.

The project would induce population growth through the establishment of additional housing. However, the potential population growth would be nominal, representing less than a 0.003 percent 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?

No impact. The project site currently contains commercial office buildings and a parking lot, and does not contain any existing housing units. The project is an 11-unit residential development and has a General Plan designation of General Commercial. The proposed project will not displace existing housing, but will increase the number of residential units in the area. Therefore, the project would not displace any housing units.

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

No impact. As discussed, the project implementation would include the demolition of existing commercial office buildings, as well as the construction of a new residential development. Therefore, the project will not displace any people or require the construction of replacement housing.

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 company,³ an urban search and rescue squad,⁴ and three Battalion Chiefs⁵, with at least one chief on duty 24-hours a day, 7 days a week. These fire personnel respond from six fire stations strategically located within the City.⁶ The closest station to the project is the Costa Mesa Fire Station #1, located at 2803 Royal Palm Drive, approximately 0.3 mile southeast of the project site. Depending on the nature, size, and location of the alarm, units from multiple stations will respond.

³ City of Costa Mesa Fire Department 2015 100-Foot Aerial Ladder Truck Website: <http://costamesaca.gov/index.aspx?page=1452>. Accessed August 18, 2015.

⁴ City of Costa Mesa Fire Department 2015 Urban Search and Rescue Website: <http://costamesaca.gov/index.aspx?page=1453>. Accessed August 18, 2015.

⁵ City of Costa Mesa Fire Department 2015 Organization Chart Website: <http://costamesaca.gov/modules/showdocument.aspx?documentid=6377>. Accessed August 18, 2015.

⁶ City of Costa Mesa Fire Department 2015 Station Locations Website: <http://costamesaca.gov/index.aspx?page=230>. Accessed August 18, 2015.

The project does not propose new or physically altered fire protection facilities. The project involves construction of an 11-unit residential development in place of two commercial office buildings. 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 development site, 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 2013 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 Services.⁷ 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 organization⁸.

The project does not propose new or physically altered police protection facilities. The project involves construction of an 11-unit, single-family home development in place of two commercial office buildings that exist on the property. As discussed in Response 4.13.a, project implementation would result in a net increase of 11 single-family residential 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 police 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.
- 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

⁷ City of Costa Mesa Police Department 2015 Department Division Website: <http://38.106.5.76/index.aspx?page=971>. Accessed August 18, 2015.

⁸ City of Costa Mesa Police Department 2015 Department Division Website: <http://38.106.5.76/index.aspx?page=971>. Accessed August 18, 2015.

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 11 single-family homes in place of the existing commercial office buildings and associated features on-site. Project implementation would result in a net increase of 11 dwelling units, with a corresponding increase in the demand for school facilities. Based on a student generation factor of 0.26 student per dwelling unit, project implementation could generate a total of 2.86 students. It is anticipated that the NMUSD schools would have the capacity to accommodate this negligible increase in enrollment, and construction of new or physically altered school facilities would not be required. Thus, less than significant impacts to school facilities would occur.

AB 2926, passed in 1986, allows school districts to collect impact fees from developers of new residential and commercial/industrial building space. SB 50 and Proposition 1A, both of which passed in 1998, provide 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 "full and complete school facilities mitigation."

The NMUSD collects \$1.84 per square foot of residential uses from developers (City of Costa Mesa 2015).⁹ 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.

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

⁹ Development Fees Information. Updated June 2015. City of Costa Mesa. Website: <http://www.costamesaca.gov/modules/showdocument.aspx?documentid=218>. Accessed August 2015.

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 an 11-unit, single-family residential development in place of general commercial office uses that exist on the property.

Project implementation would result in a net increase of 11 dwelling units, with a resultant population increase of approximately 29 persons. Based on a parkland demand factor of 4.26 acres per 1,000 residents, project implementation would generate a nominal demand for approximately 0.1234 acres of parkland. The project will be subject to development impact fees (e.g., parkland fees) to provide for the cost of maintenance of and additional recreational facilities, as discussed under Impact 4.15.b. Therefore, the proposed residential project will have less than a significant impact to parks.

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 Mesa Verde Branch Library located less than a mile north, 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 11 dwelling units, with a resultant population increase of approximately 29 persons. Given the project's nominal growth in population (less than 0.003 percent over existing conditions), construction of new or physically altered library facilities would not be required. 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 on-site landscaping; refer to Response 4.14.a.

The project does not propose new or physically altered park facilities. The project involves construction of an 11-unit, single-family residential development. Project implementation would result in a net increase of 11 dwelling units, with a resultant population increase of approximately 29 persons. Based on a parkland demand factor of 4.26 acres per 1,000 residents, project implementation would generate a demand for approximately 0.1234 acre of parkland. Compliance with the City’s Standard Condition, below, would ensure that the project’s 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 nature of the project site and surrounding properties is developed, and the proposed 11-unit residential development is not expected to significantly increase demand for recreation facilities. New development will be subject to development impact fees (e.g., parkland fees) to provide for the cost of maintenance of and additional recreational facilities. 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.

Standard Condition

- SC 4.14-1** Prior to issuance of occupancy permits, the Developer shall pay a park impact fee or dedicate parkland to meet the demands of the proposed development. The current park impact fee is calculated at \$13,572 per new single-family dwelling unit.

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"/>

Existing Conditions

A Trip Generation Analysis was prepared for the project site by Kunzman and Associates, Inc. (Kunzman 2016), included as Appendix B. The project site is currently developed as commercial office buildings totaling approximately 24,267 square feet and includes an associated parking lot.

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 2, 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 210: Single Family Detached Residential published in the Trip Generation Manual, 9th Edition, Institute of Transportation Engineers. For the existing commercial office buildings, trip generation was estimated using the average rate for ITE Land Use 710: General Office Building for daily, AM, and PM peak-hour trip rates. The average rate rather than the regression rate was utilized, since it is more conservative in estimating trip generation for the existing commercial office buildings.

Table 2 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 with the existing trip generation “budget” assuming full occupancy of the site.

The project would generate up to 105 daily trips, including up to 8 trips produced in the AM peak hour and up to 11 trips in the PM peak hour. The existing commercial office building, assuming full occupancy, is forecast to generate approximately 268 daily trips, including 38 trips in the AM peak hour and 36 trips in the PM peak hour. Overall, the project would result in 163 fewer daily trips, including a reduction of 30 AM peak-hour trips and a reduction of 25 PM peak-hour trips, compared with existing conditions. As such, the project is anticipated to generate less traffic than its existing land use at full occupancy.

Table 2: Land Use and Trip Generation Summary

Trip Generation Rates									
Land Use	ITE Code	Units	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Rates									
Single Family Detached	210	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
General Office Building	710	TSF	1.37	0.19	1.56	0.25	1.24	1.49	11.03
Project									
Single Family Detached	11	DU	2	6	8	7	4	11	105
Existing Use									
Existing Fully Occupied General Office Building	24.267	TSF	33	5	38	6	30	36	268

Table 2 (cont.): Land Use and Trip Generation Summary

Project Trip Generation Summary									
Land Use	Quantity	Units	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Total “Net” Project Trip Generation: Project Less Existing Use			-31	1	-30	1	-26	-25	-163
Notes: DU = Dwelling Unit; TSF = Thousand Square Feet Source: Kunzman 2016									

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 CMP Traffic Impact Analysis 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 Traffic Impact Analysis for CMP evaluation. For projects that will directly access or be close to a CMP Highway System link, a reduced threshold of 1,600 trips per day is used.

As discussed above in Response 4.16.a, the project would generate a reduction of 163 daily trips, including a reduction of 30 AM peak-hour trips and a reduction of 25 PM peak-hour trips compared with existing conditions. The project would generate a total of 105 daily trips and thus would not meet the criteria for a CMP Traffic Impact Analysis. 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 11-unit residential development and is not located within an Airport Safety Zone or Airport Impact Zone. Because of the nature and scope of the proposed development, 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 full access driveway on the western project boundary at Mesa Verde Drive East. Mesa Verde Drive East is currently constructed to its ultimate full-section width as a primary arterial with 80-foot right-of-way, two lanes of travel in each direction, and a two-way-left-turn lane at the project driveway. The project does not propose to alter Mesa Verde Drive East and does not propose any improvements or design features that would create hazards.

Upon review of the project site plan, the City would ensure that the project would not substantially increase hazards due to incompatible uses or design features. Impacts would be 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. The nearest bus lines to the project site are located along Adams Avenue, near the intersection of Mesa Verde Drive East and Adams Avenue, just south of the project site.

Based on CMP guidelines, person transit trips are typically estimated using a 1.4 percent factor to convert total vehicle trips to person trips, and a 3.5 percent factor to convert person trips to total transit trips. As discussed above, under Response 4.15.a, the project would generate up to 105 daily trips. Based on the CMP guidelines and given the proximity of the various land uses in relation to available transit routes in the project vicinity, the project would generate up to 6 transit trips (Orange County CMP 2013). Since these project-related transit trips can be accommodated by the

existing transit services in the project vicinity, project-related CMP transit impacts would be less than significant. Project implementation would not conflict with adopted policies, plans, or programs regarding public transit.

The project site has access to bicycle facilities within the immediate area. In addition, sidewalks are located along Mesa Verde Drive East, 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 Santa Ana RWQCB issued an 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 only nominally increase wastewater generation, thus nominally

increasing the demand for wastewater treatment; refer to Response 4.16.b. 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 RWQCB.

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.

- 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 its Division Area 2. 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).

In compliance with legislative requirements, Mesa Water has prepared its 2010 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 (MWD) through Municipal Water District of Orange County.

The project involves demolition of two existing commercial office buildings in order to develop an 11-unit residential development. Project implementation would result in a net increase of 11 dwelling units located on 2.05 acres and result in a population increase of approximately 29 persons. The project would replace the existing commercial/office use with 11 residential units (29 people) and would require a water demand of approximately 5,191 gallons per day.¹⁰

Project implementation would generate a demand for approximately 5,191 gallons of water per day,¹¹ 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 it is capable of meeting the water demands of its customers in normal, single dry, and multiple dry years between 2015 and 2035. Additionally, the Applicant will be required to obtain a Will-Serve Letter from the Mesa Water District to confirm its ability to accommodate the additional water demand associated with the proposed project.

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

The Mesa Water District has the capacity to treat 64.8 million gallons per day (mgd) of water. 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 MWDOC through Municipal Water District of Orange County. Six 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 (MWRF) 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 MWRF. As of January 2013 when the MWRF came online, Mesa Water has not needed to import water in order to meet demand. Therefore, project implementation would not require or result in the construction of new water treatment facilities or expansion of existing facilities.

Water Conveyance

As concluded above, the project would result in an increase in water demand. However, the Mesa Water District has the capacity to meet these demands, and the project would be served by existing infrastructure. Therefore, the proposed project would result in a negligible impact on the existing water conveyance facilities. The project would connect to existing water conveyance facilities. 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; therefore, a less than significant impact would occur.

¹⁰ (179 X 29=5,191) Mesa Consolidated Water District. 2010 Urban Water Management Plan (page 2-10).

¹¹ 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.

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 project site. The Sanitary District provides collection and transmission while the Orange County Sanitation District (OCSD) provides treatment, recycling, and disposal.

Wastewater Generation

The increase in wastewater generation would result in an incremental increase in the demand for wastewater conveyance and treatment facilities. The project will be consistent with the City of Costa Mesa General Plan, which forms the basis for issuance of the County Sanitation's NPDES wastewater discharge permits.

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 provide sanitary sewer service 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, and a less than significant impact would occur.

Wastewater Treatment

Wastewater collected by the Sanitary District is sent to the County Sanitation Districts of Orange County (County Sanitation) plants for treatment and disposal. County Sanitation is responsible for collecting, treating, and disposing 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. Implementation of standard conditions (refer to Response 4.17.a) would ensure that the project's increase in wastewater generation would be less than significant.

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 on-site drainage facilities and would not include the construction of off-site drainage facilities. The proposed project is located in a presently urbanized area where existing water drainage facilities exist. The project would result in a negligible increase in wastewater generation, thus resulting in a negligible impact on the existing wastewater conveyance facilities. Therefore, the proposed project will have a less than significant impact to stormwater drainage facilities.

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 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet 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 square feet 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, 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.

As discussed, the project represents an increase in water demand, compared with the existing commercial office buildings. 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 11 dwelling units with a resultant population increase of approximately 29 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 12.23 pounds per dwelling unit per day, it is estimated that the project would generate approximately 25 tons of solid waste per year. The increased solid waste generation would contribute to incrementally shortening the lifespan of the landfills identified above. However, given the project's scale, and since the City would continue to comply with the existing regulatory framework for reducing solid waste disposal volumes, it is anticipated that the specified landfills would have the capacity to accommodate the project's waste disposal needs. Additionally, the project would be subject to compliance with Standard Condition SC 4.16-5, and SC 4.16-6, which would ensure that impacts are less than significant.

Standard Conditions

- SC 4.17-5** Unless an offsite trash hauler is being used. The applicant shall contact the Costa Mesa Sanitary District to pay trash collection program fees and arrange for service for all new residences. Residences using bin or dumpster services are exempt from the requirement.
- SC 4.17-6** The applicant shall contact Costa Mesa Sanitary District for any additional district requirements.

g) 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 (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.

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 introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent.

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 were 8.5 pounds per day per resident and 11.3 pounds per day per employee.

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, and a less than significant impact would occur. Also refer 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 any historically/culturally significant structures. 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 any 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. The project’s impacts are all less than significant without the need for mitigation. Standard conditions will also be imposed upon the project, including the payment of fair-share development impact fees, implementation of design standards, etc. Other new development projects within the City would also be subject to these requirements.

The design of any future residential use is required to conform with the City’s design guidelines and residential development standards (two-story maximum building height, maximum density allowed in R1 zone, etc.), unless a request for any discretionary approvals (variance, minor modification, etc.) is approved and appropriate findings are made in conjunction with the development proposal.

Proposed standard conditions will minimize the proposed project’s impacts related to noise and air quality to below a level of significance. As an existing commercial office site with nonnative vegetation, the proposed project would not have the potential to degrade the quality of environment, sensitive biological resources, or cultural/paleontological resources. Because of the projected reduction in average daily trips from the proposed change from commercial office to residential use, the proposed project would not result in any cumulatively considerable impacts related to traffic/circulation. No significant adverse environmental effects on human beings will result, either directly or indirectly, from the proposed project.

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. Previous sections of this Initial Study/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. Therefore, with implementation of the specified conditions, the project would cause less than significant adverse effects on human beings.

Standard Conditions

Refer to Sections 4.1 through 4.17 above.

SECTION 5: INVENTORY OF STANDARD CONDITIONS

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 - 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 2013 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.

5.1.10 - 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.

5.1.11 - 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.

SECTION 6: REFERENCES

Airport Land Use Commission (ALUC). 2008. Airport Environs for Orange County, Land Use Plan for John Wayne Airport. Website: http://www.ocair.com/commissions/aluc/docs/JWA_AELUP-April-17-2008.pdf. Accessed April 2015.

Airport Land Use Commission. 2004. AEULUP Height Restriction Zone for John Wayne Airport. Website: Restriction Zone <http://www.ocair.com/commissions/aluc/docs/jwanotf.pdf>. Accessed April 2015.

American FactFinder, US Census. 2015. Website: <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>.

California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

California Air Resources Board (ARB). 2005. California Environmental Protection Agency. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. Website: www.arb.ca.gov/ch/landuse.htm.

California Air Resources Board (ARB). 2008. Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

California Department of Conservation, 1998. Seismic Hazard Zones Map Newport Beach Quadrangle. Website: http://gmw.consrv.ca.gov/shmp/download/quad/NEWPORT_BEACH/maps/ozn_newb.pdf. Released: April 15.

California Environmental Health Tracking Program. 2011. Traffic Linkage Service Demonstration. Website: http://www.ehib.org/traffic_tool.jsp.

California State Geologist, 1994. Generalized Mineral Land Classification of Orange County, California. Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Plate_1.pdf. Accessed April 2015.

Centers for Disease Control and Prevention (CDC). 2012. Construction—website: www.cdc.gov/niosh/construction/. Indoor Environmental Quality—website: www.cdc.gov/niosh/topics/indoorenv/constructionieq.html.

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

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

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

References

- City of Costa Mesa Fire Department 2015 Station Locations. Website:
<http://costamesaca.gov/index.aspx?page=230>. Accessed August 18, 2015.
- City of Costa Mesa General Zoning Map. Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=367>. Accessed on June 25, 2014.
- City of Costa Mesa Police Department 2015 Department Division Website:
<http://38.106.5.76/index.aspx?page=971>. Accessed August 18, 2015.
- City of Costa Mesa Police Department 2015 Department Division Website:
<http://38.106.5.76/index.aspx?page=971>. Accessed August 18, 2015.
- City of Costa Mesa Police Department 2015 Department Division Website:
<http://38.106.5.76/index.aspx?page=971>. Accessed August 18, 2015.
- City of Costa Mesa. 2012. Commercial Development Standards. Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=8425>. Accessed June 2015.
- City of Costa Mesa. 2013. Development Fees Information. Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=218>. Accessed June 2015.
- City of Costa Mesa. 2013. Police Department. Website:
<http://www.costamesaca.gov/index.aspx?page=302>. Accessed June 2015.
- City of Costa Mesa. 2014. City of Costa Mesa Zoning Map. Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=367>. Accessed June 2015.
- City of Costa Mesa. 2014. Housing Element (2013-2021). Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=6602>. Accessed June 2015.
- City of Costa Mesa. 2014. Municipal Code (codified through Ordinance No. 14-01, enacted January 4, 2014, including Supplement No. 125, Update 1).
- City of Costa Mesa. City of Costa Mesa 2035 General Plan. Adopted June 2016.
- City of Costa Mesa. City of Costa Mesa General Plan Environmental Impact Report. Adopted June 2016. Website: <http://www.costamesaca.gov/ftp/generalplan2015-2035/Final-EIR.pdf>. Accessed September 5, 2016.
- City of Costa Mesa. ND. Public Transit Map. Website:
<http://www.costamesaca.gov/index.aspx?page=1153>. Accessed April 2015.
- City of Costa Mesa. City of Costa Mesa General Plan Land Use Map. Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=369>. Accessed September 5, 2016.

- City of Los Angeles, 2006. CEQA Thresholds Guide. Website:
<http://environmentla.com/programs/thresholdsguide.htm>. Accessed June 2015.
- Costa Mesa Sanitary District. 2013. Costa Mesa Sanitary District Boundary Map. Website:
http://www.cmsdca.gov/images/sewer/sewer_boundary_map.pdf. Accessed June 2015.
- Development Fees Information. Updated June 2015. City of Costa Mesa. Website:
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=218>. Accessed August 2015.
- FAA. 2014. Obstruction Evaluation/Airport Airspace Analysis (OE/AAA). September. Website:
http://www.faa.gov/airports/engineering/airspace_analysis/. Accessed April 2015.
- Federal Emergency Management Agency. 2014. Map Service Center. Website:
<https://msc.fema.gov/portal>. Accessed June 2015.
- Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.
- GMPA Architects. 2015. Conceptual Plans. April 17.
- Google Earth Program. 2015. Website: <https://www.google.com/earth/>. Accessed April 2015.
- KCE Matrix, Inc. 2015. Costa Mesa Motor Inn Phase I Environmental Site Assessment Report. May 5.
- Kunzman Associates, Inc., 2014. Traffic impact analysis letter report for Brandywine Homes “Yorba Linda Fifteen” project. December 22.
- Linscott, Law and Greenspan (LLG). 2015. Traffic Impact Analysis Report Costa Mesa Motor Inn. Adopted: June 8, 2015.
- Mesa Consolidated Water District. 2010 Urban Water Management Plan (page 2-10) Website:
<http://www.mesawater.org/pdf/Mesa%20Consolidated%20WD%202010%20UWMP.pdf>. Accessed June 2015.
- Newport-Mesa School Locator. 2015. Website: <http://web.nmusd.us/schoollocator>. Accessed June 2015.
- Occupational Safety and Health Administration (OSHA). 2003. United States Department of Labor. Safety and Health Topics: Methane. Website:
https://www.osha.gov/dts/chemicalsampling/data/CH_250700.html.
- Partner Engineering and Science, Inc. 2016. Phase I Environmental Site Assessment Report. June 27.
- Psomas, 2015. Water Quality Management Plan (WQMP).
- South Coast Air Quality Management District (SCAQMD). 1993. CEQA Handbook. Available at SCAQMD, 21865 Copley Dr., Diamond Bar, CA 91765.

References

- South Coast Air Quality Management District (SCAQMD). 2005. Regulations IV—Prohibitions. Website: <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-iv>.
- South Coast Air Quality Management District (SCAQMD). 2007a. Asbestos Emissions From Demolition/Renovation Activities. 2007. Website: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf?sfvrsn=4>.
- South Coast Air Quality Management District (SCAQMD). 2008a. Mates III Final Report. Website: <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii/mates-iii-final-report>.
- South Coast Air Quality Management District (SCAQMD). 2008b. June 2003, revised July 2008. Final Localized Significance Threshold Methodology. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>.
- South Coast Air Quality Management District (SCAQMD). 2008c. Board Meeting Date: December 5, 2008, Agenda 31, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Website: www.aqmd.gov/hb/2008/December/081231a.htm. Draft Guidance Document—Interim CEQA Greenhouse (GHG) Significance Threshold Document. Website: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds/page/2>
- South Coast Air Quality Management District (SCAQMD). 2009. Final Localized Significance Threshold Methodology, Appendix C. Revised October 21, 2009. Website: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.
- South Coast Air Quality Management District (SCAQMD). 2011a. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>.
- South Coast Air Quality Management District (SCAQMD). 2011b. Air Quality Significance Thresholds. Revised March 2011. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
- State of California. 2013. CalRecycle. Estimated Solid Waste Generation and Disposal Rates. Website: <http://www.calrecycle.ca.gov/wastechar/wastegenrates/>. Accessed June 2015.
- State of California. 2013. CalRecycle. On-Line Disposal Rate Calculator. Website: <http://www.calrecycle.ca.gov/lgcentral/Reports/OnLineDisposalRateCalc.aspx?ReportingEntityID=1156&ReportYear=2012&Mode=Edit>. Accessed June 2015.
- State of California. 2015. Department of Conservation, Important Farmland Finder. Website: <http://maps.conservation.ca.gov/ciff/ciff.html>. Accessed April 2015.
- State of California. 1981. Department of Conservation California Geological Survey, Regional Geologic & Hazards Mapping Program—Alquist-Priolo Earthquake Fault Zoning

- Act. Website: <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>. Accessed June 2015.
- U.S. Census Bureau, 2015. State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, County Business Patterns, Economic Census, Survey of Business Owners, Building Permits, Census of Governments. Website: <http://quickfacts.census.gov/qfd/states/06/0616532.html> Accessed April 2015.
- U.S. Environmental Protection Agency (EPA). 2012. Green Book Nonattainment Areas for Criteria Pollutants as of December 14, 2012. Website: www.epa.gov/air/oaqps/greenbk/. Accessed June 2015.
- United States Environmental Protection Agency (EPA). 2013. Federal Register. National Ambient Air Quality Standards for Particulate Matter. Website: <http://www.gpo.gov/fdsys/pkg/FR-2013-01-15/pdf/2012-30946.pdf>. Accessed June 2015.
- United States Geological Survey, 1989 State of California Special Studies Zones, Newport Beach Quadrangle.
- University of California, Davis. 1997. Prepared for California Department of Transportation. 1997. Transportation Project-Level Carbon Monoxide Protocol. Website: www.dot.ca.gov/hq/env/air/pages/coprot.htm.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 7: REPORT PREPARATION PERSONNEL

FirstCarbon Solutions
250 Commerce, Suite 250
Irvine, CA 92602
Phone: 714.508.4100
Web: www.FirstCarbonSolutions.com

Project Director Frank Coyle
Project Manager Kim Burnell
Assistant Project Manager Cecilia So
Air Quality Lead Dave Mitchell
Noise Lead Philip Ault
Quality Control (QC) Tracy Inscore
Environmental Analyst..... Philip Vuong
Reprographics Octavio Perez
Graphics John De Martino
Technical Editor Ed Livingston
Word Processor Ericka Rodriguez

THIS PAGE INTENTIONALLY LEFT BLANK