

**ENVIRONMENTAL CHECKLIST FORM
CITY OF HUNTINGTON BEACH
COMMUNITY DEVELOPMENT DEPARTMENT
MITIGATED NEGATIVE DECLARATION NO. 20-001**

1.0 PROJECT INFORMATION

PROJECT TITLE: The Seacliff of Huntington Beach Inspired Senior Living (Assisted Living/Memory Care Facility)

CONCURRENT ENTITLEMENTS: Conditional Use Permit No. 19-025
Tentative Parcel Map No. 2020-128 (County)
Design Review No. 19-015

LEAD AGENCY: City of Huntington Beach
2000 Main Street
Huntington Beach, CA 92648

Contact: Hayden Beckman, Senior Planner
Phone: (714) 536-5561

PROJECT LOCATION: 2120 Main Street, Huntington Beach (northeast corner of Main Street and Yorktown Avenue; refer to Figures 1 and 2 below)

PROJECT PROPONENT: SBLP Huntington Beach, LLC
4514 Cole Avenue, Suite 1500
Dallas, TX 75205

Contact Person: Joseph P. McGonigle
Phone: (214) 370-2650

GENERAL PLAN DESIGNATION: CO (Commercial Office – maximum floor area ratio [FAR] of 1.0)

ZONING: CO (Commercial Office)

The project site is zoned CO-Commercial Office. Permitted uses include administrative, financial, professional, medical, and business needs. As described in Section 211.04, CO, CG, and CV Districts - Land Use Controls, in the City of Huntington Beach (City) Zoning and Subdivision Ordinance (HBZSO), convalescent facilities, including assisted living facilities, are a conditionally allowable use under the CO-Commercial Office zoning designation.

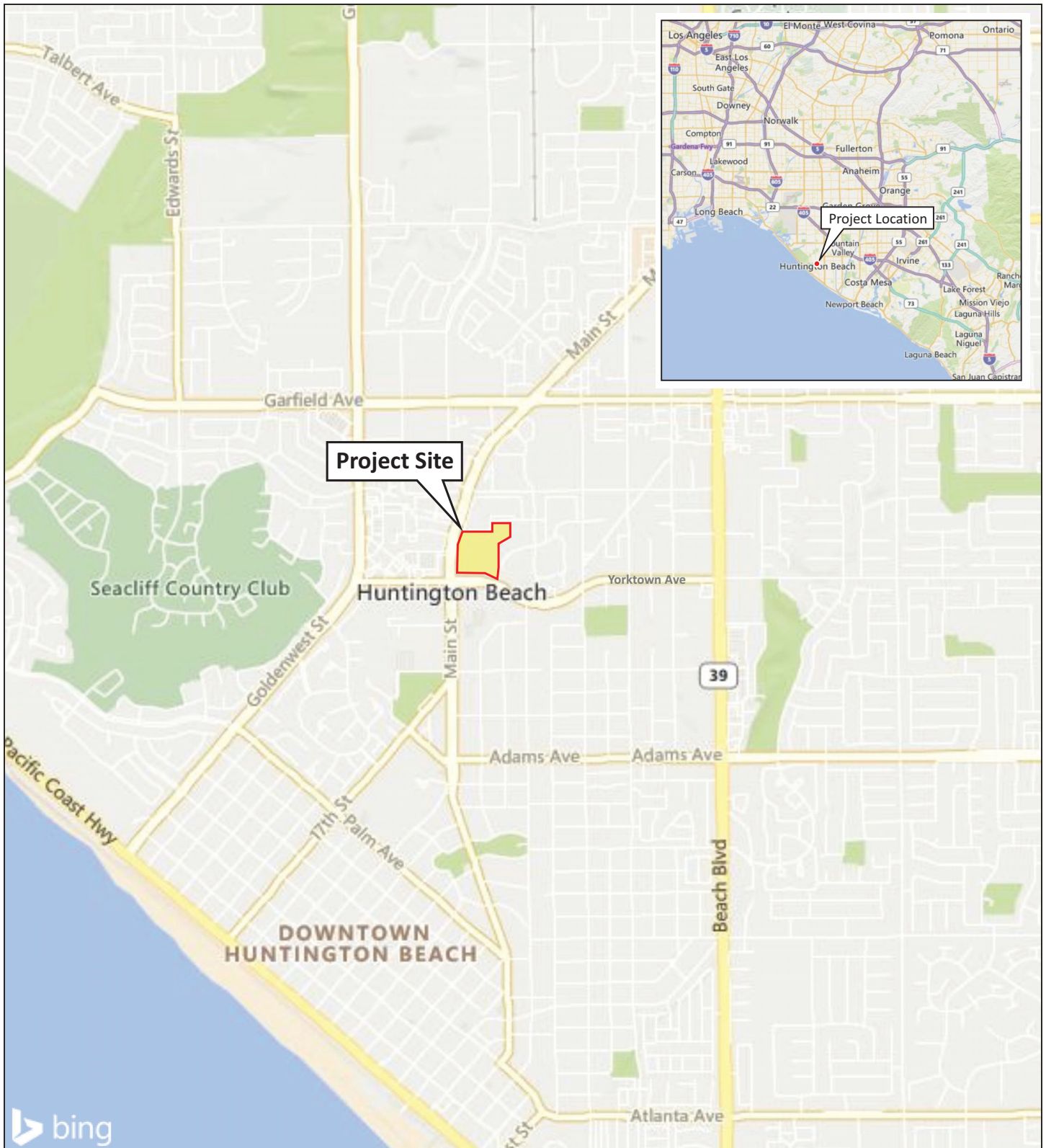
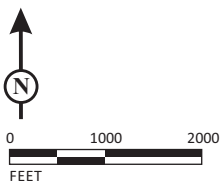


FIGURE 1

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SOURCE: Bing Maps

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The Seaclyff of Huntington Beach Inspired Senior Living
Project Location



FIGURE 2

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SOURCE: Bing Maps

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The Seacliff of Huntington Beach Inspired Senior Living
Existing Conditions

PROJECT DESCRIPTION:

The project would construct a three-story, approximately 281,000-square-foot (sf) State-licensed assisted living and memory care facility with 226 guest rooms on an approximately 6.57-acre portion of the approximately 11.29-acre site of the Seacliff Office Park (project site). Refer to Figure 1, Regional Location, for the project site’s location within the larger region. Figure 2, Existing Conditions, shows the existing conditions on the project site, including the locations of existing on-site structures.

In the existing condition, the project site is comprised of one parcel; upon project implementation, the project site would be subdivided into four distinct parcels. Pursuant to the Subdivision Map Act, a tentative parcel map (Tentative Parcel Map No. 2020-128) is being submitted, which would include four parcels (Parcels 1, 2, 3, and 4). Parcel 1 would include the assisted living and memory care facility, and Parcels 2, 3, and 4 would include the office buildings that would be retained. Figure 3, Conceptual Site Plan, shows the proposed boundaries of Parcels 1, 2, 3, and 4 on the project site. Table 1.A provides the proposed parcel sizes.

Table 1.A: Proposed Parcel Sizes and FAR

Parcel	Proposed Size	Proposed FAR
1	6.57 ac	0.98
2	1.12 ac	0.97
3	1.86 ac	0.68
4	1.74 ac	0.30

ac = acre(s)
FAR = Floor Area Ratio

Parcel 1

The licensed assisted living and memory care facility that would be constructed on Parcel 1 is considered a convalescent facility, which is a conditionally permitted use under the existing zoning designation. Therefore, a Conditional Use Permit (CUP) would be required. A CUP Application is also being submitted for a Type 47 Alcoholic Beverage Control (ABC) liquor license, which allows for the service of beer and wine and spirits on site. A CUP is also required to permit development on a site that has a grade differential greater than 3 feet (ft) between the low and high points. The 1.25-acre undeveloped area on Parcel 1 would be converted to a parking lot to provide additional parking spaces for the office park because implementation of the assisted living memory care facility on Parcel 1 would remove existing parking spaces for the office buildings. Design Review Board approval is also required.

Parcels 2, 3, and 4

Upon project implementation, four of the five existing office buildings would remain on Parcels 2, 3, and 4, and one building would be demolished. A Reciprocal Access and Parking Agreement is included as part of the proposed project to allow for reciprocal access for all parcels and for shared parking if necessitated by special events at the assisted living facility on evenings or weekends. The existing uses would not change upon project implementation, and they are allowable under the CO-Commercial Office zoning designation. The existing silo structure in Parcel 4 would be retained as is. As such, the uses on Parcels 2, 3, and 4 would be consistent with the CO-Commercial Office zoning designation.

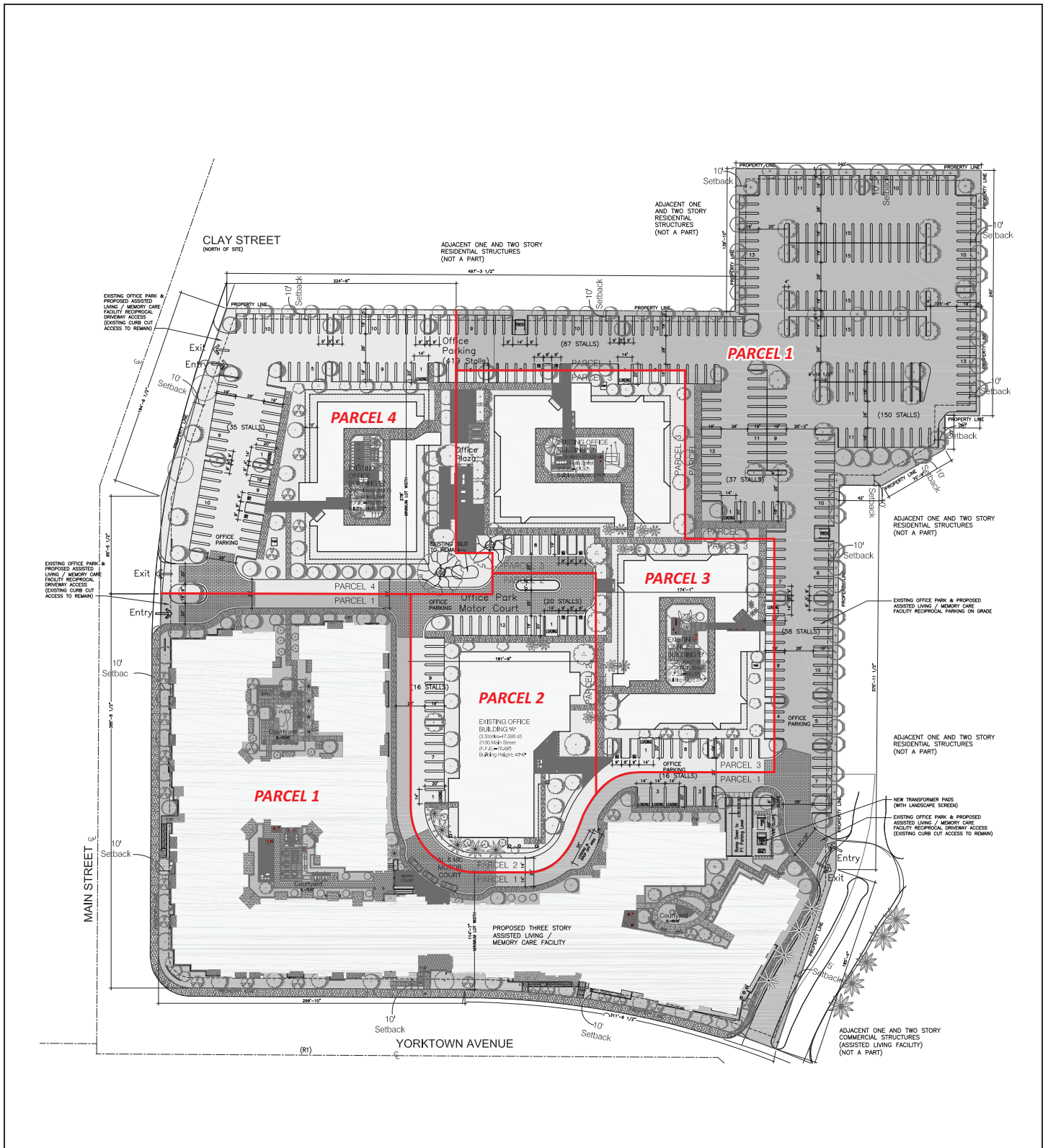
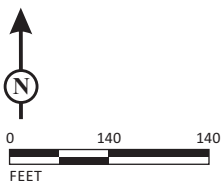


FIGURE 3

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SOURCE: Van Tillberg, Banvard & Soderbergh, AIA

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The Seaclyff of Huntington Beach Inspired Senior Living
Conceptual Site Plan

Project Characteristics

The proposed facility would include separate areas for assisted living and memory care and would include 197 assisted living guest rooms and 29 memory care guest rooms. All floor plans in the assisted living area would feature fully equipped kitchens and living and dining space. Monthly rates would include daily meals, weekly linen service, daily activities, transportation, access to common area amenities, and all utilities.

The project would provide approximately 46,300 sf of common areas for residents, including dining rooms, a bistro, a café, a club/activity room, a theater/chapel, a business center, an art studio, a hobby area, a library/computer room, and a wellness center. The facility would also include three internal courtyards providing a putting green and barbeque, swimming pool, and sitting areas.

According to the project Applicant, it is anticipated that the majority of residents would be comprised of individuals over the age of 80 (with an average entry age of 84), who would relocate to the facility from within a 5- to 7-mile radius (or have relatives within a 5- to 7-mile radius). The facility would be staffed 24 hours per day, 7 days per week by approximately 105 employees. At full occupancy, the facility would employ approximately 50 employees during the 6:30 a.m. to 2:30 p.m. shift, 40 employees during the 2:30 p.m. to 10:30 p.m. shift, and 15 employees during the 10:30 p.m. to 6:30 a.m. shift. The majority of on-site staff would work within the facility's Health Care services and Food and Beverage services. Other departments requiring on-site employees include maintenance, housekeeping, activities, sales, marketing, administrative, and drivers.

The facility would be licensed by the California Department of Social Services, Community Care Licensing Division (CCLD) per California Code of Regulations (CCR) Title 22, Division 6, Chapter 8 for "Residential Care Facilities for the Elderly." The State would enforce laws and regulations governing the guest rooms, including a building inspection prior to opening and through periodic inspections during operations.

The development of the assisted living and memory care facility would require the demolition of one of the five existing office buildings (Building E) as well as the removal of the surface parking on the southern half of the site. The other four existing office buildings (Buildings A, B, C, and D) would remain in place. The project would also require the removal of a man-made water feature in the center of the Seacliff Office Park.

The assisted living and memory care facility building would include a subterranean parking structure with 238 parking stalls. The surface parking removed to accommodate the development of the assisted living and memory care facility would be replaced on the undeveloped area in the northeast corner of the project site. As previously discussed, if special events at the assisted living and memory care facility on nights or weekends require additional parking, a Reciprocal Access and Parking Agreement would allow for shared parking and reciprocal access for all parcels.

Figure 3, Conceptual Site Plan, provides a detailed view of the site plan for the proposed assisted living and memory facility and the proposed reconfigurations to the Seacliff Office Park and its parking lots. Proposed reconfigurations include the demolition of one of the office buildings and the new overall site circulation design. Figure 4, Aerial View of Project Concept, provides a visual depiction of the proposed project's structures and other components.



The project site formerly contained 13 oil wells, which were previously capped and abandoned in 1989, prior to the development of the Seacliff Office Park. Though the project site is situated on an oil-resource area, there are no active oil wells on the site.

Architectural Design

The assisted living and memory care facility would be designed to reflect a contemporary style of architecture. Complementary colors and a variety of building materials such as cement, plaster, metal, porcelain, wood plank tiles, and natural stone accents would be incorporated to make the buildings both visually attractive and welcoming. The use of multilevel rooflines and contrasting color tones would break up the scale and massing of the building. The southwest corner of the building would include an architectural tower feature above the roof to create a sense of distinctness and visual appeal near the entry monument at the intersection of Main Street and Yorktown Avenue. Façades would contain a variety of materials and colors, including large stone veneer and aluminum storefront window façades between residential corridors to provide visual relief and diversity. Figure 5, Conceptual Renderings, provides the conceptual building renderings and the proposed architectural style and elements. Residential balconies for second- and third-floor units would be 6 ft in depth, with metal railings. First-floor patios would also be 6 ft in depth and would include privacy walls. With the exception of parapet walls and the architectural tower feature described above, the assisted living and memory care facility structure would not exceed the 40 ft height limit that applies to the project site.

Landscaping and Fencing

Landscaping for the proposed project would include a variety of tree and plant species in accordance with the requirements outlined in Section 211.06, CO, CG, and CV Districts – Development Standards, and Section 232, Landscape Improvements, in the City of Huntington Beach (City) zoning code. Figure 6, Conceptual Landscape Plan, provides the proposed landscape plan for the project. A variety of trees, shrubs, turf, and drought-tolerant landscaping is proposed along the perimeter of the project site, along the perimeter of the four office buildings that would remain, within the surface parking areas, and within the interior and common areas. Two eucalyptus trees adjacent to the existing silo structure would be retained and the other 89 existing on-site trees would be removed. As required by the City’s Interdepartmental Communication CI-74, the project would replace each mature, healthy tree that would be removed from the project site with two new trees (2:1 tree replacement ratio). All other trees would be replaced at a 1:1 tree replacement ratio. Upon project implementation, a total of 355 trees would be planted within the project site. The irrigation system for the landscaping plan would consist of low-volume spray heads or bubblers connected to an automatic irrigation control system with “Smart” controllers with rain sensors. No reclaimed water would be used for landscaping.

A low retaining wall would be installed along the western, northern, and southeastern perimeters of the assisted living and memory care facility. The existing perimeter along the project’s northern and eastern boundaries would remain intact. A tubular steel fence would be installed around the pool area within one of the facility’s courtyards, near the facility’s main entry, and along a landscaped area near the eastern side of the facility. A 4 ft high screening wall would shield the project’s heating, ventilation, and air conditioning (HVAC) units from view.

The project site would be developed with 10 ft setbacks from the property line throughout, with the exception of one 5 ft setback along Seabluff Drive.



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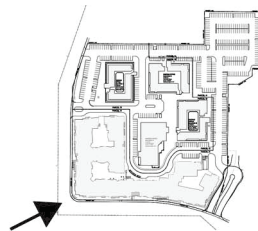


FIGURE 5
Page 1 of 7

*The Seacliff of Huntington Beach Inspired Senior Living
Conceptual Renderings*



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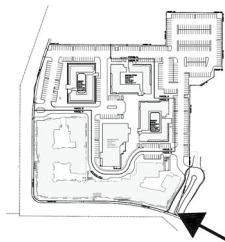


FIGURE 5
Page 2 of 7

SOURCE: Van Tillberg, Banvard & Soderbergh, AIA

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The Seacliff of Huntington Beach Inspired Senior Living
Conceptual Renderings



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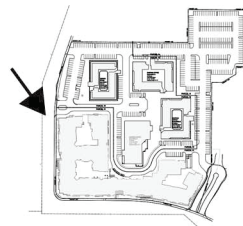


FIGURE 5
Page 3 of 7

*The Seaclyff of Huntington Beach Inspired Senior Living
Conceptual Renderings*



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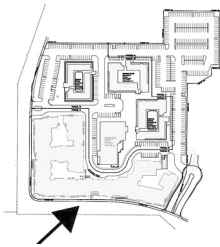


FIGURE 5
Page 4 of 7

SOURCE: Van Tillberg, Banvard & Soderbergh, AIA

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The Seacliff of Huntington Beach Inspired Senior Living
Conceptual Renderings



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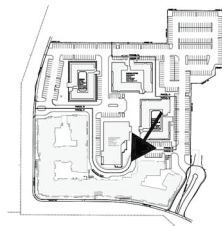


FIGURE 5
Page 5 of 7

The Seacliff of Huntington Beach Inspired Senior Living
Conceptual Renderings



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FIGURE 5
Page 6 of 7



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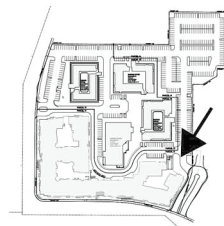
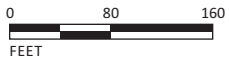


FIGURE 5
Page 7 of 7



FIGURE 6

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SOURCE: MJS Landscape Architecture

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*The Seaclyff of Huntington Beach Inspired Senior Living
Conceptual Landscape Plan*

Green Building Characteristics

The proposed project would be designed to meet sustainability goals, including the California Green Building Standards Code (CALGreen Code), Title 24 energy efficiency requirements, and Assembly Bill (AB) 1881 water efficient landscape requirements. The proposed project would also incorporate a number of energy and water conservation measures, green building features, and Low Impact Development (LID) design features.

Access, Circulation, and Parking

In the existing condition, the project site can be accessed by three driveways. A driveway on Main Street allows entry from northbound and southbound traffic along Main Street, and unrestricted entry from and exit to Main Street. A second driveway on Main Street provides right-in, right-out access to the northern portion of the project site from northbound Main Street. A third driveway, located on Seabluff Drive, allows unrestricted entry from and exit to Seabluff Drive. Seabluff Drive provides unrestricted access to Yorktown Avenue via an unsignalized driveway at the southeastern corner of the project site. These driveways would remain in operation during the life of the project to provide access to the project site.

Internal circulation within the project site would be provided by two-way drive aisles throughout the surface parking lots, and along the internal perimeter of the facility. Pedestrian access would be provided via sidewalks throughout Parcels 2, 3, and 4 and around the assisted living and memory care facility on Parcel 1. A passenger drop-off zone for the assisted living and memory care facility would be located in front of the main entrance on the northern side of the building. Refer to Figure 6, Conceptual Landscape Plan, for the circulation and access configuration.

As previously stated, a subterranean parking structure would be built beneath the assisted living and memory care facility. The ramp to the subterranean parking structure would be located at the northeastern corner of the assisting living and memory care facility building, near the driveway on Seabluff Drive. Parking for the office uses that would remain on Parcels 2, 3, and 4 would be provided in the remaining surface parking lots on Parcels 2, 3, and 4, with additional surface parking provided in the currently undeveloped area in the northeastern portion of the project site in Parcel 1. Refer to Table 1.B for a breakdown of how the various uses on Parcels 1, 2, 3, and 4 would comply with applicable parking requirements.

Table 1.B: Parking Requirements

Land Use	Parking Requirement	Units	Number of Required Parking Spaces	Number of Provided Parking Spaces
Parcel 1: Senior Facility (Proposed)				
Memory Care	0.60 space per bed	29 beds	17	238¹
Assisted Living	0.75 space per bed	254 beds	191	
Total			211¹	
Parcels 2, 3, and 4: Office (Existing)				
Office Building A	1 space per 300 sf	47,590 sf	158	427²
Office Building B	1 space per 300 sf	27,903 sf	93	
Office Building C	1 space per 300 sf	27,428 sf	92	
Office Building D	1 space per 300 sf	22,819 sf	76	
Total			427¹	
Parcels 1, 2, 3, and 4 Total			638	665
Surplus			27 spaces	

¹ Includes 3 loading spaces for the senior facility.

² Includes 8 loading spaces for the office uses.

sf = square foot/feet

As shown in Table 1.B, the proposed assisted living and memory care facility would require a total of 211 parking spaces; however, the subterranean parking structure would provide 238 parking spaces for the assisted living and memory care facility, an excess of 27 parking spaces. The subterranean parking structure would include 212 standard spaces, 9 Americans with Disabilities Act (ADA) compliant spaces, 2 ADA van-accessible spaces, and 12 spaces dedicated for electric vehicles. Table 1.B also shows that the remaining office uses on the project site would require 427 spaces. The existing and proposed surface parking areas would provide 427 total parking spaces for the on-site office uses.

Lighting

The proposed project would feature outdoor lighting to meet safety and orientation needs. There would be 42-inch-tall bollards lining pedestrian walkways and 10 ft tall pole lights located in common areas. There would be 14 ft tall pole lights placed uniformly throughout the surface parking areas and drive aisles. Throughout the site, accent lights would be placed facing down atop palm trees and facing up at the base of palm trees. Festival lights would line the recreation and common areas. Ceiling lights would be affixed to the roofs of metal trellis structures.

Lighting in public areas would be warmly colored, unobtrusive, and angled in a way that minimizes spill and glare. The level of lighting intensity would vary throughout the day, becoming less intense during non-operating hours. Lighting would be shielded and directed downward to avoid off-site light spillage.

Infrastructure

Water. The Utilities Division of the City's Public Works Department currently provides potable water service to the project site. The project would connect to the existing 10-inch asbestos cement pipe (ACP) water loop on the project site and be rerouted around the proposed assisted living and memory care facility building to connect to City water mains in Yorktown Avenue and Main Street.

Sewer. The Utilities Division of the City's Public Works Department currently provides sewer service to the project site. The existing sewer system would be intercepted and rerouted through the site to Seabluff Drive, avoiding the proposed assisted living and memory care facility building. The sewer would then run through the site to Seabluff Drive and run down Seabluff Drive to connect to the existing sewer main in Yorktown Avenue.

Drainage. The project site has a relatively flat topography. Stormwater runoff generally flows in two separate directions. The northerly portion of the project site currently drains to an inlet and catch basin that discharges into an existing 24-inch-diameter storm drain that connects to an existing 48-inch-diameter storm drain in the property to the north. These flows are ultimately conveyed to the regional flood control system prior to discharging into the Pacific Ocean. The southerly portion of the project site currently flows via gutters and sheet flow onto Yorktown Avenue, where the flows are intercepted by local storm drain systems and discharged into the Pacific Ocean.

Runoff from the northern side of the project site would continue to drain to the north to the existing storm drain system, and runoff from the southern side of the site would be redirected to an underground stormwater detention basin before being pumped to Yorktown Avenue. Before

entering the storm drain system to the north and the pump station to the south, required treatment flows would be diverted to Modular Wetlands biotreatment structures to be cleaned.

Utilities and Service Systems. Utilities for the proposed project would include electricity provided by Southern California Edison, natural gas provided by the Southern California Gas Company, telecommunications facilities (including telephone and fiber-optic lines), and cable services provided by third-party providers. The City of Huntington Beach contracts third-party services for solid waste collection, recycling, green waste collection, and composting services. Solid waste is taken to a transfer station in Huntington Beach, where it is processed and transported to the Frank Bowerman Landfill in Irvine. All new utility infrastructure for electricity, natural gas, telecommunications, and cable service that is not installed underground within the project site would be screened from public view with a minimum 3 ft wide landscaped area in accordance with Section 230.76 of the City's Zoning Code.

Construction

Construction Staging and Phases. It is anticipated that the construction period for the assisted living and memory care facility, subterranean parking garage, and surface parking area included in the proposed project would be approximately 34-38 months. Construction is anticipated to be phased so that it does not interrupt the office spaces and neighboring homes. The first construction phase would include reconfiguring the undeveloped area on Parcel 1 and landscaped areas to create the additional parking spaces required ahead of the demolition and clearing of the site for the assisted living and memory care facility. While the construction schedule is subject to change, it is anticipated that the peak of construction would occur between the 22nd and the 30th month of construction, with an average of 150 to 175 construction workers on site per day. Measures would be taken to promote car-pooling, and all construction employee parking would be contained on site.

Cut/Fill Quantities. Approximately 82 percent of the project site surface area would be graded. The volume of cutting would be 68,600 cubic yards (cy), and the volume of fill would be 12,600 cy, with a total export of 56,000 cy. Export would be hauled off site to an approved dump site.

Excavation. Due to the existing site topography, which varies across the site, the excavation depth would range between 10 ft and 18 ft below the existing ground surface. It is estimated that 52,604 cy of dirt would be excavated for construction of the subterranean parking structure.

ANTICIPATED APPROVALS AND PERMITS

It is anticipated that the proposed project would require the following approvals and permits:

- Design Review Board;
- Tentative Parcel Map No. 2020-128;
- Conditional Use Permit (CUP) for a Type 47 ABC liquor-license, which would allow for service of beer, wine, and spirits in the dining rooms, bistro, and café at the assisted living facility for residents and their guests;
- CUP for a convalescent facility use;

- CUP for development on a site that has a grade differential greater than 3 ft between the low and high points;
- Reciprocal Access and Parking Agreement;
- Grading, street and infrastructure permits;
- Utility permits, including sewer, water, and storm drain;
- Sign permits;
- Building permits; and
- Any other necessary discretionary or ministerial permits and approvals required for the construction or operation of the proposed project.

PROJECT DESIGN FEATURES

Project Design Features are specific design components of the proposed project that have been incorporated to reduce potential environmental impacts related to aesthetics and noise.

- **Aesthetics:**
 - Parking is located below grade within the project structure in order to minimize views of parking to the surrounding uses.
 - On-site entry/exit and parking structure entry/exit are screened from adjacent properties.
 - Building massing is concentrated along Main Street and Yorktown Avenue in order to create a buffer from the commercial street intersection and the surrounding residential developments to the north and east.
 - Landscaping along project site perimeters creates a green buffer between the project and surrounding developments.
 - Balcony units are located along Main Street, Yorktown Avenue, and the internal courtyards in order to retain privacy for existing developments to the north and east.
 - Mechanical equipment is located in the middle section of the roof and screened from view with parapet walls.
 - Neutral-toned materials are used for the exterior building finishes to enhance and unite the neighborhood's aesthetic quality.
- **Noise:**
 - Interior courtyards were designed to contain the active outdoor areas within the project, allowing the building to act as a buffer to shield adjacent surrounding residential developments.
 - Mechanical equipment is located in the middle portion of the roof to minimize equipment noise.

- Parking is located below grade within the project structure in order to minimize parking lot noise impacts.

SURROUNDING LAND USES AND SETTING

The project site is directly bordered on the north by the Pacific Ranch multi-family residential development. Huntington Beach City Hall is located to the south of the project site across Yorktown Avenue. The area east of the project site is developed with the Sunrise of Huntington Beach Assisted Living and Memory Care facility and the Pacific Ranch multi-family residential development. The Seacliff Village Shopping Center is located to the west of the project site across Main Street.

With the exception of an undeveloped 1.25-acre area in the northeast corner of the project site, the majority of the site is currently developed with four two-story office buildings and one three-story office building associated with the Seacliff Office Park, and an existing silo structure. Surface parking lots surround the office buildings, and a landscaped courtyard and water feature are situated in the center of the office buildings. Landscaping and vegetation line the perimeter of the project site, providing a barrier between the site and the adjacent roadways.

OTHER PREVIOUS RELATED ENVIRONMENTAL DOCUMENTATION: NONE.

OTHER AGENCIES WHOSE APPROVAL IS REQUIRED (AND PERMITS NEEDED) (i.e., permits, financing approval, or participating agreement)

- Pool permit from the Orange County Health Care Agency; and
- Type 47 license from the Department of Alcoholic Beverage Control (ABC).

HAVE CALIFORNIA NATIVE AMERICAN TRIBES TRADITIONALLY AND CULTURALLY AFFILIATED WITH THE PROJECT AREA REQUESTED CONSULTATION PURSUANT TO PUBLIC RESOURCES CODE SECTION 21080.3.1? IF SO, IS THERE A PLAN FOR CONSULTATION THAT INCLUDES, FOR EXAMPLE, THE DETERMINATION OF SIGNIFICANCE OF IMPACTS TO TRIBAL CULTURAL RESOURCES, PROCEDURES REGARDING CONFIDENTIALITY, ETC.?

The California Native American Tribes traditionally and culturally affiliated with the project area were invited to consult with the City. One tribe has requested consultation, and the consultation has concluded.

2.0 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 is “Potentially Significant Unless Mitigated,” as indicated by the checklist on the following pages.

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

3.0 DETERMINATION

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

_____ X _____

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

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

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, **nothing further is required.**

Hayden Beckman
Signature

09/09/20
Date

HAYDEN BECKMAN
Printed Name

SENIOR PLANNER
Title

4.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project. A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards.
2. All answers must take account of the whole action involved. Answers should address off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. “Potentially Significant Impact” is appropriate, if an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more “Potentially Significant Impact” entries when the determination is made, preparation of an Environmental Impact Report is warranted.
4. “Potentially Significant Impact Unless Mitigated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). Earlier analyses are discussed in Section 6.0 at the end of the checklist.
6. References to information sources for potential impacts (e.g., general plans, zoning ordinances) have been incorporated into the checklist. A source list has been provided in Section 6.0. Other sources used or individuals contacted have been cited in the respective discussions.
7. The following checklist has been formatted after Appendix G of Chapter 3, Title 14, California Code of Regulations, but has been augmented to reflect the City of Huntington Beach’s requirements.

(Note: Standard Conditions of Approval - The City imposes standard conditions of approval on projects which are considered to be components of or modifications to the project, some of these standard conditions also result in reducing or minimizing environmental impacts to a level of insignificance. However, because they are considered part of the project, they have not been identified as mitigation measures. Applicable standard conditions are identified in the environmental impacts discussions of this document.

5.0 ENVIRONMENTAL ANALYSIS

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.1 AESTHETICS <i>Except as provided in Public Resources Code Section 21099, would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Impact Analysis:

- a) *Would the project have a substantial adverse effect on a scenic vista?*

Less Than Significant Impact.

Scenic vistas are viewpoints that provide expansive views of a highly valued landscape for the public’s benefit. Aesthetic components of a scenic vista include (1) scenic quality, (2) sensitivity level, and (3) view access. A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or “vista” of the scenic resource. Important factors in determining whether a proposed project would block scenic vistas include the project’s proposed height, mass, and location relative to surrounding land uses and travel corridors.

While the City of Huntington Beach’s (City) General Plan does not officially designate any scenic vistas within Huntington Beach, the City has identified scenic corridors that have notable aesthetic appeal for the community as a way to protect land adjacent to scenic highways. Refer to Response 5.1(b) for a discussion of scenic highways within the City. Unofficial scenic views within the City include views of the Pacific Ocean and the Bolsa Chica Ecological Reserve and panoramic views of the Pacific Ocean and Catalina Island from beach and shore areas, Pacific Coast Highway and surrounding local streets, and the Huntington Beach Municipal Pier. Scenic resources in the City include the Pacific Ocean and the adjacent beaches and viewpoints, the Bolsa Chica Ecological Reserve and Mesa, the Huntington Beach Municipal Pier, the Huntington Beach Wetlands, the Huntington Harbour, and the Huntington Beach Central Park urban forest.

No designated scenic vistas or scenic resources are visible from the project site. The project site is within an urbanized area predominantly developed with residential, commercial, civic, and office uses. The surrounding views comprise a developed urban and suburban environment that is built out. Existing development in the project vicinity includes multi- and single-family residential developments to the north and northeast; Sunrise of Huntington Beach (an assisted living and memory care facility), the Huntington Beach City Hall, and the Huntington Beach Police Department to the south and southeast; Huntington Beach High School to the southwest; and the Seacliff Village Shopping Center to the west across Main Street. Existing structures in the project's vicinity range from one to three stories in height, with the exception of the Huntington Beach City Hall, which is five stories (90 ft from grade) in height. Existing development in the area, particularly the Seacliff Village Shopping Center, is at a density and scale similar to that of the current multi-tenant office uses on the project site. Although the proposed assisted living and memory care facility would introduce a use that is more dense than current on-site uses and adjacent off-site uses, the density and scale are consistent with that of existing multi-family residential and assisted living development within the immediately surrounding area.

As stated previously, the project site is developed and contains five office buildings with surface parking lots. The proposed project includes the demolition of one of the five existing office buildings, and the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. The assisted living and memory care facility, including parapet walls and the architectural tower feature, would not exceed the 40 foot (ft) structure height limit, 44 ft parapet wall height limit, and 50 ft tower height limit that apply to the project site, as described in Chapter 211.06 - Development Standards of the City's Zoning Ordinance. As such, the three-story facility would be within the existing height range of structures in the project's vicinity, and would not be significantly taller than the existing structures in the vicinity of the site. As previously discussed, the density of the project would also be similar to that of the surrounding densities. Because scenic vistas within the City are not visible from the project site, the development would not obstruct any scenic views. Therefore, the proposed project would have a less than significant impact on scenic vistas. No mitigation is required.

- b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Less Than Significant Impact.

The California Department of Transportation (Caltrans) Landscape Architecture Program administers the Scenic Highway Program, contained in the Streets and Highway Code Sections 260-263. Scenic highways are classified as either Officially Listed or Eligible. There are no Officially Listed or Eligible State-designated Scenic Highways in Huntington Beach.¹ As such, the project would not impact scenic resources within a State-designated Scenic Highway.

The City of Huntington Beach Circulation Element (2017) identifies Pacific Coast Highway as an informal scenic highway and a major urban scenic corridor. The project site is located approximately 1.25 miles northeast of Pacific Coast Highway and is not visible due to intervening land uses. Main Street, south of the intersection with Yorktown Avenue, is a City-designated

¹ California Department of Transportation (Caltrans). Scenic Highways System Lists: Eligible and Officially Designated State Scenic Highways (XLSX). Website: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> (accessed April 26, 2020).

landscape corridor. Per the City’s Circulation Element, landscape corridors are corridors requiring specific signage, landscaping, and features to reinforce the design continuity of the area. As shown on Figure 6, Conceptual Landscape Plan, the project would feature landscaped areas along all project boundaries, including the boundary along Main Street, which would complement the visual aesthetics of the landscape corridor south of Yorktown Avenue.

As stated previously, there are no Officially Listed or Eligible State-designated Scenic Highways in Huntington Beach. Additionally, no scenic rock outcroppings are located within the project limits. Therefore, the proposed project does not have the potential to damage scenic resources within a State Scenic Highway, and no mitigation would be required.

- c) *Would the project in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less Than Significant Impact.

The project site is currently developed with five multi-tenant office buildings and an associated parking lot. The project site is located within an urbanized area predominantly developed with residential, commercial, civic, and office uses. In the existing condition, the project site contains a variety of trees and ornamental landscaping within the surface parking lots and surrounding the on-site office buildings. The project includes the demolition of one of the five office buildings, a new three-story assisted living facility with a subterranean parking garage, a new surface parking area, and on-site landscaping and utility improvements. As discussed below, the proposed project would not conflict with applicable zoning and General Plan regulations governing scenic quality.

Zoning. The project site is currently zoned CO – Commercial Office. The licensed assisted living and memory care facility that would be constructed on Parcel 1 is considered a convalescent facility, which is a conditionally permitted use under the existing zoning designation. Therefore, a Conditional Use Permit (CUP) would be required. The uses on Parcels 2, 3, and 4 would not change as a result of project implementation, and the existing uses are allowable under the CO – Commercial Office zoning designation.

Title 21 of the Zoning Code outlines permitted uses and minimum development standards allowed in the Commercial Office zone. One purpose of these regulations is to ensure compliance with appropriate standards related to aesthetics and scenic quality. The proposed project is consistent with all applicable development standards of Chapter 211 of the HBZSO, including the following standards applicable to non-residential developments in the CO – Commercial Office zone:

- A minimum lot area of 10,000 square feet (sf)
- A minimum lot width of 100 ft
- Minimum front, side, street side, and rear setbacks of 10 ft, 5 ft, 10 ft, and 5 ft respectively, and a 10 ft setback along a side or rear property line abutting a residential district
- A maximum structure height of 40 ft, with exceptions allowing up to 44 ft for parapet walls and 50 ft for towers

- A maximum Floor Area Ratio (FAR) of 1.0
- Minimum site landscaping of 8 percent

Additional development standards require compliance with basic requirements for off-street parking and loading, fencing and walls, screening of mechanical equipment, undergrounding of public utilities, signage, and conformance to air and water quality performance standards. The proposed project is consistent with all applicable development standards. Parcel 1 is 286,053 sf and approximately 115 ft wide. Parcel 2 is 49,691 sf and approximately 182 ft wide. Parcel 3 is 81,550 sf and approximately 174 ft wide. Parcel 4 is 74,473 sf and approximately 225 ft wide. As such, each Parcel exceeds the minimum lot area requirement of 10,000 sf and minimum lot width of 100 ft. Parcel 1, which does not abut any residential districts, would exceed the minimum setback standards of 10 ft on the front and street side, and 5 ft on the side and rear. Parcels 2, 3, and 4 would exceed the minimum setback standards of 10 ft on all sides, due to their location adjacent to residential districts. Upon project implementation, Parcels 1, 2, 3, and 4 would have a FAR of 0.98, 0.96, 0.68, and 0.31, respectively. As such, a FAR of 1.0 would not be exceeded on any of the four parcels. The structure would not exceed the allowable height maximum of 40 ft, with the exception of the parapets, which would not exceed the height limit of 44 ft, and the tower, which would not exceed the height limit of 50 ft. Landscaping on each parcel would range from 20 percent to 40 percent of the surface area, which would exceed the minimum landscaping requirement of 8 percent.

As shown on Figure 5, Renderings, ground-floor residences would feature a solid masonry wall along the edge of patios. These walls would be comprised of stone masonry or concrete, depending on their location within the development, and would not exceed 3.5 ft in height where they are within 15 ft of a street. All new utility infrastructure for electricity, natural gas, telecommunications, and cable service that is not installed underground within the project site would be screened from public view with a minimum 3 ft wide landscaped area in accordance with Section 230.76 of the City's Zoning Code.

General Plan. According to the General Plan Land Use Element (2017), the project site has a land use designation of Commercial - Office (CO). This land use designation provides for professional offices and ancillary commercial services, and allows a Floor Area Ratio (FAR) up to 1.0. As stated previously, Parcels 1, 2, 3, and 4 would have a FAR within the allowable FAR range for this land use designation.

The Land Use Element includes goals and policies related to urban design and aesthetics. The project would be consistent with the applicable Land Use Element goal related to aesthetics and scenic quality:

Goal LU-7: Neighborhoods, corridors, and community subareas are well designed, and buildings, enhanced streets, and public spaces contribute to a strong sense of place.

The construction materials, colors, and proposed landscaping would improve site conditions and enhance views of the site from adjacent properties (Goal LU-7). The southwest corner of the building would include a distinct architectural tower feature above the roof to create visual appeal and a sense of place near the entry monument at the intersection of Main Street and Yorktown Avenue (Goal LU-7). Façades would contain a variety of materials and colors, including large stone veneer and aluminum storefront window façades between residential corridors, which would provide visual relief and diversity (Goal LU-7). Further, the design of the proposed development

would be compatible with the existing style of the surrounding neighborhood and would comply with the City's Urban Design Guidelines.² Refer to Figure 5, Conceptual Renderings, for the proposed architectural style and elements.

Summary. The proposed project would be consistent with all Zoning Code development standards and General Plan goals and policies pertaining to the visual character of the proposed facility. Overall, improvements associated with the proposed project would improve the existing visual character of the project site and would enhance the visual interest and character of the project site and the surrounding area. For the reasons stated above, the proposed project would not degrade the visual character of the planning area or conflict with applicable zoning and General Plan regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

- d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less Than Significant Impact.

The impact of nighttime lighting depends on the type of use affected, the proximity to the affected use, the intensity of specific lighting, and the background or ambient level of the combined nighttime lighting. Nighttime ambient light levels may vary considerably depending on the age, condition, and abundance of point-of-light sources present in a particular view. The use of exterior lighting for security and aesthetic illumination of architectural features may contribute to ambient nighttime lighting conditions.

The spillover of light onto adjacent properties has the potential to interfere with certain activities, including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. Light-sensitive uses include residential, some commercial and institutional uses, and, in some situations, natural areas. Changes in nighttime lighting may become significant if a proposed project substantially increases ambient lighting conditions beyond its property lines or if the project lighting routinely spills over into adjacent light-sensitive land use areas.

Reflective light (glare) is caused by sunlight or artificial light reflecting from finished surfaces (e.g., window glass) or other reflective materials. Glass and other materials can have many different reflectivity characteristics. Buildings constructed of highly reflective materials from which the sun reflects at a low angle commonly cause adverse glare. Reflective light is common in urban areas. Glare generally does not result in the illumination of off-site locations but does result in a visible source of light viewable from a distance.

The project site is currently developed with five multi-tenant office buildings and a surface parking lot. The project site is surrounded by a variety of commercial, civic, and residential uses. Sensitive receptors subject to potential light and glare impacts in the vicinity of the project site include adjacent residential uses immediately adjacent to the north and the northeast.

Existing sources of light on the project site include pole-mounted lighting in the surface parking areas. Other sources of light in the vicinity of the project site include exterior lighting from adjacent properties, streetlights, and vehicle headlights. The development of a three-story assisted living and memory care facility and surface parking lot would introduce sources of light to the project

² On August 13, 2020, the City's Design Review Board recommended approval of the project.

site that are typical of commercial and office uses and similar to existing light sources. Outdoor lighting proposed as part of the project would include 42-inch-tall bollards lining pedestrian walkways and 10 ft tall pole lights located in common areas. Fourteen ft tall pole-mounted lights would be placed uniformly throughout the surface parking lots and drive aisles. Accent lights would be placed facing downward atop palm trees and facing up at the base of palm trees. Festival lights would line the recreation and common areas, and ceiling lights would be affixed to roofs of metal trellis structures. All on-site outdoor lighting would be placed to meet safety and orientation needs. Lighting in public areas would be warmly colored, unobtrusive, and angled in a way that minimizes spill and glare. The level of lighting intensity would vary throughout the day, becoming less intense during non-operating hours. Lighting would be shielded and directed downward to avoid off-site light spillage. The proposed assisted living facility would replace an existing office building and would not introduce a significant new source of light on this portion of the project site.

The surface parking lot that would be constructed on the undeveloped portion of Parcel 1 would feature pole-mounted lighting, thereby introducing a new source of light on the northeastern portion of the project site, near sensitive residential receptors. As a condition of project approval, the proposed project would be required to comply with HBZSO Section 231.18 and lighting standards described in the Photometric Plan. Although the proposed project is not anticipated to incorporate design features that would result in excessive lighting or the generation of glare on the site, the Photometric Plan and any other lighting plans are subject to City review and approval as part of the site plan review process. Implementation of Standard Condition AES-1 as a condition of project approval would ensure that impacts associated with new lighting would be less than significant. No mitigation is required.

Standard Conditions (SCs) and Mitigation Measures (MMs). No mitigation is required; however, implementation of the following standard condition would further reduce potential impacts related to glare and lighting.

SC AES-1 Photometric Plan. Prior to issuance of any building permits, the project Applicant shall prepare a Photometric Plan for review and approval by the City of Huntington Beach (City) Director of the Community Development, or designee. The Photometric Plan shall be prepared by a qualified engineer and shall demonstrate that the intensity and direction of all on-site outdoor lighting avoid spillage and glare onto adjacent properties.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
<p>5.2 AGRICULTURE AND FORESTRY RESOURCES</p> <p><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 sign significant environmental impacts, 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>				
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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

Impact Analysis:

- a) *Would the project 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 and located in an urbanized area predominantly developed with residential, commercial, and office uses. As stated previously, the project site is developed with five office buildings and surface parking areas. The proposed project includes the demolition of one of the five existing office buildings, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. The site is currently zoned as CO – Commercial Office; it is not zoned for agricultural uses. The project site is in an urbanized area that is not used for agriculture, and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the California Department of Conservation’s (DOC) Important Farmland Finder, where the project site is designated as Urban and Built-Up Land.³ As such, the proposed project would not impact designated farmlands. No mitigation is required.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact.

As stated previously, the project site is developed and contains five office buildings with surface parking lots. The proposed project includes the demolition of one of the five existing office buildings, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. The site is currently zoned as CO – Commercial Office, and is not zoned for agricultural uses. Moreover, the site is not used for agricultural purposes, nor are there Williamson Act contracts in effect for the site. As a result, the proposed project will not conflict with existing zoning for agricultural uses or Williamson Act contracts. No mitigation is required.

c) *Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?*

No Impact.

As stated previously, the project site is developed with five office buildings and surface parking lots. The proposed project includes the demolition of one of the five existing office buildings, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. The site is currently zoned as CO – Commercial Office, and is not designated or zoned as forest land, timberland, or for timberland production. As a result, the proposed project would not result in impacts on timberland resources. No mitigation is required.

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

No Impact.

The project site is in an urban, built-out portion of the City. There are no forest or timberland resources on or in the vicinity of the project site. The proposed project would not convert forest land to a non-forest use. Likewise, the project site would not contribute to environmental changes that could result in the conversion of forest land to non-forest use. Therefore, the project would

³ California Department of Conservation (DOC). 2016. California Important Farmland Finder. Website: <https://maps.conservacion.ca.gov/DLRP/CIFF/> (accessed April 22, 2020).

not result in impacts to the loss of forest land or the conversion of forest land to non-forest uses. No mitigation is required.

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

No Impact.

The project site is in an urban, built-out portion of the City. As stated previously, the project site is developed with five office buildings and surface parking lots. The proposed project includes the demolition of one of the five existing office buildings, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. The project site is not zoned for agricultural purposes, nor is it designed or zoned for forest land. The proposed project would not convert farmland to a non-agricultural use or convert forest land to a non-forest use. Likewise, the proposed project would not contribute to environmental changes that could result in conversion of farmland to a non-agricultural use or the conversion of forest land to a non-forest use as it is located within a built-out urban area. Therefore, no impacts to farmland or forest land would occur as a result of project implementation, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.3 AIR QUALITY. <i>The City has identified the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

The following section is based on the California Emissions Estimator Model (CalEEMod) output prepared by LSA (August 2020) and provided in Appendix A.

Discussion:

The proposed project is located within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) is the regional government agency that monitors and regulates air pollution within the Basin. The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these Acts, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), particulate matter (PM₁₀), sulfur dioxide (SO₂), and lead (Pb). Secondary criteria pollutants include ozone (O₃), and fine particulate matter (PM_{2.5}). These ambient air quality standards are levels of contaminants, which represent safe levels that avoid specific adverse health effects associated with each criteria pollutant.

The SCAQMD is in non-attainment for the federal and State standards for O₃ and PM_{2.5}. In addition, the Basin is in non-attainment for the State PM₁₀ standard and in attainment/maintenance for the federal PM₁₀, CO, and NO₂ standards. To meet these standards, the SCAQMD has established project-level thresholds for VOC, NO_x, and PM_{2.5}. The SCAQMD has established thresholds of significance for criteria pollutant emissions generated during both construction and operation of projects as shown in Table 5.3.A below.

Table 5.3.A: SCAQMD Construction and Operation Thresholds of Significance (lbs/day)

	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction Thresholds	75	100	550	150	150	55
Operation Thresholds	55	55	550	150	150	55

Source: South Coast Air Quality Management District (1993).

CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides

PM_{2.5} = fine inhalable particulate matter less than 2.5 microns in size

PM₁₀ = coarse inhalable particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOCs = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of the emission thresholds below are considered potentially significant by the SCAQMD.

In addition, the SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.⁴ This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance to the project. The SCAQMD defines structures that house persons (e.g., children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise) or places where they gather as sensitive receptors (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields).

⁴ South Coast Air Quality Management District (SCAQMD). 2008. *Final Localized Significance Threshold Methodology*. July.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the nearby North Coastal Orange County area (SRA 18). SCAQMD provides LST screening tables for 25, 50, 100, 200, and 500-meter source-receptor distances.

Impact Analysis:

- a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact.

The SCAQMD and Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The applicable AQMP is the SCAQMD Final 2016 AQMP. The 2016 AQMP incorporates local land use assumptions and regional growth projections developed by SCAG to estimate stationary and mobile source emissions associated with projected population and planned land uses. If a new land use is consistent with the local and the regional growth projections adopted in the 2016 AQMP, then the added emissions are considered to have been evaluated, are contained in the 2016 AQMP, and would not conflict with or obstruct implementation of the regional 2016 AQMP.

The proposed project is not considered a project of Statewide, regional, or area-wide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential development of more than 500 dwelling units, shopping center or business establishments employing more than 1,000 persons or encompassing more than 500,000 square feet (sf) of floor space, etc.) as defined in the California Code of Regulations (CCR) (Title 14, Division 6, Chapter 3, Article 13, §15206(b)).

As discussed above, for a project to be consistent with the 2016 AQMP, the pollutants emitted from project operation should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projection. Because the AQMP is based on local General Plans, projects that are deemed consistent with a specific General Plan are usually found to be consistent with the AQMP.

As previously mentioned in the Project Description, five office buildings are currently operational on the project site. Construction of the proposed project would involve the removal of one of the on-site office buildings (2120 Main Street) and construction of a 226-dwelling unit assisted living and memory care facility. The project site is zoned CO – Commercial Office; convalescent facilities are a conditionally allowable use under the CO-Commercial Office zoning designation. According to the General Plan Land Use Element (2017), the project site has a land use designation of Commercial - Office (CO). Therefore, the proposed project is consistent with the City’s land use and zoning designation. In addition, as discussed below, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Operational emissions associated with the proposed project would also not exceed SCAQMD established significance thresholds for VOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5} emissions. Therefore, the proposed project is consistent with the 2016 AQMP. Impacts would be less than significant, and no mitigation is required.

- b) *Would the project 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?*

Less Than Significant Impact.

The Basin is currently designated non-attainment for the federal and State standards for O₃ and PM_{2.5}. In addition, the Basin is in non-attainment for the State PM₁₀ standard. The Basin's non-attainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in non-attainment of ambient air quality standards (AAQS). Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by demolition, site preparation, grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, VOC, directly-emitted PM_{2.5} or PM₁₀, and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Project construction activities would include site preparation and parking lot paving, demolition, grading, building construction, architectural coating, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the project Applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:

- Water active sites at least three times daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_x, NO_x, VOCs and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the proposed project using the most recent version of the CalEEMod, Version 2016.3.2, consistent with SCAQMD recommendations. Construction of the proposed project would require the export of approximately 56,000 cubic yards (cy) of soil and demolition of an existing 22,712 sf office building (2120 Main), which were included in CalEEMod. In addition, on-road construction worker and truck trips in CalEEMod were adjusted based on the construction trip generation summary prepared for the proposed project (LSA 2020). Other precise details of construction activities are unknown at this time; therefore, default assumptions (e.g., construction equipment) from CalEEMod were assumed. This analysis also assumes that the proposed project would utilize Tier 2 construction equipment, which was included in CalEEMod. The proposed project would begin construction in February 2021 and would occur for approximately 30 months until July 2023. Table 5.3.B identifies the maximum daily emissions associated with construction activities during each phase.

Table 5.3.B: Short-Term Regional Construction Emissions

Construction Phase	Maximum Daily Regional Pollutant Emissions (lbs/day)							
	VOCs	NO _x	CO	SO _x	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}
Site Preparation/ Parking Lot Paving	2.4	59.1	42.2	0.1	7.6	1.6	4.0	1.6
Demolition	1.6	41.1	27.3	0.1	1.5	0.9	0.3	0.9
Grading	2.1	57.0	32.5	0.1	4.0	1.1	1.7	1.1
Building Construction	2.1	42.6	25.4	0.1	29.7	1.0	7.4	1.0
Architectural Coating	18.4	10.6	10.2	0.1	2.9	0.1	0.8	0.1
Paving	1.2	23.3	19.2	<0.1	0.6	0.7	0.2	0.7
Peak Daily Emissions	19.6¹	59.1	42.2	0.1	30.7		8.4	
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0		55.0	
Significant?	No	No	No	No	No		No	

Source: Compiled by LSA (August 2020).

¹ Peak daily emissions of VOCs occur during overlap of the Architectural Coating and Paving Phases.

CO = carbon monoxide
lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = fine inhalable particulate matter less than 2.5 microns in size

PM₁₀ = coarse inhalable particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOCs = volatile organic compounds

As shown in Table 5.3.B, construction emissions associated with the project would not exceed the SCAQMD's thresholds for VOC, NO_x, CO, SO_x, PM_{2.5}, and PM₁₀ emissions. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State AAQS. Impacts would be less than significant, and no mitigation is required.

Operational Emissions. Long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources. Area sources include architectural coatings, consumer products, and landscaping. Energy source emissions result from activities in buildings for which electricity and natural gas are used. Mobile-source emissions are from vehicle trips associated with operation of the project.

PM₁₀ emissions result from running exhaust, tire, and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM₁₀ occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. The primary sources of energy demand for the proposed project would include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators or computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than conventional sources. The proposed project would comply with the 2019 the California Green Building Standards Code (CALGreen Code), which was accounted for in the analysis.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of architectural coatings, consumer products, and landscaping equipment. This analysis assumes that the proposed project would not include any wood-burning hearths.

Long-term operation emissions associated with the proposed project were calculated using CalEEMod. Trip generation rates used in CalEEMod for the proposed project were based on the project's trip generation estimates. The proposed project would generate approximately 736 average daily trips (ADT), resulting in 310 net new ADT (LSA 2020). In addition, as identified above, the proposed project would include the demolition of an existing 22,712 sf office building. Therefore, this analysis provides the net new operational emissions associated with the proposed project. The project's net new operational emissions are shown in Table 5.3.C, below.

The results shown in Table 5.3.C indicate the proposed project would not exceed the significance criteria for daily VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} emissions. The table also shows that the net increase in criteria pollutants is minimal and does not exceed the SCAQMD significance criteria. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State AAQS, and impacts would be less than significant. No mitigation is required.

Table 5.3.C: Project Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Existing Operational Emissions						
Existing Area Sources	0.6	<0.1	<0.1	0.0	<0.1	<0.1
Existing Energy Sources	<0.1	0.1	0.1	<0.1	<0.1	<0.1
Existing Mobile Sources	0.9	4.3	10.8	<0.1	3.1	0.9
Total Existing Emissions	1.5	4.4	10.9	<0.1	3.1	0.9
Proposed Project Operational Emissions						
Project Area Sources	7.1	3.4	20.0	<0.1	0.4	0.4
Project Energy Sources	0.1	0.6	0.3	<0.1	0.1	0.1
Project Mobile Sources	1.2	5.0	15.9	0.1	5.4	1.5
Total Project Emissions	8.4	9.0	36.2	0.1	5.9	2.0
Net New Operational Emissions	6.9	4.6	25.3	0.1	2.8	1.1
SCAQMD Thresholds	55.0	55.0	550.0	150.0	150.0	55.0
Exceeds?	No	No	No	No	No	No

Source: Compiled by LSA (August 2020).

CO = carbon monoxide
lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOC = volatile organic compounds

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact.

LSTs are developed based upon the size or total area of the emissions source from the construction equipment activities, the ambient air quality levels in each SRA in which the emission source is located, and the distance to the sensitive receptor. The nearest residential homes (i.e., single-family residences) are located approximately 25 ft north of the project site. LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each SRA. As identified above, for the proposed project, the appropriate SRA for the LST is SRA 18 (North Coastal Orange County).

LSTs only apply to on-site CO, nitrogen dioxide (NO₂), PM₁₀, and PM_{2.5} emissions during construction and operation. Screening-level analysis of LSTs is only recommended for construction activities at project sites that are approximately 5 acres or less. The total construction surface area portion of the project site would be 6.57 acres; however, the maximum daily disturbance to the proposed project site on any given day would be 3 acres, during the grading phase.⁵ Therefore, the 3-acre thresholds were used for construction of the proposed project. The maximum 5-acre thresholds would apply to operational activities associated with the proposed project.

⁵ Based on the SCAQMD Fact Sheet, the daily disturbance areas are based on the number of construction equipment estimated for daily use. CalEEMod estimates for the maximum number of equipment during the Grading phase would not exceed the 3-acre per day threshold.

Localized significance is determined by comparing the on-site-only portion of the construction and operational emissions with emissions thresholds derived by the SCAQMD to ensure that pollutant concentrations at nearby sensitive receptors would be below the LST thresholds established by the SCAQMD. Tables 5.3.D and 5.3.E indicate the construction and operational LST analyses of the CalEEMod results.

Table 5.3.D: Project Localized Construction Emissions

Source	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	53.8	40.3	8.7	25.5
LST Thresholds	153.0	1,121.0	9.3	6.3
Significant?	No	No	No	No

Source: Compiled by LSA (August 2020).

SRA 18, based on 3-acre construction disturbance daily area.

CO = carbon monoxide

PM₁₀ = particulate matter less than 10 microns in size

lbs/day = pounds per day

PM_{2.5} = particulate matter less than 2.5 microns in size

LST = localized significance threshold

SRA = Source Receptor Area

NO_x = nitrogen oxides

Table 5.3.E: Project Localized Operational Emissions

Source	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	3.7	20.8	0.6	0.4
LST Thresholds	197.0	1,711.0	4.0	2.0
Significant?	No	No	No	No

Source: Compiled by LSA (August 2020).

SRA 18, based on 5-acre operational daily area.

CO = carbon monoxide

PM₁₀ = particulate matter less than 10 microns in size

lbs/day = pounds per day

PM_{2.5} = particulate matter less than 2.5 microns in size

LST = localized significance threshold

SRA = Source Receptor Area

NO_x = nitrogen oxides

As detailed in Tables 5.3.D and 5.3.E, emissions would not exceed LST thresholds. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations.

Although project-level NO_x emissions would generate ozone precursor emissions, as identified in Tables 5.3.D and 5.3.E, above, these levels would not exceed any established SCAQMD daily emission thresholds. The project's peak operational on-site NO_x emissions amount to approximately 3.7 pounds per day. Due to the incremental size of the proposed project, the level of emissions is not sufficiently high to use a regional modeling program to correlate health effects on a basin-wide level. On a regional scale, the quantity of emissions from the project is incrementally minor. Because SCAQMD has not identified an accurate method to quantify health impacts from small projects, and due to the size of the project, it is speculative to assign any specific health effects to small project-related emissions. Therefore, impacts related to substantial pollutant concentrations for construction and operation would be less than significant. No mitigation is required.

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

Less Than Significant Impact.

Heavy-duty equipment on the project site during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances 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 proposed uses are not anticipated to emit any objectionable odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and this impact would be less than significant. No mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.4 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 Wildlife or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X

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?				X
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The following section is based on the *Biological Resources Memorandum* (May 2020a) and the *Addendum to the Biological Resources Memorandum* (August 2020b), prepared by LSA and provided in Appendix B.

Discussion:

The proposed project’s potential impacts on biological resources were evaluated based on a review of existing site conditions and land uses, as well as a literature search (i.e., the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database [CNDDDB], the California Native Plant Society’s RareFind, and the United States Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation databases). LSA conducted a site visit on March 30, 2020, to assess the biological resources within the project site. LSA biologists also conducted a bat roosting assessment on April 26, 2020, and a nighttime bat acoustic and emergence survey on April 30, 2020. An Addendum to the Biological Resources Memorandum was prepared in August 2020 to address changes to the project’s site plan, which would retain the existing silo structure. The Biological Resources Memorandum, which includes the results of these surveys, and the Addendum to the Biological Resources Memorandum, are provided in Appendix B.

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

Less Than Significant Impact.

The project site is developed with office buildings, an ornamental pond for landscape aesthetics, ornamental landscaping, a parking lot that surrounds the office buildings, and an undeveloped 1.26-acre dirt lot that appears to be regularly weeded for vegetation control.

Critical habitat and sensitive plant species are not present because the site has been developed for many years. Threatened and endangered species are not likely to use the site due to lack of suitable habitat. However, foraging and suitable nesting habitat may be present for species of special concern and common avian species, which are protected under California Fish and Game Code Section 3503 and the Migratory Bird Treaty Act (MBTA) and would be afforded protection if found nesting on site. Additionally, the existing silo structure and mature ornamental trees within the project site have the potential to be used for roosting by a variety of bat species, which are protected by California Fish and Game Code Sections 4150 and 86. However, an on-site bat survey conducted during the bat maternity season did not detect any bat activity, and determined that the existing silo structure and on-site trees do not serve as bat roosts. Because bat colonies exhibit high roosting site fidelity, the absence of bat activity on the project site during the bat surveys indicates that bat colonies do not currently exist on site, and bats are unlikely to use the existing silo structure or on-site trees as nesting sites. Therefore, removal of mature trees would not result in impacts to roosting bats or bat colonies. Retaining the existing silo structure as part of the project would not create new impacts to avian bird species, day-roosting bats, bat colonies, or other biological resources. No mitigation is required.

Standard Conditions (SCs) and Mitigation Measures (MMs). SC BIO-1 would reduce potential impacts to any nesting birds and would be implemented as a routine regulatory action.

SC BIO-1 General Nesting Bird Surveys and Avoidance of Active Nests. Any vegetation removal, construction, or grading activities, if possible, should take place outside of the active nesting bird season (i.e., February 1–August 31), when feasible. Should these activities take place during the active nesting bird season, a qualified biologist should conduct a nesting bird survey no more than 3 days prior to the start of such activities. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around any active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active, as determined by the qualified biologist.

Implementation of SC BIO-1 would ensure that potential direct and indirect project-related impacts on any nesting birds would be in accordance with applicable regional conservation plans and resource agency guidelines. With implementation of SC BIO-1, impacts on special-status species would be less than significant, and no further measures are required.

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

No Impact.

There is no riparian habitat within the project site. The existing vegetation within the project site is ornamental landscaping planted for aesthetic appeal. No sensitive natural communities (i.e., riparian habitat) would be adversely affected because there are none within the project site.

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

No Impact.

Most of the project site is within an office park. There are no records indicating that federally protected wetlands or jurisdictional drainage features exist (or historically existed) on the project site. No such resources were observed during the site visit. Therefore, no mitigation would be required.

- d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?*

Less Than Significant Impact.

The project site is used by foot and vehicle traffic and any wildlife species observed on the project site would be those species familiar with navigating developed and urban areas. The project would not interfere substantially with wildlife movement or migratory wildlife species. The on-site water feature in the courtyard of the office park likely supports year-round mallard (*Anas platyrhynchos*)

ducks, and the existing silo structure may provide refuge to a great horned owl (*Bubo virginianus*). As discussed in the Addendum to the Biological Resources Memorandum, by retaining the existing silo structure, there would be no additional impacts to biological resources associated with the project, including avian bird species. However, the on-site water feature would be removed as part of the project. Following the standard preconstruction nesting bird survey condition outlined in SC BIO-1, the project would not interfere substantially with the above-mentioned resident species or impede the use of any wildlife nursery sites.

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

Less Than Significant Impact.

As part of the project, two eucalyptus trees adjacent to the existing silo structure would be retained and the other 89 existing on-site trees would be removed. As required by the City's Interdepartmental Communication CI-74, the project would replace each mature, healthy tree that would be removed from the project site with two new trees (2:1 tree replacement ratio). All other trees would be replaced at a 1:1 tree replacement ratio (refer to CM BIO-2, below). Upon project implementation, a total of 355 trees would be planted within the project site. Therefore, with adherence to SC BIO-2, tree removal as part of the project would have a less than significant impact with regard to local policies related to biological resources. No mitigation is required.

Standard Conditions (SCs) and Mitigation Measures (MMs). SC BIO-2 would reduce potential impacts from tree removal and would be implemented as a routine regulatory action.

SC BIO-2 Tree Replacement. In accordance with the City of Huntington Beach's Interdepartmental Communication CI-74, each mature, healthy tree that would be removed from the project site would be required to be replaced with two new trees (2:1 tree replacement ratio). All other trees would be required to be replaced at a 1:1 tree replacement ratio.

- f) *Would the project 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.

There is no adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other habitat conservation plan in the City.⁶ The Orange County Transportation Authority's (OCTA) 2016 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which was adopted for the purpose of permitting freeway capital improvement projects proposed by OCTA and OCTA's habitat preserve, restoration, and monitoring activities, includes a Plan Area that covers the entirety of Orange County, including Huntington Beach.⁷ The City is not a party to the OCTA NCCP/HCP, and development activity within the City is not

⁶ City of Huntington Beach. General Plan Update. 2017. Program Environmental Impact Report – Volume II. Website: <https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf> (accessed May 14, 2020).

⁷ Orange County Transportation Authority (OCTA). 2016. Natural Community Conservation Plan/Habitat Conservation Plan, Figure 1-2. Website: https://www.fws.gov/carlsbad/HCPs/documents/OCTA_M2_NCCP_HCP_FPlan_1016.pdf (accessed May 14, 2020).

subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project, and the proposed project would not conflict with any local, regional, or State HCP or NCCP. The proposed project would not result in impacts related to conflict with any provisions of an HCP or NCCP, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.5 CULTURAL RESOURCES <i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

The following section is based on the *Cultural Resources Study* prepared by LSA (June 2020c) and the *Historic Resources Evaluation* prepared by LSA (September 2019) both of which are provided in Appendix C.

Impact Analysis:

- a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

No Impact.

CEQA defines a “historical resource” as a resource that meets one or more of the following criteria:

1. Is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register);
2. Is listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k);
3. Is identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or
4. Is determined to be a historical resource by a project’s Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]).

As detailed in the *Cultural Resources Study* (LSA, June 2020c, Appendix C), a records search was conducted on May 25, 2020, to identify historic resources in the project area. The records search was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System and California State University, Fullerton. The SCCIC houses the pertinent archaeological and historic site and survey information necessary to determine

whether cultural resources are known to exist within the project area. In addition, the Directory of Properties in the Historic Property Data File (which includes the National Register of Historic Places [National Register], National Historic Landmarks, and the California Register); California Historical Landmarks; the California Points of Historical Interest; the California Register; Five Views: An Ethnic Historic Site Survey for California; the National Register; and the California Inventory of Historic Resources were reviewed.

The results of the records search indicate that three previous cultural studies have been conducted within the project area. One cultural historic resource occurs within a 0.25-mile radius: the Huntington Beach High School Auditorium and Bell Tower. No previously recorded historical resources (as defined in §15065.5 of the *State CEQA Guidelines*) occur on the project site. A Historic Resources Evaluation was previously prepared to evaluate the historic-period existing silo structure on the project site (LSA, September 2019, Appendix C); however, the existing silo structure was determined to be ineligible for listing in the California Registry due to its insufficient association with a period of significance. As such, the existing silo structure does not represent a historic resource under CEQA.

Although the existing silo structure is not considered a historic resource under CEQA, there has historically been widespread community awareness and activism to preserve the silo structure. According to the Historic Resources Evaluation, the silo structure was constructed around 1930 by the corporate owners of the Northam Ranch House, the Huntington Beach Company. The Northam Ranch House (no longer in existence) was located approximately 600 ft southeast of the silo structure. The silo structure was used for grain and plant material storage. From a historic preservation standpoint, agricultural and industrial structures such as silos are not suitable for traditional preservation strategies used for buildings (e.g., adaptive reuse as loft apartments or retail space). However, one strategy that has succeeded at preserving these structures is to stabilize them and incorporate them into either a designed landscape or a building that exploits their inherent architectural appeal in a largely “as is” condition. This strategy has been applied to the existing silo structure, which will be preserved-in-place and would not be affected by project implementation.

Additional research indicates that surficial deposits of the project site will include Artificial Fill (as a result of previous construction for the existing buildings). Based on the previous level of disturbance on the site and the report from SCCIC, the proposed project would not cause a substantial adverse change in the significance of a historical resource. No impact would occur, and no mitigation is required.

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

Less Than Significant Impact. Based on the SCCIC records search and the City of Huntington Beach General Plan Historical and Cultural Resources Element, there are no known archaeological resources located on the project site. The project site has been disturbed previously for the existing buildings, and additional research indicates that surficial deposits of the project site include Artificial Fill. Additionally, the borings conducted for the Geotechnical Investigation indicate that the Artificial Fill is underlain by Old Paralac Deposits, Undivided, which date between 11,700 to 781,000 years ago. These deposits are unlikely to contain archaeologically sensitive materials. The project involves the demolition of one of the five existing multi-tenant office buildings and the construction of an assisted living and memory care facility, and the development of a current undeveloped lot containing scattered vegetation into a surface parking area. During site

preparation/grading activities, the potential to encounter unknown cultural resources is unlikely. It is anticipated that any discoveries would be paleontological in nature. As such, implementation of the proposed project would not cause a substantial adverse change in the significance of an archaeological resource, and no archaeological monitoring is recommended. Impacts would be less than significant, and no mitigation is required. As requested by Joyce Perry of the Juaneño Band of Mission Indians Acjachemen Nation – Belardes during the tribal consultation process, an archaeologist and a Native American monitor will be present on site during geotechnical trenching (refer to MM TCR-1 in Section 5.18, Tribal Cultural Resources, of this IS/MND).

- c) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant Impact. There are no known human remains interred on the project site, nor are there facts or evidence to support the idea that Native Americans or people of European descent are buried on the project site. However, while the potential to encounter human remains is low, buried and undiscovered human remains may be present below the ground surface. Disturbing human remains could violate the State’s Health and Safety Code as well as destroy the resource. In the unlikely event that human remains are encountered during ground-disturbing activities, the proper authorities would be notified in compliance with State Health and Safety Code Section 7050.5 and PRC Section 5097.98, which require that no further disturbance occur in the event of a discovery or recognition of any human remains on site and that the County Coroner be notified immediately. The contractor, Applicant, and County Coroner would be required to comply with the provisions of California Code of Regulations (CCR) Section 15064.5(e), PRC Section 5097.98, and Section 7050.5 of the State’s Health and Safety Code. Compliance with these provisions (specified in RCM CUL-1, below), would ensure that any potential impacts to unknown buried human remains would be less than significant by ensuring appropriate examination, treatment, and protection of human remains as required by State law.

Regulatory Compliance Measures and Mitigation Measures: No mitigation is required. However, RCM CUL-1 is a standard condition based on State law related to the discovery of human remains. This Regulatory Compliance Measure is applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts related to unknown buried human remains.

RCM CUL-1 Human Remains. In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the Orange County (County) Coroner notified immediately, consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). 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 (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place,

relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of Huntington Beach Director of Community Development, or designee, shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.6 ENERGY <i>Would the project:</i>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

The following section analysis is based on the California Emissions Estimator Model (CalEEMod) output prepared by LSA (August 2020) and provided in Appendix A.

Discussion:

The proposed project would increase the demand for electricity associated with lighting, cooking, laundry, electric car charging, and pool heating, and natural gas associated with lighting, heating, and appliances, and gasoline associated with project-related vehicle trips. The discussion and analysis provided below are based on data included in the CalEEMod output, which is provided in Appendix A.

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

Less Than Significant Impact.

Construction Energy Use. The anticipated construction schedule assumes that the proposed project would be built in approximately 30 months. The proposed project would require demolition, site preparation, grading, building construction, paving, and architectural coating activities during construction.

Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from non-renewable

year. Therefore, the proposed project would result in a net increase of 49,008 gallons of gasoline per year.

Table 5.6.A shows the estimated potential increased electricity and natural gas demand associated with the proposed project.

As shown in Table 5.6.A, the estimated potential net increase in electricity demand associated with the operation of the proposed project is 796,842 kilowatt hours (kWh) per year. In 2018, California consumed approximately 281,120 gigawatt-hours (GWh) (281,120,193,430 kWh).⁹ Of this total, Orange County consumed 20,197 GWh or 20,196,974,897 kWh. Therefore, operation of the proposed project would negligibly increase the annual electricity consumption in Orange County by less than 0.1 percent.

Also shown in Table 5.6.A, the estimated potential net increase in natural gas demand associated with the proposed project is 21,918 therms per year. In 2018, California consumed approximately 12,638 million therms or 12,638,157,740 therms, while Orange County consumed approximately 557 million therms or approximately 575,133,597 therms.¹⁰ Therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Orange County by less than 0.1 percent.

In addition, the project would result in energy usage associated with motor vehicle gasoline that fuels project-related trips. As shown above in Table 5.6.A, the proposed project would result in a net increase of approximately 49,008 gallons of gasoline per year. In 2015, vehicles in California consumed approximately 15.1 billion gallons of gasoline.¹¹ Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, and would be applicable to cars and light trucks of model years 2011 through 2020.¹² In early August 2018, the USEPA and U.S. Department of Transportation issued a new ruling, *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule*, which would freeze the fuel economy goals to the 2021 target of 37 mpg for model years 2021 through 2026.¹³ New automobiles purchased by residents, employees, and visitors driving to and from the project site would be subject to fuel economy and efficiency standards applied throughout the State. As such, the fuel efficiency of vehicles associated with the project site would increase throughout the life of the project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

The expected energy consumption during operation of the proposed project would be consistent with typical usage rates for assisted living uses; however, energy consumption is largely a function

⁹ California Energy Commission (CEC). 2018a. Energy Consumption Data Management Service. Electricity Consumption by County. Website: <http://www.ecdms.energy.ca.gov/elecbycounty.aspx> (accessed May 2020).

¹⁰ CEC. 2018b. Energy Consumption Data Management Service. Gas Consumption by County. Website: <http://www.ecdms.energy.ca.gov/gasbycounty.aspx> (accessed May 2020).

¹¹ CEC. 2017. California Gasoline Data, Facts, and Statistics. Website: http://www.energy.ca.gov/almanac/transportation_data/gasoline/ (accessed May 2020).

¹² U.S. Department of Energy. "Energy Independence & Security Act of 2007." Website: <https://www.afdc.energy.gov/laws/eisa> (accessed April 21, 2020).

¹³ U.S. Department of Transportation (USDOT). *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule*. Website: <https://www.nhtsa.gov/corporate-average-fuel-economy/safe> (accessed April 22, 2020).

of the physical structure and layout of buildings. The proposed project is consistent with the project's General Plan and land use designations and would include a new assisted living facility on an infill site that will be developed in close proximity to a retail shopping center, medical offices, and the City's Civic Center. The close proximity to those amenities encourages alternative means of travel by way of walking and bicycling, and would be consistent with goals to reduce vehicle trips and VMT. The assisted living facility will offer group transportation services to designated locations, which would further reduce individual trips in cars by residents, reducing VMT. Therefore, the proposed project would support the ability to use alternative modes of transportation and would promote initiatives to reduce vehicle trips and VMT, which would allow for a decreased dependence on non-renewable energy resources.

In addition, the proposed project would be constructed to CALGreen Code standards, which would help to reduce energy and natural gas consumption. Therefore, construction and operation of the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant, and no mitigation would be required.

- b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Less Than Significant Impact.

In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC recently adopted the *2019 Integrated Energy Policy Report*.¹⁴ The *2019 Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The *2019 Integrated Energy Policy Report* covers a broad range of topics, including implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), updates on Southern California electricity reliability, the natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources, and energy impacts would

¹⁴ CEC. 2019. *2019 Integrated Energy Policy Report*. Publication Number: CEC-100-2019-001-CMF.

be negligible at the regional level. Because California’s energy conservation planning actions are conducted at a regional level, and because the project’s total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California’s energy conservation plans as described in the CEC’s *2019 Integrated Energy Policy Report*. As shown above, the proposed project would avoid the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Potential impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation would be less than significant. No mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.7 GEOLOGY AND SOILS <i>Would the project:</i>				
a) Directly or indirectly cause 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?		X		
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or loss of topsoil?			X	
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?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?		X		

The following section is based on information contained in the *Preliminary Geotechnical Investigation Proposed Senior Care Facility Seacliff Office Park Redevelopment, 2100-2134 Main Street, Huntington Beach, Orange County, California 92648, APN 023-010-19* (Geotechnical Investigation) (GeoSoils, Inc., November 14, 2018), which is provided in Appendix D, and the *Paleontological Resources Records Check for the Proposed Senior Care Facility Seacliff Office Park Redevelopment Project* (Paleontological Resources Assessment) (Los Angeles County Natural History Museum, April 14, 2020), which is also provided in Appendix D.

Impact Analysis:

- a) *Would the project directly or indirectly cause 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?*

Potentially Significant Impact Unless Mitigated.

The City of Huntington Beach (City), like the rest of Southern California, is located in a seismically active area. The Newport-Inglewood Fault Zone runs through the City, and the San Andreas Fault, the Elsinore Fault, and San Jacinto Fault, the San Joaquin Hills Thrust Fault, and the Puente Hills Thrust Fault are all located within approximately 50 miles of the City (City of Huntington Beach General Plan Natural and Environmental Hazards Element, 2017). The Newport-Inglewood-Rose Canyon Fault Zone travels in a northwest-southeast direction through the central portion of the project site (California Department of Conservation [DOC] 2019). There is a portion of the Newport-Inglewood-Rose Canyon Fault Zone that runs through the project site and is a designated Alquist-Priolo Fault Zone. This fault zone is a northwest-southeast trending right lateral strike slip fault with a maximum probable magnitude of 6.0–7.4. Use of the surface area of this fault zone is regulated by the Alquist-Priolo Act, which is intended to reduce losses from surface fault rupture. The recent movement along this fault zone in the project site’s vicinity is not well known; however, recurrence of a potentially surface-rupturing earthquake is expected every 400–500 years, and as much as 2,000–3,000 years for major events. The slip rate, or rate at which the two sides of the fault are slipping relative to one another beneath the surface, is approximately 0.5 millimeter (mm) to 6.0 mm per year.¹⁵ According to the Geotechnical Investigation, the largest maximum earthquake site acceleration on the site is 0.8443 g (acceleration due to gravity).

Though there is an active fault on site, the potential for surface fault rupture is inherently minimized by the incorporation of fault zone setbacks into the project’s design. An Alquist-Priolo Earthquake Fault Zone (APEFZ) investigation was previously performed on the adjoining property immediately to the west of Main Street. The investigation, which was reviewed and approved by governing agencies, recommended a restricted use setback zone over the surface of the fault of 190 feet (ft) wide, with the main fault at about 50 ft from the southern margin of the zone. A supplemental APEFZ investigation performed on the property adjoining the subject site to the east recommended a restricted use setback zone of 156 ft wide, with the main fault trace at approximately 57 ft inboard from the southerly limits of the

¹⁵ U.S. Geological Survey – Earthquake Hazards Program. 2017. Quaternary Fault and Fold Database of the United States.

restricted use setback zone. Though the Newport-Inglewood-Rose Canyon Fault Zone runs through the project site and beneath existing Office Buildings A, B, C, and D, no new development or demolition would occur within the established limits of the fault zone, or within the established restricted use setback zone. The area of development, including the office building to be demolished, which is the location of the proposed assisted living facility, and the location of the surface parking lot, would be entirely outside of the fault zone and the established restricted use setback zone. According to the Geotechnical Investigation, the potential for surface fault rupture to affect the project is minimized by the implementation of the fault zone setbacks that have been incorporated into the project design. Further, geotechnical trenching would occur prior to issuance of any demolition or construction permits in order to specifically identify the earthquake fault(s) on the project site, and to confirm the appropriate setbacks. Nevertheless, the rupture of a known earthquake fault is considered a potentially significant impact that may affect the proposed project. Mitigation Measure GEO-1 requires that the project Applicant comply with the recommendations of the Geotechnical Investigation, the most current California Building Code (CBC), and the Huntington Beach Building and Construction Code, which stipulates appropriate seismic design provisions that shall be implemented with project design and construction. With the implementation of Mitigation Measure GEO-1, including implementation of fault zone setbacks, potential project impacts related to rupture of a known earthquake fault would be reduced to a less than significant level.

Mitigation Measure (MM):

MM GEO-1 Compliance with the Recommendations in the Geotechnical Investigation.

Prior to the issuance of grading permits, grading plan review shall be conducted by the City of Huntington Beach (City) City Engineer, or designee, to verify that requirements developed during the preparation of geotechnical documents have been appropriately incorporated into the project plans. All grading operations and construction shall be conducted in conformance with all of the recommendations included in the geotechnical document prepared by GeoSoils, Inc., titled *Preliminary Geotechnical Investigation Proposed Senior Care Facility Seaciff Office Park Redevelopment, 2100-2134 Main Street, Huntington Beach, Orange County, California 92648, APN 023-010-19* (Geotechnical Investigation) (November 14, 2018). All recommendations found in the Geotechnical Investigation report shall be incorporated into project design and shall include, but not be limited to:

- Owing to the presence of active faulting on site, reasonable-width setbacks and related geotechnical mitigation (overexcavation, strengthened foundation/slabs) are recommended. The geophysically identified location of the active faults shall be field-checked/calibrated with actual subsurface trenching on each main strand prior to final planning and existing building demolition;
- General earthwork and grading, including site preparations, over-excavation and re-compaction, fill placement and compaction, importing of fill soil, shrinkage and subsidence, rip ability, and oversized material;

- Reasonable-width setbacks and related geotechnical mitigation (overexcavation, and strengthened foundations/slabs), including adherence to the required restricted use setback zones from the active fault on the site;
- Foundations, including minimum embedment and width, allowable bearing, lateral load resistance, increase in bearing and friction, and settlement estimates;
- Conformance to the California Occupational Safety and Health Administration (CAL/OSHA) and/or the federal Occupational Safety and Health Administration (OSHA) requirements for Type “B” soils during excavations greater than 4 feet (ft);
- Specific structural design and earthwork to remove the influence of expansive soils;
- Concrete mix designs that consider the potential for presence of relatively high soluble sulfates and chlorides;
- Perched water manifestation;
- Erosive soils;
- Surface fault rupture;
- Seismic design parameters;
- Retaining walls;
- Pavement design; and
- Infiltration testing.

Additional site grading, foundation, and utility plans shall be reviewed by the project Geotechnical Consultant prior to construction to check for conformance with all of the recommendations of the Geotechnical Investigation (GeoSoils, Inc. 2018). Design, grading, and construction shall be performed in accordance with the requirements of the City Building Code and the 2019 California Building Code (CBC) applicable at the time of grading, as well as the recommendations of the project Geotechnical Consultant as summarized in the final Geotechnical Report subject to review by the City Engineer, or designee, prior to the start of grading activities. The final Geotechnical Report shall present the results of observation and testing done during grading activities.

ii) *Strong seismic ground shaking?*

Potentially Significant Impact Unless Mitigated.

As stated in Response 5.7(a)(i), the project site is located within a designated Alquist-Priolo Earthquake Fault Zone. The Newport-Inglewood-Rose Canyon Fault Zone runs in a northwest-southeast direction through the central portion of the project site. Due to the proximity, there is a potential for seismic shaking generated from this active fault to occur during the life of the project. In the event a major earthquake were to occur, the result could

range from moderate to severe ground shaking. As with most areas in Southern California, damage to development and infrastructure associated with the surrounding areas could be expected as a result of seismic ground shaking. The severity of the shaking would be influenced by the distance of the site from the seismic source, the soil conditions, and the depth to groundwater.

As discussed in Response 5.7(a)(i), two Alquist-Priolo Earthquake Fault Zone (APEFZ) investigations previously performed in the project area established a fault zone, which constitutes a restricted use area. Although the Newport-Inglewood-Rose Canyon Fault Zone runs through the project site and beneath existing Office Buildings A, B, C, and D, no new development or demolition would occur within the limits of the fault zone. The area of development, including the office building to be demolished, which is the location of the assisted living facility, and the location of the surface parking lot, would be located entirely outside of the fault zone and the restricted use setback zone. The Geotechnical Investigation recommends sufficient setbacks from the fault zone to minimize the potential impacts of strong seismic ground shaking on site. Compliance with Mitigation Measure GEO-1, including the recommended fault setbacks, would reduce potential project impacts related to seismic ground shaking to a less than significant level. No additional mitigation is required.

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

Less Than Significant Impact.

Liquefaction commonly occurs when three conditions are present simultaneously: (1) high groundwater; (2) relatively loose, cohesion-lacking (sandy) soil; and (3) earthquake-generated seismic waves. Liquefaction effects can manifest in several ways, including (1) loss of bearing, (2) lateral spread, (3) dynamic settlement, and (4) flow failures.

According to the City's General Plan Natural and Environmental Hazards Element (2017), parts of the City are at an elevated risk of liquefaction. The coastal portions of the City are at a very high risk of liquefaction, and the northwestern and southern portions of the City are at a medium-to-high risk of liquefaction. However, the project site and the area around the project site have a low liquefaction potential (Natural and Environmental Hazards Element, Figure HAZ-3). Additionally, according to the California DOC Seismic Hazards Program, the project site is not located within a recognized liquefaction zone.¹⁶

The liquefaction susceptibility of the on-site subsurface soils was evaluated as part of the Geotechnical Investigation prepared for the proposed project. According to the Geotechnical Investigation, on-site soils are generally dense and stiff. As such, the soils on site have a low potential for liquefaction. Therefore, the Geotechnical Investigation concluded that the proposed project would not expose people or structures to substantial adverse effects related to liquefaction. Impacts are considered less than significant, and no mitigation is required.

iv) *Landslides?*

No Impact.

¹⁶ California Department of Conservation (DOC). 2018. Geologic Hazards Data Viewer. Website: <https://maps.conservacion.ca.gov/geologic Hazards/DataViewer/index.html> (accessed April 23, 2020).

Landslides are most common where slopes are steep, soils are weak, and groundwater is present. Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes in areas with significant ground slopes. The project site is relatively flat, with no slopes on site. According to the City's Natural and Environmental Hazards Element, the project site is not in an identified seismically induced landslide zone. Additionally, the project site is not located within a California DOC Seismic Hazards Program recognized landslide zone.¹⁷ Therefore, the proposed project would not expose people or structures to substantial adverse effects related to seismically induced landslides. No mitigation is required.

b) *Would the project result in substantial soil erosion or loss of topsoil?*

Less Than Significant Impact.

During construction of the proposed project, soil would be exposed and there would be increased potential for soil erosion and siltation compared to existing conditions. During storm events, erosion and siltation could occur at an accelerated rate. The increased erosion potential could result in short-term water quality impacts as discussed in Section 5.10, Hydrology and Water Quality.

As discussed in further detail in Section 5.10, the proposed project would increase impervious surface area on the project site from approximately 9 acres to 10.31 acres representing an increase of 1.31 acres, which would increase the volume and velocity of stormwater runoff from the project site. The remaining portion of the site would primarily be landscaping, which would minimize on-site erosion and siltation.

As the project site is relatively flat, soil erosion can be controlled via implementation of standard erosion control practices. Additionally, impervious surface areas associated with development of the project site are not prone to erosion or siltation. Erosion and siltation would be minimal in the proposed landscaped areas. In the undeveloped areas, erosion and siltation would be similar to the existing condition.

As required by Standard Condition WQ-1 in Section 5.10, the proposed project would comply with the Construction General Permit, which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of construction Best Management Practices (BMPs) to reduce impacts to water quality during construction, including impacts associated with soil erosion and siltation. Furthermore, the exposure of soils during construction would be short-term and subject to requirements established by the National Pollutant Discharge Elimination System (NPDES). With incorporation of construction BMPs as required by Standard Condition WQ-1, impacts related to erosion during construction would be reduced to a less than significant level. Therefore, impacts related to erosion and loss of topsoil would be less than significant, and no mitigation is required.

c) *Would the project 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?*

Potentially Significant Impact Unless Mitigated.

¹⁷ California DOC. 2018. Geologic Hazards Data Viewer. Website: <https://maps.conservation.ca.gov/geologichazards/DataViewer/index.html> (accessed April 23, 2020).

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. As discussed in Response 5.7(a)(iv), there are no landslide zones close to or within the boundaries of the project site. The project site is relatively flat; therefore, slope failure resulting in landslide is not a concern on the project site.

As discussed in Response 5.7(a)(iii), there is low potential for liquefaction on the project site and liquefaction is not considered a concern on the project site. Lateral spreading involves the lateral movement of earth materials due to ground shaking. Lateral spreading is generally caused by liquefaction of soils with gentle slopes. Since the project site is relatively flat, the risk of liquefaction and lateral spreading impacts are considered low. However, with implementation of Mitigation Measure GEO-1, the project would comply with recommendations outlined in the Geotechnical Investigation, which would reduce potential project impacts related to liquefaction and lateral spreading to a less than significant level.

Differential settlement or subsidence could occur if buildings or other improvements are built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause building damage over time. Soils susceptible to seismically induced settlement typically include loose, granular materials. Though some of the on-site soils are susceptible to seismically induced settlement, adherence to Mitigation Measure GEO-1, which requires that the project be designed in accordance with the most recent California Building Code, would reduce impacts related to settlement to less than significant levels.

According to the General Plan Natural and Environmental Hazards Element, the project site is within an area with the potential for -0.03 to -0.04 inches of subsidence. Subsidence is often associated with strong seismic events. As specified in Mitigation Measure GEO-1, project design and implementation would comply with the design recommendations of the Geotechnical Investigation, including setbacks and strengthened foundations, which would ensure that impacts related to subsidence would be less than significant.

In summary, with implementation of Mitigation Measure GEO-1, potentially significant impacts related to unstable soils or geologic units that could result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse would be reduced to a less than significant level.

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

Potentially Significant Impact Unless Mitigated.

Expansive soils contain types of clay materials that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansive soils can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out. Foundations constructed on these soils are subjected to large uplifting forces caused by the swelling.

According to the Geotechnical Investigation, the soils on the project site have a low-to-medium expansion potential. The Geotechnical Investigation states that specific structural design in

accordance with the 2019 CBC and earthwork to replace expansive soils with non-expansive soils would be required. Therefore, implementation of Mitigation Measure GEO-1, which requires over-excavation and recompaction, and project compliance with recommendations of the Geotechnical Investigation, would reduce the potential impacts from expansive soils to a less than significant level.

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

No Impact.

The project would not use septic tanks or alternative methods for disposal of wastewater into subsurface soils. Further, the entire City is currently served by an existing sewer system; as such, there is no need for septic tanks or other alternative wastewater systems. The proposed project would connect to existing public wastewater infrastructure. Therefore, the project would not result in any impacts related to septic tanks or alternative wastewater disposal methods. No mitigation is required.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

Project plans, geologic maps of the area within the project limits, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project limits and whether fossils have been recovered within the project limits or from similar geologic units elsewhere in the region. In addition, a search for known fossil localities was conducted through the Natural History Museum of Los Angeles County (LACM) to determine the status and extent of previously recorded paleontological resources within and surrounding the project limits. A copy of the results letter from the LACM is included in Appendix D.

A pedestrian field survey was completed to note the sediments and to identify any unrecorded paleontological resources exposed on the surface within the project limits. The pedestrian field survey was conducted on April 16, 2020, by LSA Paleontologist Emily Chebul. Visibility within the project limits varied, ranging from no visibility in areas that were paved or in landscaped planters to approximately 35 percent in the undeveloped lot in the northeastern part of the project site. Fill material was noted along the edge of the project limits in landscaped planters, as well as in portions of the undeveloped lot. Native sediments were visible in the undeveloped lot. The native sediments consisted of tan, slightly consolidated, medium- to coarse-grained, silty sand with pebble-sized clasts, consistent with the Old Paralic Deposits, Undivided mapped by Morton and Miller (2006). No vertebrate paleontological resources were found on the surface within the project limits during the field survey.

Results of the literature review indicate that the project is located at the northwestern end of the Peninsular Ranges Geomorphic Province, a 900-mile long northwest-southeast-trending structural block that extends from the Transverse Ranges in the north to the tip of Baja California in the south (California Geological Survey, 2002; Norris and Webb, 1976). Surficial geologic mapping indicates that within the project limits, there are Old Paralic Deposits, Undivided (Morton and Miller 2006). Although not mapped by Morton and Miller (2006), some areas within the project limits also likely contain Artificial Fill placed during construction of the existing parking lots and businesses. Dates for the geologic time intervals are derived from the *International*

Chronostratigraphic Chart prepared by the International Commission on Stratigraphy (Cohen et al., 2019).

Artificial Fill

Artificial Fill consists of sediments that have been removed from one location and transported to another location by human activity, rather than by natural means. The transportation distance can vary from a few feet to many miles, and composition is dependent on the source and purpose. Artificial Fill will sometimes contain modern debris such as asphalt, wood, bricks, concrete, metal, glass, plastic, and even plant material. While Artificial Fill may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered important for scientific study, and Artificial Fill has no paleontological sensitivity.

Old Paralic Deposits, Undivided

The Old Paralic Deposits, Undivided mapped in the project area formed during the late to middle Pleistocene (11,700–781,000 years ago) (Morton and Miller 2006). Saucedo et al. (2016) describe the same deposits under a different name (Old Shallow Marine Deposits On Wave-Cut Surface). Generally, paralic deposits include marine and non-marine deposits that accumulated at or near sea level in environments such as deltas, estuaries, tidal flats, beaches, lagoons, and shallow subtidal shelves. The deposits in the project area are mostly poorly sorted, moderately permeable, and reddish-brown siltstone, sandstone, and conglomerate (Morton and Miller 2006) that represent deposition in strandline, beach, estuarine, and terrestrial environments.

The late to middle Pleistocene (11,700–781,000 years ago) Old Paralic Deposits, Undivided accumulated along the coast in marine, estuarine, and terrestrial environments. As such, these deposits have the potential to preserve both marine and terrestrial animals and plants similar to other deposits of the same age that have produced large and small mammals, reptiles, fish, invertebrates, and plants elsewhere in Southern California (Bell et al. 2004; Jefferson 1991a, 1991b; Miller 1971; Pajak et al. 1996; Reynolds and Reynolds 1991; Springer 2009). Pleistocene marine terrace deposits have produced a variety of well-preserved shells of marine and estuarine invertebrates, such as mollusks (e.g., clams, oysters, scallops, snails, and scaphopods), crustaceans (e.g., crabs, and barnacles), and echinoderms (e.g., sand dollars) (Powell et al. 2004). Based on the quality of preservation and diversity of the fauna, fossils from these deposits are considered scientifically significant, thus giving the Old Paralic Deposits, Undivided a high paleontological sensitivity rating.

Impact Analysis:

Potentially Significant Unless Mitigated.

Within the project limits, there are two geologic units: (1) Artificial Fill, which has no paleontological sensitivity, and (2) Old Paralic Deposits, Undivided, which has high paleontological sensitivity. The maximum depth of excavation for this project is expected to reach a depth of 15 ft (personal communication, Sapetto Real Estate Solutions, Inc., April 2020) and is expected to extend beneath the Artificial Fill into native Old Paralic Deposits, Undivided.

According to the locality search conducted by the LACM, there are no known fossil localities within the Quaternary Terraces (i.e., Old Paralic Deposits, Undivided) within the project limits. However, the museum has localities nearby these deposits, the closest of which are LACM 7657-

7659, located northeast of the proposed project area along Ellis Avenue east of Beach Boulevard. These localities are from well core samples at depths between 130 and 400 ft below the surface and produced fossil specimens of eagle ray (*Myliobatis*), skate (*Raja*), soupfin shark (*Galeorhinus galeus*), Pacific angel shark (*Squatina californica*), plain fin midshipman (*Porichthys notatus*), cusk eel (*Otophidium*), bay goby (*Lepidogobius lepidus*), queenfish (*Seriphus politus*), Pacific sanddab (*Citharichthys sordidus*), speckled sanddab (*Citharichthys stigmaeus*) and sculpin (*Leptocottus*). The next closest localities are LACM 7422-7425, located just east of due south of the project limits, between Beach Boulevard and Pacific Coast Highway (State Route 1). These localities produced fossil specimens of mammoth (*Mammuthus*), bison (*Bison*), and horse (*Equus*). Locality LACM 7366 is located at the same site as LACM 7422-7425 and produced fossil specimens of leopard shark (*Triakis*), three-spined stickleback (*Gasterosteus*), garter snake (*Thamnophis*), desert shrew (*Notiosorex*), and pocket gopher (*Thomomys*).

Because the Old Paralic Deposits, Undivided have high paleontological sensitivity, there is a potential for the project to impact scientifically significant paleontological resources. To ensure that potential impacts to undiscovered paleontological resources remain less than significant, preparation of a Paleontological Resources Impact Mitigation Program (PRIMP), to include monitoring of ground-disturbing activities in deposits with high paleontological sensitivity, shall be required as outlined in Mitigation Measure PAL-1. With implementation of this mitigation measure, potential impacts to unknown paleontological resources would be reduced to a less than significant level.

Mitigation Measure (MM):

MM PAL-1 A Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared prior to commencement of any grading activity on site, and approved by the City of Huntington Beach's (City) Director of Community Development, or designee. The PRIMP shall be prepared by a paleontologist who is listed on the County of Orange list of certified paleontologists, and shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP 2010).

All ground-disturbing activities in deposits with high paleontological sensitivity (i.e., Old Paralic Deposits, Undivided) shall be monitored by a qualified paleontological monitor following the recommendations contained in the approved PRIMP. If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and the paleontologist or paleontological monitor shall be contacted to assess the find for scientific significance. If determined to be scientifically significant, the fossil shall be collected from the field by the paleontological monitor.

Any collected resources that shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the

permanent collections of a museum repository. At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program. When submitted to the City’s Director of Community Development, or designee, the report and inventory would signify completion of the program to mitigate impacts to paleontological resources.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.8 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?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

The following section is based on the California Emissions Estimator Model (CalEEMod) output prepared by LSA (August 2020) and provided in Appendix A.

Discussion:

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF₆)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While man-made GHGs include naturally-occurring GHGs such as CO₂, methane, and N₂O, some gases, like HFCs, PFCs, and SF₆ are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based

on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂e).

In October 2008, the SCAQMD released a *Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold* that suggested a tiered approach to analyzing greenhouse gas emissions in a project level analysis. In the Draft Guidance Document, the SCAQMD provided numerical thresholds that can be applied to smaller projects (like the proposed project). For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD, under Option 1, is proposing a “bright-line” screening-level threshold of 3,000 MT CO₂e/yr for all land use types or, under Option 2, the following land-use-specific thresholds: 1,400 MT CO₂e for commercial projects, 3,500 MT CO₂e for residential projects, or 3,000 MT CO₂e for mixed-use projects. This bright-line threshold is based on a review of the Governor’s Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions. If the project exceeds the 3,000 MT CO₂e per year threshold, then project GHG emissions would need to identify target options to reduce the GHG emissions.

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

Less Than Significant Impact.

State CEQA Guidelines Section 15064(b) provides that the “determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data,” and further states that an “ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.” Climate change is a global issue and is described in the context of the cumulative environment. Therefore, the project is considered in the context of multiple sectors and the combined efforts of many industries, including development. The primary GHG emissions generated by the project would be CO₂. The following analysis represents an estimate of the project’s GHG emissions through the quantification of CO₂ emissions (included in Appendix A). The following project activities were analyzed for their contribution to global CO₂ emissions.

This section evaluates potential significant impacts to GHG that could result from implementation of the proposed project. Construction and operation of project development would generate GHG emissions. Overall, the following activities associated with the proposed project could contribute directly or indirectly to the generation of GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs (e.g., CO₂, CH₄, and N₂O). Furthermore, CH₄ is emitted during the fueling of heavy equipment.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily vehicle trips.

- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California’s water conveyance system is energy-intensive. CalEEMod defaults were used to estimate these emissions from the project. The proposed project would install low-flow water fixtures consistent with 2019 California Green Building Standards Code (CALGreen Code) standards, and efficient irrigation systems in compliance with the water efficient landscape ordinance (Huntington Beach Municipal Code 14.52).
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully and the carbon that remains is sequestered in the landfill and not released into the atmosphere. The proposed project would implement the Statewide goal of meeting the 75 percent recycling program on site.

GHG emissions associated with project construction would occur over the short-term from construction activities and would consist primarily of emissions from equipment exhaust. Long-term GHG emissions would also be associated with project-related new vehicular trips and stationary-source emissions (e.g., natural gas used for heating and electricity usage for lighting). The calculations presented below includes construction emissions in terms of CO₂ and annual CO₂e GHG emissions from increased energy consumption, water usage, solid waste disposal, and estimated GHG emissions from vehicular traffic that would result from implementation of the proposed project. The following project activities were analyzed for their contribution to global CO₂e emissions.

Construction Emissions. Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. The construction GHG emission estimates were calculated using CalEEMod, as shown in Table 5.8.A.

Table 5.8.A: Construction Greenhouse Gas Emissions

Construction Phase	Greenhouse Gas Emissions, CO ₂ e (metric tons per year)
Site Preparation/Parking Lot Paving 2021	247.9
Demolition 2021	210.7
Grading 2021	435.1
Building Construction 2021	42.9
Building Construction 2022	1,103.1
Building Construction 2023	123.5
Architectural Coating 2023	284.4
Paving 2023	137.8
Total Project Emissions	2,585.5
Total Construction Emissions Amortized over 30 years	86.2

Table 5.8.A: Construction Greenhouse Gas Emissions

Construction Phase	Greenhouse Gas Emissions, CO₂e (metric tons per year)
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Source: Compiled by LSA (August 2020).

Note: Numbers may appear to not sum correctly due to rounding.

CO₂e = carbon dioxide equivalent

As indicated in Table 5.8.A, project construction would result in total emissions of 2,585.5 MT of CO₂e, which, when amortized over the 30 year life of the project would be 86.2 MT of CO₂e per year.

Operational Emissions. Long-term operation of the project would generate GHG emissions from mobile, area, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The operational GHG emissions estimates were also calculated using CalEEMod. Table 5.8.B details the net new operational emission associated with the proposed project.

Table 5.8.B: GHG Emissions (Metric Tons Per Year)

Emissions Source	Operational Emissions			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Existing Operational Emissions				
Existing Area Sources	<0.1	0.0	0.0	<0.1
Existing Energy Sources	162.3	<0.1	<0.1	163.1
Existing Mobile Sources	634.0	<0.1	0.0	634.8
Existing Waste Sources	1.1	0.1	0.0	2.7
Existing Water Sources	19.5	0.1	<0.1	23.8
Total Existing Operational Emissions				824.4
Proposed Project Operational Emissions				
Project Area Sources	49.9	<0.1	<0.1	50.3
Project Energy Sources	460.4	<0.1	<0.1	462.9
Project Mobile Sources	1,005.1	<0.1	0.0	1,006.2
Project Waste Sources	10.5	0.6	0.0	25.9
Project Water Sources	60.8	0.4	<0.1	73.4
Total Project Operational Emissions				1,618.7
Total Net Operational Emissions				794.3
Amortized Construction Emissions				86.2
Total Net Annual Emissions				880.5
SCAQMD Threshold				3,000
Exceed?				No

Source: Compiled by LSA (August 2020).

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

N₂O = nitrous oxide

SCAQMD = South Coast Air Quality Management District

As discussed above, according to SCAQMD, a project would have less than significant GHG emissions if it would result in operations-related GHG emissions of less than 3,000 MT CO₂e per year. As indicated in Table 5.8.B, the proposed project would result in a net increase of 880.5 MT CO₂e per year, which is below the SCAQMD's threshold of 3,000 MT CO₂e per year. Therefore, the project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be less than significant, and no mitigation is required.

- b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Less Than Significant Impact.

The City of Huntington Beach Greenhouse Gas Reduction Program (GGRP) outlines the City's approach to reduce GHG emissions. The GGRP identifies strategies to reduce emissions to approximately 16 percent below 2005 levels by 2020 and approximately 53 percent below the 2020 target by 2040. The following strategies are applicable to the proposed project:

- **LU-1 – Improved pedestrian network:** Improve the safety and convenience of the pedestrian network to support walking as a viable alternative.
- **T-3 – Increased transit ridership:** Increase transit ridership to minimize congestion, improve air quality, and promote increased mobility.

- **WW-1 – Indoor water efficiency:** Reduce indoor water use in the community.
- **WW-2 – Water-efficient landscaping:** Reduce the amount of water used for landscaping in Huntington Beach.
- **RM-2 – Composting and organic waste:** Reduce the amount of organic wastes sent to landfills.
- **RM-3 – Increased recycling:** Improve the use of recycling bins to minimize the amount of lost materials.
- **CA-7 – Waste minimization:** Reduce the amount of solid waste produced in Huntington Beach.

The proposed project is consistent with the City’s General Plan and land use designations and would include a new assisted living facility on an infill site that would be developed in close proximity to a retail shopping center, medical offices, and the City’s Civic Center. The close proximity to those amenities encourages alternative means of travel by way of walking and bicycling, and would be consistent with goals to improve the pedestrian network (Strategy LU-1). The assisted living facility would offer group transportation services to designated locations, which would further reduce individual trips in cars by residents, reducing VMT (Strategy T-3). In addition, the proposed project would comply with the latest Title 24 standards of the California Code of Regulations (CCR), by means of high efficiency lighting, appliances, motion activation lighting, high energy efficiency equipment, and green building standards. The Title 24 standards of the CCR also include a variety of different measures, including low-flow faucets and toilets, water efficient appliances, low flow irrigation, and good housekeeping practices (Strategies WW-1 and WW-2). In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance (Strategy WW-2). The proposed project would also be consistent with the CalRecycle Waste Diversion and Recycling Mandate, which will reduce solid waste production by 75 percent (Strategies RM-2, RM-3, and CA-7).

Therefore, the proposed project would comply with applicable GGRP strategies designed to reduce GHG emissions. In addition, as shown in Table 5.8.B, even without including the GHG emissions reductions that would result from compliance with these strategies, the proposed project-related GHG emissions would be well below the SCAQMD threshold. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be less than significant, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.9 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?			X	

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?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?		X		
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?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

The following section is based on the *Phase I Environmental Site Assessment Report* (Partner Engineering and Science, Inc., October 18, 2018), which is provided in Appendix E, and the *Phase II Subsurface Investigation Report* (Partner Engineering and Science, Inc., June 28, 2019), which is provided in Appendix F.

Impact Analysis:

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

Less Than Significant Impact.

Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, and an irritant or strong sensitizer.¹⁸ Hazardous substances include all chemicals regulated under the U.S. Department of Transportation “hazardous materials” regulations and the U.S. Environmental Protection Agency (USEPA) “hazardous waste” regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the routine transport, use, or disposal of hazardous materials are affected by the type of substance, the quantity used or managed, and the nature of the activities and operations.

¹⁸ A “sensitizer” is a chemical that can cause a substantial proportion of people or animals to develop an allergic reaction in normal tissue after repeated exposure to a chemical (U.S. Department of Labor 2017).

Construction activities associated with the proposed project would use a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site excavation, grading, and construction. The amount of hazardous chemicals present during construction would be limited and would be in compliance with existing government regulations, including the Huntington Beach Fire Department (HBFD) City Specification No. 431-92, which provides guidance in assessing site soils for the presence of chemical contaminants and informs decision-making in the event that contamination is identified. The potential for the release of hazardous materials during project construction is low, and even if a release were to occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials associated with construction activities. Therefore, no mitigation is required.

The proposed project includes the demolition of one of existing office building, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. Assisted living facilities typically do not present a hazard associated with the accidental release of hazardous substances into the environment because residents and employees are not anticipated to use, store, dispose, or transport large volumes of hazardous materials. Hazardous substances associated with assisted living facilities are typically limited in both amount and use such that they can be contained without impacting the environment.

Project operation would involve the use of potentially hazardous materials (e.g., solvents, cleaning agents, sanitizing solutions, paints, fertilizers, and pesticides) typical of residential/assisted living facilities that, when used correctly and in compliance with existing laws and regulations, would not result in a significant hazard to people in the vicinity of the proposed project.

No manufacturing, industrial, or other uses utilizing large amounts of hazardous materials would occur with project implementation. Typical use of household hazardous materials (e.g., pesticides, fertilizer, solvents, cleaning products, and paints) would not generally result in the transport, disposal, or release of hazardous materials in an amount that would create a significant hazard to the public or environment. Therefore, impacts associated with the disposal of hazardous materials and/or the potential release of hazardous materials that could occur with the implementation of the proposed project are considered less than significant, and no mitigation is required.

- b) *Would the project 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?*

Potentially Significant Impact Unless Mitigated.

A Phase 1 Environmental Site Assessment (ESA) was prepared for the Seacliff Office Park, located at 2100, 2120, 2124, 2130, and 2134 Main Street (project site). The purpose of the Phase I analysis was to evaluate the project site for potential Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), and Historical Recognized Environmental Conditions (HRECs) that may be present, off-site conditions that may impact the subject property, and/or conditions indicative of releases or threatened releases of substances on, at, in, or to the project site.

An REC can be defined as the presence or likely presence of any hazardous substances or petroleum products in or at a property due to a release to the environment; under conditions

indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

An HREC can be defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

A CREC can be defined as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

According to the Phase I ESA, the project site contains 13 oil wells, which were in operation from the 1940s until the 1970s. During operation of the wells, it was common practice to drill to great depths and deposit the cuttings in a large excavation pit near the location of the well. The drilling cuttings could potentially contain elevated levels of crude oil, petroleum hydrocarbons and metals. An additional concern associated with the presence of oil wells is the potential emission of methane and hydrogen sulfide gases, which have the potential to migrate through the subsurface and accumulate within building interiors or basements. The oil wells were last in use in the 1970s, and all 13 of the on-site oil wells were all capped and abandoned by 1998. All of the oil wells on the project site would be re-abandoned, with the exception of those wells in the vacant lot on the northeast side of the project site. Those wells would only be re-abandoned if testing indicates that the re-abandonment process is necessary. Given the limited extent of previous sampling of the wells, the wells are considered a Recognized Environmental Condition (REC). The Phase I ESA did not identify any CRECs or HRECS on the project site.

According to the Phase I ESA, the project site was previously developed with agricultural or ranch uses with several oils wells until the late 1970s, but has been used for various professional office uses since the year 1980. Due to the age of the existing structures, the Phase I ESA also analyzed the potential for asbestos-containing materials (ACMs) and lead-based paints (LBPs) to be present on the project site. The examined ACMs were observed to be in good condition, and they are unlikely to constitute a health or safety concern to project occupants. However, the ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any demolition or construction activities. Adherence to Mitigation Measure HAZ-1, which requires the sampling of ACMs and LBPs on-site prior to demolition activities, would reduce potential impacts from ACMs and LBPs to construction workers or building occupants to a less than significant level.

Given the presence of an REC on the project site, the Phase I ESA recommended further environmental investigation. A Phase II Subsurface Investigation, including a geophysical survey, was conducted to collect and analyze subsurface soil samples from the project site, and to investigate the potential impact of petroleum hydrocarbons, VOCs, metals, methane gas, and hydrogen sulfide gas as a result of the former on-site oil production activities. Based on 28 soil samples, the Phase II Subsurface Investigation found evidence of a minor release above residential screening levels of petroleum hydrocarbons in the 1.25-acre undeveloped area within the northeast portion of the project site that will be converted to a surface parking lot and evidence of methane and hydrogen sulfide in soils throughout the project site. As described in Mitigation Measure HAZ-2, additional sampling is recommended in the area in which petroleum hydrocarbons were detected to determine the extent of the impact to the soil, and to determine the appropriate steps for remediation of the soil conditions, if necessary. The City of Huntington Beach (City) maintains

standards for soil quality. The Huntington Beach Fire Department (HBFD) has the responsibility under the California Fire Code (CFC) and the City's Municipal Code, Chapter 17.56, Huntington Beach Fire Code, to require the implementation of the procedures necessary to evaluate the condition of the soil and to confirm that, subsequent to remediation, the soil conforms to conditions determined to be appropriate by the City's standards. With adherence to Mitigation Measure HAZ-2, which requires further investigation to determine the extent of the soil contamination and to remediate any adverse soil conditions, impacts to the environment related to a release of petroleum hydrocarbons would be reduced to a less than significant level.

Given the on-site presence of methane and hydrogen sulfide, development of the proposed project will require a methane mitigation system to ensure that methane soil gas vapor would not penetrate on-site buildings and structures. According to Chapter 17.56.540 Section 5801.1.1, Methane Gas Soil, of the City's Municipal Code, all sources of methane soil gas are subject to testing, mitigation, and detection and alarm systems as prescribed in City Specification 429, *Methane District Building Permit Requirements*. As described in Mitigation Measure HAZ-3, the methane mitigation system would be subject to the requirements of the HBFD and City Specification 429. The implementation of a methane mitigation system as part of the proposed project would ensure that construction and operation of the project would not allow methane gas to encroach into project buildings, or into the off-site environment. With the implementation of Mitigation Measure HAZ-3, impacts related to the release of hazardous materials into the environment would be reduced to a less than significant level.

Mitigation Measures (MMs):

MM HAZ-1 Asbestos Containing Materials and Lead-Based Paint Sampling. Prior to the commencement of demolition activities, the Asbestos Containing Materials (ACMs) and Lead-Based Paints (LBPs) identified by the Phase I Environmental Site Assessment (ESA), shall be sampled by a licensed abatement contractor to confirm the presence or absence of asbestos and lead prior to their removal. In the event that ACMs and/or LBPs are confirmed to contain asbestos and/or lead, the licensed abatement contractor shall assess the condition of the ACMs and LBPs and recommend their removal, in accordance with all local and State standards for the removal of potentially hazardous materials. Alternatively, the licensed abatement contractor may recommend an Operation and Maintenance Plan for the management of ACMs in good condition.

MM HAZ-2 Additional Soil Sampling. Prior to the issuance of grading permits, a Registered Professional shall conduct additional soil sampling in the vicinity of the petroleum hydrocarbon detections, as identified by the Phase II Subsurface Investigation Report. If adverse soil conditions are detected, the project Applicant shall, under the direction of the Registered Professional, prepare a soil remediation plan that adheres to all applicable City of Huntington Beach (City) and Huntington Beach Fire Department (HBFD) standards for soil remediation. The plan shall be reviewed and approved by the HBFD and the Huntington Beach Director of Community Development, or designee.

MM HAZ-3 Methane Mitigation System. Prior to the commencement of demolition, grading activities, or construction, a California Registered Professional Engineer or Registered Professional Geologist shall conduct a soil gas investigation to determine the locations and concentrations of combustible soil gas. Subsequent to

the completion of the soil gas investigation, the California Registered Professional Engineer or Registered Professional Geologist shall prepare a site specific mitigation plan, pursuant to City Specification No. 429, that addresses all potential hazards due to the presence of combustible soil gases. To the degree possible, the source(s) of any anomalous levels of methane shall be identified.

Prior to the start of construction activities, the Mitigation Plan, which shall include a request for a permit for either a Passive or Active Mitigation System, as determined by the requirements of City Specification No. 429 based on the results of on-site soil sampling, shall be approved by the HBFD. The project Applicant shall submit verification of the completion and approval of the Mitigation Plan to the City Director of Community Development, or designee, to ensure that the Plan satisfies all requirements of City Specification No. 429 and all applicable requirements of the California Fire Code.

- c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?*

Potentially Significant Impact Unless Mitigated.

The proposed assisted living facility would not produce hazardous emissions or handle a significant amount of acutely hazardous materials, substances, or wastes during either construction or operations. The nearest school to the project site is Huntington Beach High School, located at 1905 Main Street (approximately 200 feet (ft) southwest of the project site). As discussed in Response 5.9(a), the proposed project is not anticipated to release hazardous emissions or handle acutely hazardous materials, substances, or wastes in significant quantities. Construction activities associated with the proposed project would use a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site excavation, grading, and construction. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing government regulations, including the Huntington Beach Fire Department (HBFD) City Specification No. 431-92, which provides guidance in assessing site soils for the presence of chemical contaminants and informs decision-making in the event that contamination is identified.

However, given the potential for on-site soils to contain methane gas (Geotechnical Investigation; Natural and Environmental Hazards Element Figure HAZ-9), the accidental release of gases and other unidentified hazardous materials during construction could create a significant hazard in the vicinity of the project site. Given the project site's proximity to a school, Mitigation Measure HAZ-4, Construction Contingency Plan, is proposed to ensure that procedures for handling hazardous materials are incorporated during project construction. The contingency plan would minimize the risk of a potentially adverse impact to the environment in the event that hazardous materials are released during construction. Additionally, the Construction Contingency Plan would be consistent with the City's adopted Local Hazard Mitigation Plan (December 2017). Therefore, with incorporation of Mitigation Measure HAZ-4, impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or wastes within 0.25 mile of an existing or proposed school would be reduced to a less than significant level.

The assisted living facility and office buildings would not require the use, storage, disposal, or transport of large volumes of hazardous materials that could cause serious environmental damage in the event of an accident. Although hazardous substances typical of residential and office uses

would be present and utilized at the assisted living facility and office buildings, such substances would not be used in quantities that are considered significant. Additionally, similar hazardous substances are likely in use for cleaning and maintenance of schools in the area, including Huntington Beach High School. These substances are typically found in small quantities, and can be cleaned up without affecting the environment. Though there is one school within 0.25 mile of the project site, the limited use of hazardous substances on the project site during project operation is unlikely to impact Huntington Beach High School due to the low quantities of substances that would be used and the likelihood that substances could be cleaned up on-site without off-site impacts.

Mitigation Measures (MMs):

MM HAZ-4 Construction Contingency Plan. Prior to commencement of site preparation or grading activities, the Director of the County Environmental Health Division, or designee, shall review and approve a contingency plan that addresses the procedures to be followed should on-site unknown hazards or hazardous substances be encountered or released during grading and construction activities. The plan shall indicate that if construction workers encounter underground tanks, gases, odors, oils, or uncontained spills, or other unidentified substances, the contractor shall stop work, cordon off the affected area, and notify the HBFD. The HBFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations. The Construction Contingency Plan shall be consistent with the most recent version of the City's Local Hazard Mitigation Plan. Following the approval of the Construction Contingency Plan by the County Environmental Health Division, and prior to issuance of any grading permits, the project Applicant shall submit written notification of the approval to the City Director of Community Development, or designee.

- d) *Would the project 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.

According to the California Department of Toxic Substances Control (DTSC) EnviroStor database, the project site is not located on a federal Superfund site, State response site, voluntary cleanup site, school cleanup site, corrective action site, or tiered permit site.¹⁹ Therefore, the proposed project would not result in an impact related to a known hazardous materials site pursuant to Government Code Section 65965.5 and would not create a significant hazard to the public or the environment. No mitigation is required.

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

¹⁹ California Department of Toxic Substances Control (DTSC). 2020. EnviroStor Database. Website: <https://www.envirostor.dtsc.ca.gov/public/> (accessed April 22, 2020).

No Impact.

The proposed project is not within an airport land use plan and is not within 2 miles of a public airport or public use airport. The project site is approximately 7.3 miles northwest of John Wayne Airport, which is the nearest airport to the project site. The proposed assisted living and memory care facility would be a maximum of three stories and 40 ft in height at the tallest point, which would not exceed City standards for the maximum allowable height for the project site. Thus, the facility would not be of sufficient height to require modifications to the existing air traffic patterns at the airport and, therefore, would not affect aviation traffic levels or otherwise result in substantial aviation-related safety risks. The proposed project would not result in safety hazards for people living or working in the area different than would occur under existing conditions. No impacts would occur, and no mitigation is required.

- f) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Sources: General Plan Natural and Environmental Hazards Element)*

Less Than Significant Impact.

The City's Natural and Environmental Hazards Element (2017) outlines goals and policies aimed at adequately preparing for future emergency situations, particularly in the context of changing environmental conditions, and planning in a way that reduces potential hazards as much as possible. Emergency events addressed in the Natural and Environmental Hazards Element include seismically induced conditions, slope stability/landslides, subsidence, liquefaction, and geologic hazards, flooding, wildland and urban fires, emergency evacuation, coastal hazards, hazardous materials and waste, aircraft hazards, and emergency preparedness. While the Natural and Environmental Hazards Element makes recommendations for emergency evacuation and access, it only designates official evacuation routes in the event of tsunami. In the event of tsunami, Main Street/Gothard Street is one of 12 designated emergency evacuation routes for the western portions of the City located in a tsunami risk zone.

The proposed project does not include any characteristics (e.g., permanent road closures or long-term blocking of road access) that would physically impair or otherwise conflict with an emergency response plan or emergency evacuation plan. During short-term construction activities, the proposed project is not anticipated to result in any substantial traffic queuing on nearby streets, and all construction equipment would be staged within the project site. Therefore, project construction impacts related to emergency response and evacuation plans would be less than significant.

The proposed project does not include any changes to public or private roadways that would physically impair or otherwise conflict with an emergency response plan or emergency evacuation plan. Further, the proposed project would not obstruct or alter any transportation routes that could be used as evacuation routes during emergency events, including Main Street. In addition, during the operational phase of the proposed project, on-site access would be required to comply with standards established by the City and the HBFD. The size and location of fire suppression facilities (e.g., hydrants) and fire access routes would be required to conform to City and HBFD standards. The proposed project would provide adequate emergency access to the site via existing driveways off of Main Street and Seabluff Drive. The driveways would both connect to an internal access way that would ensure access for emergency vehicles within the interior of the site. Further, access to and from the project site for emergency vehicles would be reviewed and approved by HBFD

and the City as part of the project approval process to ensure the proposed project is compliant with all applicable codes and ordinances for emergency vehicle access. Therefore, operation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Operational project impacts would be less than significant. Therefore, impacts related to interference with an emergency response plan are considered less than significant, and no mitigation is required.

- g) *Would the project expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

No Impact.

The project site is located within an urbanized area. The project site is bounded by residential development to the north and east; commercial uses to the west across Main Street; and civic/office uses to the south across Yorktown Avenue.

The project site is not adjacent to any wildland areas. According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not within an area identified as a Very High Fire Hazard Severity Zone (VHFHSZ). According to the City’s General Plan Natural and Environmental Hazards Element, the City does not face wildfire risk due to its position in an urbanized and built-out region. As a result, the proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Therefore, no impacts are anticipated, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.10 HYDROLOGY AND WATER QUALITY <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would:				
i) result in substantial erosion or siltation on or off-site?			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			X	

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
iv) impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

The following section is based on the following technical reports: *Preliminary Geotechnical Investigation Proposed Senior Care Facility Seacliff Office Park Redevelopment, 2100-2134 Main Street, Huntington Beach, Orange County, California 92648, APN 023-010-19* (Geotechnical Investigation) (GeoSoils, Inc., November 14, 2018), which is provided in Appendix D; the *SWRCB Construction General Permit; Santa Ana RWQCB North Orange County MS4 Permit; Santa Ana RWQCB NPDES De Minimis Permit*; the *Preliminary Hydrology Study* (JLC Engineering, June 2, 2020), which is provided in Appendix G, and the *Preliminary Water Quality Management Plan (WQMP)* (JLC Engineering, June 2, 2020), which is provided in Appendix H.

Impact Analysis:

- a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Less Than Significant Impact.

The proposed project involves the construction of a three-story assisted living and memory care facility for residential purposes and a parking lot on the project site. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via stormwater runoff into receiving waters (i.e., the municipal storm drain system which discharges into the Pacific Ocean). During construction, the disturbed soil area would be approximately 5.6 acres. Because construction of the proposed project would disturb greater than 1 acre of soil, the project is subject to the requirements of the SWRCB’s National Pollutant Discharge Elimination System (NPDES) permit *Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities* (Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Orders No. 2010-0014-DWQ and 2012-0006-DWQ) (Construction General Permit). As specified in Standard Condition WQ-1, a SWPPP would be prepared and construction Best Management Practices (BMPs) implemented during construction activities, as required by the Construction General Permit. In addition, as specified in Standard Condition WQ-2, Section 17.05.310-330 of the City of Huntington Beach’s

(City) Municipal Code requires that an Erosion Control Plan be prepared annually during construction and submitted to the City for approval prior to September 15 of each year. The SWPPP and Erosion and Sediment Control Plan would detail the BMPs to be implemented during construction. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize the erosion and retain sediment on-site, and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Compliance with the requirements of the Construction General Permit and City Municipal Code, including incorporation of construction BMPs to target and reduce pollutants of concern in stormwater runoff, would reduce pollutant discharge to receiving waters.

According to the Geotechnical Investigation (GeoSoils, Inc., November 2018) prepared for the project, groundwater was not encountered during borings drilled to a depth of 60 feet (ft), and there is no evidence of a near surface groundwater table on the project site. Based on the maximum depth of excavation for the project of 15 ft below ground surface (bgs), it is not anticipated that the groundwater table would be encountered. However, according to the Geotechnical Investigation, seepage and/or perched groundwater²⁰ could be present below the project site. If encountered during excavation, groundwater dewatering of perched groundwater may be required. If groundwater dewatering is necessary, groundwater would be discharged to either the sanitary sewer or storm drain system. If discharged to the sanitary sewer system, a permit from the City of Huntington Beach Public Works Department would be required, as specified in Standard Condition WQ-3, to ensure that there is sufficient capacity available to accommodate the discharge to prevent a sanitary sewer overflow, which can result in a discharge of pollutants to surface waters. If groundwater is discharged to the storm drain system, coverage under the Santa Ana RWQCB's NPDES Permit *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality* (Order No. R8-2009-0003, NPDES No. CAG998001, as amended by Order No. R8-2015-0004) would be required, as also specified in Standard Condition WQ-3. Groundwater that is discharged to surface waters can introduce total dissolved solids, nitrates, and other constituents to surface waters. Any groundwater dewatering activities that require discharge to surface waters would be conducted in accordance with the *De Minimis* Permit as specified in Standard Condition WQ-3. This order requires testing and treatment, as necessary, of groundwater encountered during groundwater dewatering prior to release.

Although groundwater dewatering could occur, dewatered groundwater would be discharged to the sanitary sewer or storm drain system and not back into groundwater, and would therefore not introduce pollutants to groundwater. Infiltration of stormwater can have the potential to affect groundwater quality in areas of shallow groundwater. As discussed above, the groundwater table was not encountered up to a depth of 60 ft bgs. Pollutants in stormwater are generally removed by soil through absorption as water infiltrates. Therefore, in areas of deep groundwater, there is more absorption potential and, as a result, less potential for pollutants to reach groundwater. Therefore, due to the depth to groundwater, it is not expected that any stormwater that may infiltrate during construction would affect groundwater quality because there is not a direct path for pollutants to reach the groundwater table. Therefore, project construction would not substantially degrade groundwater quality.

Potential pollutants of concern from long-term operations of residential developments include suspended solids/sediments, nutrients, pathogens (bacteria/virus), pesticides, oil and grease, trash

²⁰ Seepage or perched groundwater is groundwater that accumulates above a geologic layer with low permeability and is separated from the main groundwater table.

and debris, and dry weather runoff. The project would comply with the requirements of the Santa Ana RWQCB's NPDES Permit *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 Areawide Urban Storm Water Runoff Orange County* (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit). The North Orange County MS4 Permit requires that a Water Quality Management Plan (WQMP) be prepared for new development and significant redevelopment projects. WQMPs specify the Site Design, Low Impact Development (LID), Source Control, and/or Treatment Control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff. The proposed project is classified as a significant redevelopment project because it would result in the addition or replacement of 5,000 square feet (sf) or more of impervious surface on a developed site; therefore, the proposed project must comply with the requirements of the North Orange County MS4 Permit, including the requirement for preparation of a WQMP and implementation of operational BMPs. A preliminary WQMP (JLC Engineering and Consulting, Inc., January 2020) has been prepared for the project. As specified in Standard Condition WQ-4, the preliminary WQMP will be refined and finalized during final design based on the final site plan.

According to the preliminary WQMP, proposed non-structural source control BMPs include:

- Education for property owners, tenants, and occupants
- Activity restrictions
- Common area landscape management
- Ongoing BMP maintenance by the property owner
- Common area litter control
- Employee training
- Common area catch basin inspection
- Street sweeping private streets and parking lots

Proposed structural source control BMPs include:

- Storm drain stenciling and signage
- Trash and waste storage area to reduce pollution introduction
- Use of efficient irrigation systems and landscape design, water conservation, smart controllers, and source control
- Wash water control for food preparation areas

Proposed BMPs include two BMP treatment trains, each consisting of an underground detention system and biotreatment BMPs (a Modular Wetland System) which would be designed to retain and treat stormwater runoff on the project site before being discharged to the storm drain system. Specifically, stormwater runoff from the northern portion of the project site will be discharged to a subsurface detention system located beneath the project site boundary, which will retain flow before discharging to a Modular Wetland System. The treated stormwater runoff would then be discharged to an existing 24-inch storm drain, which connects to an existing 48-inch storm drain just north of the project site. Stormwater runoff from the southern portion of the project site will first flow to a subsurface detention system located beneath the southeastern project site boundary, which will retain flow prior to discharging to a Modular Wetland System. The treated stormwater would then be pumped onto Seabluff Drive via a proposed stormdrain, and would ultimately be conveyed to Yorktown Avenue. When combined, the non-structural source control, structural

source control, and biotreatment BMPs would target and reduce pollutants of concern in stormwater runoff from the project site.

As discussed previously, infiltration of stormwater could have the potential to affect groundwater quality in areas of shallow groundwater. Due to the depth to groundwater, it is not expected that any stormwater that may infiltrate during operation would affect groundwater quality because there is not a direct path for pollutants to reach groundwater. In addition, the project would be required to implement operational BMPs to treat stormwater before it could reach groundwater.

With implementation of Standard Conditions WQ-1, WQ-2, WQ-3, and WQ-4, which require compliance with City and NPDES regulations and implementation of construction and post-construction BMPs, construction and operational impacts related to waste discharge requirements, water quality standards, and degradation of surface or groundwater quality would be less than significant, and no mitigation is required.

Standard Conditions (SCs) and Mitigation Measures: No mitigation is required. However, the following Standard Conditions are standard conditions based on local, State, and federal regulations or laws that serve to reduce impacts related to hydrology and water quality. These Standard Conditions are applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts to receiving waters.

SC WQ-1 Construction General Permit. Prior to issuance of a grading permit, the project Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System No. CAS000002, as amended by Orders No. 2010-0014-DWQ and 2012-0006-DWQ) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTs). The project Applicant shall provide the Waste Discharge Identification Number (WDID) to the Director of the City of Huntington Beach (City) Public Works Department, or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the Director of the City's Public Works Department, or designee. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented for the proposed project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction best management practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.

SC WQ-2 Erosion and Sediment Control Plan. In compliance with the requirements of Title 17 Buildings and Construction, Chapter 17.05 Grading and Excavation Code, subsection 17.05.320 Erosion Control Plans of Huntington Beach Municipal Code, the project Applicant shall submit a grading plan and erosion control plan to the Director of the City Public Works Department, or designee, for review and approval

prior to issuance of a grading permit. The project Applicant shall also submit erosion and sediment control plans annually to the Director of the City Public Works Department, or designee, for review and approval by September 15th of each year during construction.

SC WQ-3 Groundwater Dewatering Permit. If groundwater dewatering is required during construction or excavation activities and the dewatered groundwater is discharged to the sanitary sewer system, the project Applicant shall obtain a discharge permit from the Director of the City Public Works Department. If the dewatered groundwater is discharged to the stormdrain system, the project Applicant shall obtain coverage under the *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality* (Order No. R8-2009-0003, NPDES No. CAG998001, as amended by Order No. R8-2015-0004), which covers discharges to surface waters that pose an insignificant (de minimus) threat to water quality within. The project Applicant shall provide the Waste Discharge Identification Number (WDID) to the Director of the City's Public Works Department, or designee, to demonstrate proof of coverage under the *De Minimis* Permit. Groundwater dewatering shall not be initiated until a WDID is received from the Santa Ana Regional Water Quality Control Board (RWQCB) and is provided to the Director of the City's Public Works Department, or designee. This shall include submission of a Notice of Intent for coverage under the permit to the RWQCB at least 45 days prior to the start of dewatering. Groundwater dewatering activities shall comply with all applicable provisions in the permit, including water sampling, analysis, treatment (if required), and reporting of dewatering-related discharges. Upon completion of groundwater dewatering activities, a Notice of Termination shall be submitted to the Santa Ana RWQCB.

SC WQ-4 Water Quality Management Plan. Prior to the issuance of grading or building permits, the project Applicant shall submit a Final Water Quality Management Plan (WQMP) to the City Engineer, or designee, for review and approval in compliance with the requirements of the 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 Areawide Urban Storm Water Runoff Orange County (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit). The Final WQMP shall be prepared consistent with the requirements of the *Technical Guidance Document for Water Quality Management Plans* (December 2013) and the Water Quality Management Plan template, or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project area. The City shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.

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

Less Than Significant Impact.

As discussed in Response 5.10(a), groundwater was not encountered up to a depth of 60 ft bgs during geotechnical borings on the project site. Therefore, due to the depth to the groundwater table and the depth of excavation, dewatering of the groundwater table would not be required. Although excavation would occur well above existing groundwater levels, perched groundwater could be present beneath the project site. Therefore, groundwater dewatering of perched groundwater may be required during construction. Groundwater dewatering would not substantially affect groundwater supplies or recharge because groundwater dewatering would be temporary, would cease after project construction, and would only affect perched groundwater. Therefore, construction impacts related to depletion of groundwater supplies or interference with groundwater recharge would be less than significant, and no mitigation would be required.

Currently, the project site is developed with existing commercial uses, and consists of both pervious and impervious surfaces. According to the preliminary WQMP, development of the project would increase impervious surface area on the project site by approximately 1.31 acres. The increase in impervious surface area as a result of project implementation would decrease on-site infiltration. However, due to the depth to groundwater, it is unlikely that groundwater recharge from stormwater infiltration currently occurs on the project site. Regardless, any decrease in infiltration would be minimal in comparison to the size of the Coastal Plain of Orange County Groundwater Basin, which underlies the project site and has a storage capacity of 38,000,000 acre-feet.²¹ Furthermore, project operation would not include groundwater extraction. For these reasons, a less than significant impact related to depletion of groundwater supplies or interference with groundwater recharge during project operation would occur, and no mitigation is required.

- c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i) *Result in substantial erosion or siltation on or off-site?*

Less Than Significant Impact.

During construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above in Response 5.10(a) and as specified in Standard Condition WQ-1, the Construction General Permit requires preparation of a SWPPP to identify construction BMPs to be implemented as part of the proposed project to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation. In addition, as also specified in Standard Condition WQ-2, Section 17.05.310-330 of the City's Municipal Code requires that an Erosion Control Plan be prepared annually during construction. The SWPPP and Erosion and Sediment Control Plan would detail the BMPs to be implemented during construction. With compliance with the Construction General Permit as indicated in Standard Condition WQ-1 and with implementation of an Erosion Control Plan, as specified in Standard Condition WQ-2, construction impacts related to on- or off-site erosion or siltation would be less than significant, and no mitigation is required.

²¹ California Department of Water Resources (DWR). 2004. Bulletin 118, Coastal Plain of Orange County Groundwater Basin. February 27.

The proposed stormwater drainage system will generally conform to the existing on-site drainage pattern. However, development of the project would increase impervious surface area on the project site to a total of approximately 1.31 acres, which would increase on-site stormwater flows. Although the project would increase impervious surface area, impervious surface areas associated with development of the project site are not prone to erosion or siltation, because no loose soil would be included in these areas. The remaining portion of the site, although pervious, would be covered with proposed landscaping, which would stabilize the soil and minimize on-site erosion or siltation.

As a result of the 1.31-acre increase in impervious surface area, the proposed project would increase runoff from the site during storm events, which can increase off-site erosion and siltation. As discussed in Response 5.10(a) above, the project includes two BMP treatment trains, each consisting of an underground detention system. The underground detention systems would be designed to retain and treat stormwater runoff from the project site and would reduce the volume of stormwater discharged to the local storm drain system off-site.

Significant redevelopment projects are subject to specific hydromodification²² requirements of the North Orange County MS4 Permit and must implement measures for site design, source control, runoff reduction, stormwater treatment, and baseline hydromodification management. However, according to the Preliminary WQMP, the project site is not located in an area of hydrologic condition of concern (HCOC)²³ and is exempt from hydromodification requirement. Specifically, according to the Orange County Susceptibility Analysis map for the Anaheim Bay-Huntington Harbour, the project site is not located within a potential area of erosion, habitat, and physical structure susceptibility because downstream receiving waters are stabilized channels. Because the downstream receiving waters are not susceptible to hydromodification, the proposed project does not have a potential to result in downstream erosion or siltation. With implementation of Standard Conditions WQ-1 and WQ-2, impacts related to the alteration of the existing drainage pattern in a manner that would result in substantial erosion or siltation would be less than significant, and no mitigation is required.

- ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*

Less Than Significant Impact.

Construction activities would alter the on-site drainage pattern, potentially compacting on-site soils and increasing the potential for flooding compared to existing conditions. As discussed in Response 5.10(a) above, the Construction General Permit requires preparation of a SWPPP to identify construction BMPs to be implemented as part of the proposed project, as specified in Standard Condition WQ-1. The SWPPP would include construction BMPs to control and direct on-site surface runoff and would include detention facilities, if required to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage systems. In addition, as also specified in Standard Condition WQ-2, an Erosion Control Plan would be prepared, which would detail the BMPs to be implemented during construction. Proper

²² Hydromodification is defined as hydrologic changes resulting from increased runoff from increases in impervious surfaces. Hydromodification impacts can include changes in downstream erosion and sedimentation.

²³ Areas designated as hydrologic conditions of concern are watersheds of unarmored or soft-armored drainages that are vulnerable to geomorphology changes due to hydromodification.

management of stormwater during construction would reduce impacts associated with on and off-site flooding.

Although the project would increase the amount of impervious surface at the project site by 1.31 acres, the proposed project would not alter the existing on-site drainage patterns. However, the increase in impervious surface area would increase stormwater runoff compared to existing conditions. The proposed project would include the construction of on-site storm drain facilities and BMPs, including two BMP treatment trains, each consisting of an underground detention system. The underground detention systems would be designed to retain and treat stormwater runoff from the project site and would reduce the volume of stormwater discharged to the local storm drain system. In order to ensure that stormwater runoff from development projects do not exceed the capacity of downstream storm drain systems, the City of Huntington Beach Project Implementation Code Requirements specifies that the project must reduce runoff from the project site to a level that is less than or equal to the 25-year existing land use flow rate, which is defined as the pre-project condition flow rate. In order to address increased runoff, the project is required to retain the incremental volume difference between the post-project 100-year, 24-hour storm duration and the pre-project 25-year, 24-hour storm duration.

As detailed in the Preliminary Hydrology Study (JLC Engineering, June 2, 2020), the two underground detention systems would retain the required volume within each drainage area respectively, and would reduce the flow rate equal to or below the 25-year existing land use (pre-project) flow rate to ensure that stormwater runoff from the project site does not exceed the capacity of the downstream storm drain systems. In addition, as specified in Standard Condition WQ-5, a Final Hydrology Study would be prepared based on final project plans and would be approved by the City. The Hydrology Study would confirm that the project drainage facilities comply with the City of Huntington Beach Project Implementation Code Requirements to ensure that sufficient capacity in the downstream drain systems is available to accommodate any increase in storm runoff from the project site so that off-site flooding does not occur. The proposed drainage facilities and BMPs needed to accommodate stormwater runoff would also be appropriately sized so that on-site flooding would not occur. With implementation of BMPs and Standard Conditions WQ-1, WQ-2, and WQ-5, impacts related to on- or off-site flooding from an increase in surface runoff would be less than significant, and no mitigation is required.

Standard Conditions (SCs) and Mitigation Measures: No mitigation is required; however, Standard Conditions WQ-1, WQ-2, and WQ-5 would be implemented to reduce impacts.

SC WQ-5 Final Hydrology and Hydraulic Analysis. The project Applicant shall submit a Final Hydrology Study to the City Engineer, or his/her designee, for review and approval prior to issuance of grading and building permits. The Final Hydrology Study shall be prepared consistent with the requirements of the *Orange County Hydrology Manual* (Orange County Environment Agency 1986) and *Orange County Hydrology Manual Addendum No. 1* (Orange County Environment Agency 1996), or subsequent guidance manuals. The Final Hydrology Study shall demonstrate that the on-site drainage facilities and on-site underground detention systems are designed and adequately sized to accommodate stormwater runoff from the design storm so that peak flow of stormwater from the project site would not exceed pre-project conditions. The Final Hydrology Study shall comply with the City of Huntington Beach Project Implementation Code Requirements and would demonstrate that stormwater runoff would be reduced to less than or equal to the 25-year existing land use flow rate, which is defined as the pre-project condition

flow rate. The City Engineer, or designee, shall ensure that the drainage facilities specified in the Final Hydrology Study are incorporated into the final project design.

- iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant Impact.

As discussed in Response 5.10(a), and specified in Standard Conditions WQ-1, WQ-3, and WQ-4, the proposed project would include implementation of construction BMPs, would comply with the requirements of the *De Minimis* Permit, and would include implementation of operational BMPs to treat stormwater runoff. Implementation of BMPs and compliance with the *De Minimis* Permit would ensure that the project would not provide substantial additional sources of polluted runoff to the storm drain system.

As discussed previously, the proposed project would increase the impervious surface area by 1.31 acres compared to existing conditions, which would increase stormwater runoff from the site. However, the proposed project would include the construction of on-site storm drain facilities, including underground detention systems, which would collect and retain stormwater on-site. As specified in Response 5.10(c)(ii), the two underground detention systems would retain the required volume within each drainage area, and would reduce the flow rate either equal to or below the 25-year existing land use (pre-project) flow rate to ensure that stormwater runoff from the project site does not exceed the capacity of the downstream storm drain systems. In addition, as stated in the Preliminary Hydrology Study, flows on the southern portion of the project site would discharge from Seabluff Drive directly into Yorktown Avenue and would not adversely impact Seabluff Drive. As specified in Standard Condition WQ-5, the proposed on-site storm drain facilities would be appropriately sized to reduce stormwater runoff discharged from the project site so that runoff water would not exceed the capacity of existing or planned stormwater drainage systems.

Therefore, with implementation of Standard Conditions WQ-1, WQ-3, WQ-4, and WQ-5, impacts related to the creation or contribution of runoff water that would provide substantial additional sources of polluted runoff or that would exceed the capacity of existing or planned stormwater drainage systems would be less than significant, and no mitigation is required.

Standard Conditions (SCs) and Mitigation Measures: No mitigation is required; however, Standard Conditions WQ-1, WQ-3, WQ-4, and WQ-5 would be implemented to reduce impacts.

- iv) *Impede or redirect flood flows?*

No Impact.

The project site is not located within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain. According to the FEMA Flood Insurance Rate Maps (FIRMs) Nos. 06059C0242K (March 21, 2019) and 06059C0261J (December 3, 2009), the project site is located within Zone X, Area of Minimal Flood Hazard. Because the project would not place improvements and structures directly within a 100-year floodplain, the project would not impede or redirect flood flows. Therefore, no impact would occur related to impeding or redirecting of flood flows, and no mitigation is required.

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

No Impact.

As discussed in Response 5.10(c)(iv), the project is not located within a 100-year flood hazard area. In addition, the proposed project does not place structures within a 100-year floodplain. Furthermore, the project site is not within a dam inundation area.²⁴ Therefore, the project site is not subject to inundation from flooding during a storm event or from dam failure.

Tsunamis are ocean waves generated by tectonic displacement of the seafloor associated with shallow earthquakes, seafloor landslides, rock falls, and exploding volcanic islands. Tsunamis can have wave lengths of up to 120 miles and travel as fast as 500 miles per hour (mph) across hundreds of miles of deep ocean. Upon reaching shallow coastal waters, the waves can reach up to 50 ft in height, causing great devastation to near-shore structures. The project site is located approximately 1.3 miles from the Pacific Ocean shoreline. According to the City's *Local Hazard Mitigation Plan*, the project site is not located within a tsunami inundation zone.²⁵ Therefore, the project site is not subject to inundation from tsunamis.

Seiching occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). Such waves can cause retention structures to fail and flood downstream properties. Because there are no large lakes, reservoirs, or other water retention facilities in the vicinity of the project site, the project site is not at risk of inundation from seiche.

Because the project site is not subject to inundation from a storm event, dam failure, tsunami, or seiche waves, there is no risk of release of pollutants due to inundation, and no mitigation is required.

- e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less Than Significant Impact.

The project is within the jurisdiction of the Santa Ana RWQCB. The Santa Ana RWQCB adopted a Water Quality Control Plan (i.e., Basin Plan) (January 1995, with amendments effective on or before June 2019), which designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. As summarized below, the project would comply with the applicable NPDES permits and would implement construction and operational BMPs to reduce pollutants of concern in stormwater runoff.

As discussed in Response 5.10(a), during construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via stormwater runoff into receiving waters. As specified in Standard Condition WQ-1, the

²⁴ City of Huntington Beach. 2017. *Local Hazard Mitigation Plan*, Figure 2: Dam Inundation Hazard Zone. March.

²⁵ City of Huntington Beach. 2017. *Local Hazard Mitigation Plan*. Figure 1: Tsunami Inundation Zones in Huntington Beach. March.

proposed project would be required to comply with the requirements set forth by the Construction General Permit, which requires preparation of a SWPPP and implementation of construction BMPs to control stormwater runoff and discharge of pollutants. Additionally, as also specified in Standard Condition WQ-2, an Erosion Control Plan would be prepared annually during construction. The SWPPP and Erosion and Sediment Control Plan would detail the BMPs to be implemented during construction. In addition, groundwater dewatering of perched groundwater may be required during construction. If groundwater dewatering is necessary, groundwater would be discharged to either the sanitary sewer or stormdrain system. Groundwater that is discharged to surface waters can introduce total dissolved solids, nitrates, and other constituents to surface waters. If discharged to the sanitary sewer system, a permit from the City of Huntington Beach Public Works Department would be required, as specified in Standard Condition WQ-3. If groundwater is discharged to the storm drain system, coverage under the North Orange County MS4 Permit would be required, as also specified in Standard Condition WQ-3.

As discussed in Response 5.10(a), the primary pollutants of concern during project operations are suspended solids/sediments, nutrients, pathogens (bacteria/virus), pesticides, oil and grease, trash and debris, and dry weather runoff. As discussed in Standard Condition WQ-4, a final WQMP would be prepared for the project in compliance with the North Orange County MS4 Permit. The final WQMP will detail the Site Design, LID, Source Control, and/or Treatment Control BMPs that would be implemented to treat stormwater runoff and reduce impacts to water quality during operation. The proposed BMPs would capture and treat stormwater runoff and reduce pollutants of concern in stormwater runoff.

The proposed project would comply with the applicable NPDES permits, which requires preparation of a SWPPP, specifies regulations for groundwater dewatering, requires preparation of a final WQMP, and includes implementation of construction and operational BMPs to reduce pollutants of concern in stormwater runoff. As such, the project would not result in water quality impacts that would conflict with Santa Ana RWQCB's Basin Plan. Impacts related to conflict with a water quality control plan would be less than significant and no mitigation is required.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. Specifically, SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans (GSPs), or an approved alternative to a GSP, to manage the sustainability of groundwater basins in California. The project site is located within the Coastal Plain of Orange County Groundwater Basin, which is managed by the Orange County Water District. The Coastal Plain is identified by the Department of Water Resources as a medium-priority basin;²⁶ therefore, development of a GSP or an approved GSP alternative is required. In lieu of a GSP, Orange County Water District, Irvine Ranch Water District, and the City of La Habra developed the Basin 8-1 Alternative, which establishes objectives and criteria for groundwater management and is designed to be functionally equivalent to a GSP.²⁷

The project would not conflict with or obstruct the implementation of the Basin 8-1 Alternative. As discussed in Response 5.10(a), although groundwater dewatering of perched groundwater could occur, dewatered groundwater would be discharged to the sanitary sewer or storm drain system

²⁶ California Department of Water Resources (DWR). 2016. SGMA Basin Prioritization Dashboard, Groundwater Basins 2016. Website: <https://gis.water.ca.gov/app/bp-dashboard/p2/> (accessed May 1, 2020).

²⁷ Orange County Water District. 2017. *Basin 8-1 Alternative*. January 1.

and not back into groundwater, and would therefore not introduce pollutants to groundwater. Due to the depth to groundwater, it is not expected that any stormwater that may infiltrate during construction would affect groundwater quality because there is not a direct path for pollutants to reach the groundwater table. In addition, the project would be required to implement operational BMPs to treat stormwater before it could reach groundwater. Additionally, as discussed in Response 5.10(b), groundwater dewatering would be temporary, and dewatering of the groundwater table would not be required. Lastly, although the increase in impervious surface area as a result of project implementation would decrease on-site infiltration, due to the depth to groundwater, it is unlikely that groundwater recharge from stormwater infiltration currently occurs on the project site. Any decrease in infiltration would be minimal in comparison to the size of the Coastal Plain of Orange County Groundwater Basin. Therefore, the proposed project does not have the potential to impact groundwater quality, interfere with groundwater recharge, or decrease groundwater supplies. For the reasons outlined above and with implementation of Standard Conditions WQ-1, WQ-2, WQ-3, and WQ-4, a less than significant impact would occur related to conflict with or obstruction implementation of water quality control plans or sustainable groundwater management plans, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.11 LAND USE AND PLANNING <i>Would the project:</i>				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Impacts Analysis:

a) *Would the project physically divide an established community?*

No Impact.

The project site is bounded to the northwest by a senior (aged 55 and over) multi-family residential development; to the north and northeast by multi- and single-family residential developments; to the east by Seabluff Drive and a private, multi-family residential development; to the southeast by Sunrise of Huntington Beach (an assisted living and memory care facility); to the south by Yorktown Avenue, the Huntington Beach City Hall, and the Huntington Beach Police Department; to the southwest by Huntington Beach High School; and to the west by Main Street and Seacliff Village Shopping Center. Land uses in the project vicinity are predominantly multi-family residential, public, and commercial.

The proposed project would replace an existing office building and surface parking with an assisted living and memory care facility. The project is designed to utilize the project site to its full potential. Located along Main Street, one of the City of Huntington Beach’s (City) major travel corridors, the project site would include a mix of land uses that would complement existing

development in the vicinity of the project site. Although implementation of the proposed project would change the existing parcel configuration within the site, it would not change the existing street layout in the area or introduce any new barriers that would impede or alter access to any existing adjacent uses. Therefore, the proposed project would not result in the physical division of any established community, and no mitigation is required.

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

Less Than Significant Impact.

The main documents regulating land use on the project site are the City of Huntington Beach General Plan and the City's Zoning Code. The proposed project is consistent with both the City's General Plan and Zoning Code, and would not require a General Plan Amendment or a zone change. Discussion on the project's consistency with the City's General Plan and Zoning Code are included below.

General Plan. The City's General Plan is the fundamental policy document of the City of Huntington Beach. Within the General Plan, the Land Use Element (2017) is the principal document guiding land use and development within the City. It serves as a blueprint for development throughout the community and is the vehicle through which the community needs, desires, and aspirations are balanced.

The project site has a land use designation of Commercial – Office (CO). This land use designation provides for professional offices, ancillary commercial services, eating and drinking establishments, and similar uses designed to serve the needs of businesses and employees. The CO designation allows a Floor Area Ratio (FAR) up to 1.0.

The proposed project would be consistent with applicable Land Use Element policies:

Goal LU-1, Policy A: Ensure that development is consistent with the land use designations presented in the Land Use Map, including density, intensity, and use standards applicable to each land use designation.

Goal LU-2, Policy D: Maintain and protect residential neighborhoods by avoiding encroachment of incompatible land uses.

Goal LU-11, Policy B: Encourage new businesses to locate on existing vacant or underutilized commercial properties where these properties have good locations and accessibility.

Goal LU-12, Policy B: Encourage renovation and revitalization of deteriorating and struggling nonresidential areas and corridors, particularly commercial locations.

The proposed project's land uses would be consistent with the allowable uses within the CO designation, and the proposed project's development intensity on Parcels 1, 2, 3, and 4 would not exceed the maximum allowable FAR of 1.0 allowed by the CO designation (Goal LU-1, Policy A). As described elsewhere in this Initial Study/Mitigated Negative Declaration (IS/MND), the proposed project's addition of an assisted living and memory care facility and surface parking on the project site would not result in any potentially significant nuisance impacts (air quality, noise,

and visual impacts) on surrounding properties that cannot be reduced to less than significant levels after implementation of mitigation. As such, development of the proposed project would not result in the encroachment of incompatible land uses in the area (Goal LU-2, Policy D). Implementation of the proposed project would improve the utilization of a commercial property that is centrally located within the City and has good access to major roadways (Main Street and Yorktown Avenue), shopping (the Seacliff Village Shopping Center), and bus service (several OCTA bus routes serve the project site) (Goal LU-11, Policy B). The proposed project would also renovate and revitalize an existing office park by replacing the existing landscaping with new trees and shrubs and providing new outdoor work space to make the office park more competitive with other office properties that offer similar amenities for their tenants (Goal LU-12, Policy B).

The proposed project is consistent with the land use designation on the project site, and with applicable goals and policies of the City’s General Plan Land Use Element, and would not require a General Plan Amendment. Therefore, the proposed project would be consistent with the General Plan, and no land use conflict would occur. No mitigation is required.

Zoning Code. The City’s Zoning Code is the primary implementation tool for the Land Use Element and the goals and policies contained therein. The City’s Zoning Map indicates the general location and extent of future development in the City. The City’s Zoning Ordinance, which includes the Zoning Map, contains more specific information related to permitted land uses, building intensities, and development standards.

Based on the City’s Zoning Map, the project site is zoned CO – Commercial Office. This zoning designation allows for administrative, financial, professional, medical, and business needs. The assisted living and memory care facility that would be constructed on Parcel 1 is considered a convalescent facility, which is a conditionally permitted use under the existing zoning designation. A Conditional Use Permit Application for a convalescent facility is being submitted to develop and operate a licensed assisted living and memory care facility on Parcel 1 of the project site. Upon the approval of a Conditional Use Permit (CUP) by the City’s Planning Commission for the construction and operation of the assisted living and memory care facility on Parcel 1, the proposed project would be consistent with the CO – Commercial Office zoning designation. The four remaining multi-tenant commercial office buildings on Parcels 2, 3, and 4 are consistent with CO – Commercial Office zoning designation. Because these uses would not change, project implementation on Parcels 2, 3, and 4 would be consistent with the City’s Zoning Code. Therefore, the proposed project would be consistent with the City’s Zoning Code, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.12 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?			X	

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?			X	
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Impact Analysis:

a) *Would the project 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?*

Less Than Significant Impact.

In 1975, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA), which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State of California Mining and Geology Board as being “regionally significant.” Such designations require that a lead agency’s land use decisions involving designated areas are to be made in accordance with its mineral resource management policies and that it considers the importance of the mineral resource to the region or the State as a whole, not just to the lead agency’s jurisdiction.

The project site has been classified by the California Geological Survey (CGS) as MRZ-3, indicating that the project site is in a region generally underlain by mineral deposits, the significance of which cannot be evaluated by available data. According to the City of Huntington Beach (City) Environmental Resources and Conservation Element (2017), the urbanized character of the City has generally precluded historic and current mining activities.

The City contains numerous land-based resources such as oil and natural gas. According to the City’s Environmental Resources and Conservation Element, oil wells are scattered throughout the City. Oil reserves in the Huntington Beach oil field are estimated to be between 117 and 866 million barrels of recoverable oil, and roughly 745,000 million cubic feet of natural gas was withdrawn from the City in 2012 (Environmental Resources and Conservation Element, 2017).

According to the Phase I Environmental Site Assessment (ESA) (provided in Appendix E), 13 oil wells were located on the project site at various times beginning in the 1940s until the 1970s. All

13 of the oil wells were capped and abandoned by 1998. Today, most of the oil-extracting facilities currently operating in the City are located along the coastal areas and mesas. Oil resources underlying the project site are still accessible from nearby properties and from existing oil-extraction facilities in the area, which are able to use directional (slant) drilling technology to access potential oil resources beneath the project site by drilling non-vertical wells. Though the project site is located in a methane-rich (and hence, a natural-gas rich) area, no natural gas extraction currently occurs on-site. In addition, the project site is currently developed with office uses and a paved asphalt parking lot. Therefore, the drilling of vertical oil and natural gas extraction wells is already precluded on much of the project site. As such, the proposed project would not result in the loss of a known commercially valuable or locally important mineral resource. Impacts to known mineral resources as a result of the proposed project would be less than significant; therefore, no mitigation would be required.

b) *Would the project 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?*

Less Than Significant Impact.

As discussed in Response 5.12(a), although the project site is located in an oil- and natural gas-rich area and has been previously used for the extraction of oil, no mineral resource extraction activities currently occur on the site. In addition, the project site is currently developed with office uses and a paved asphalt parking lot. According to City’s Environmental Resources and Conservation Element (2017), the primary mineral resources of value within the City are oil and natural gas. Though much of the City is underlain by these resources, existing extraction facilities within the City are concentrated in coastal and mesa areas. Furthermore, the City’s Environmental Resources and Conservation Element does not identify the project site as a locally-important mineral resource recovery site. As such, redevelopment of the project site would not cause the loss of potential resources. Therefore, no impacts related to the loss of availability of a locally important mineral resource recovery site, as delineated on a local general plan, specific plan, or other land use plan would occur as a result of project implementation.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.13 NOISE <i>Would the project result in:</i>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or				X

working in the project area to excessive noise levels?				
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Discussion:

The following provides an overview of the characteristics of sound and the regulatory framework that applies to noise within the vicinity of the project site.

Characteristics of Sound. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements, which better represent how humans are more sensitive to sound at night.

As noise spreads from a source, it loses energy; therefore, the farther away the noise receiver is from the noise source, the lower the perceived noise level. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise-sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} , the Community Noise Equivalent Level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours), and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The City of Huntington Beach (City) uses the CNEL noise scale for long-term noise impact assessment. Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max} , which reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments.

The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels (3 dB or greater) are considered potentially significant.

Characteristics of Vibration. Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors where the motion may be discernible. However, without the effects associated with the shaking of a building, there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as motion of building surfaces, the rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Building damage is not a factor for normal operation and construction activities with the occasional exception of blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 VdB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet (ft) of the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft (Federal Transit Administration [FTA] *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual) (May 2018)). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. For most projects, it is assumed that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, construction activities have the potential to result in ground-borne vibration that could be perceptible and annoying. Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path usually will be greater than ground-borne noise.

Ground-borne vibration has the potential to disturb people as well as damage buildings. Although it is very rare for ground-borne vibration to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile driving to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 2018). Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). RMS is best for characterizing human response to building vibration, and PPV is used to characterize the potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the velocity in decibels (VdB), “V” is the RMS velocity amplitude, and “Vref” is the reference velocity amplitude, or 1×10^{-6} inches per second (inch/sec) used in the United States.

Applicable Noise Standards

The applicable noise standards governing the project site include the criteria in the City’s Noise Element of the General Plan and Section 8.40.050 of the City’s Municipal Code.

City of Huntington Beach General Plan Noise Element. The City of Huntington Beach General Plan 2017 Noise Element describes the City’s noise environment. Table 5.13.A below presents the

Land Use-Noise Compatibility Standards as presented in the Noise Element. These standards are used in the land planning stage of the development process to identify project opportunities and constraints and may be used to determine whether a certain type of land use would be compatible with the existing and future noise environment. Proposed land uses should be compatible with existing and forecasted future noise levels. Projects with incompatible land use-noise exposures should incorporate noise attenuation and/or control measures within the project design that reduce noise to an acceptable interior level of 45 dBA CNEL or lower, as required by State regulations (California Code of Regulations [CCR] Title 24) for residential uses. The City's compatibility standards provide for normally acceptable conditions, and are generally based on State recommendations and City land use designations. These standards, which use the CNEL noise descriptor, are intended to be applicable for land use designations exposed to noise levels generated by transportation-related sources. Land use compatibility noise exposure limits are generally established as 60 dBA CNEL for low-density and medium-density residential uses.

Table 5.13.A: Land-Use Noise Compatibility Standards

General Plan Land Use Designation	Proposed Uses	Exterior Normally Acceptable¹ (dBA CNEL)	Exterior Conditionally Acceptable² (dBA CNEL)	Exterior Normally Unacceptable³ (dBA CNEL)	Interior Acceptable² (dBA CNEL)
Residential					
Low Density	Single-family, mobile home, senior housing	Up to 60	61–65	≥66	45
Medium Density, Medium High Density, High Density	Attached single-family, duplex, townhomes, multi-family, condominiums, apartments	Up to 65	66–70	≥71	45
Mixed-Use					
Mixed-Use	Combination of commercial and residential uses	Up to 70	71–75	≥76	45
Commercial					
Neighborhood Commercial, General Commercial	Retail, professional office, health services, restaurant, government offices, hotel/motel	Up to 70	71–75	≥76	45
Visitor Commercial	Hotel/motel, timeshares, recreational commercial, cultural facilities	Up to 65	66–75	>75	45
Office	Office, financial institutions	N/A	N/A	N/A	N/A
Public / Semi-public					
Semi-public (School)	Schools	Up to 60	61–65	≥66	45
Semi-public (Other)	Hospitals, churches, cultural facilities	Up to 65	66–70	≥71	45
Public	Public utilities, parking lot	N/A	N/A	N/A	N/A
Industrial					
Research and Technology	Research and development, technology, warehousing, business park	N/A	N/A	N/A	N/A
Industrial	Manufacturing, construction, transportation, logistics, auto repair	N/A	N/A	N/A	N/A
Open Space and Recreational					
Conservation	Environmental resource conservation	N/A	N/A	N/A	N/A
Park	Public park	Up to 65	65–75	≥76	N/A

Table 5.13.A: Land-Use Noise Compatibility Standards

General Plan Land Use Designation	Proposed Uses	Exterior Normally Acceptable ¹ (dBA CNEL)	Exterior Conditionally Acceptable ² (dBA CNEL)	Exterior Normally Unacceptable ³ (dBA CNEL)	Interior Acceptable ² (dBA CNEL)
Recreation	Golf courses, recreational water bodies	Up to 65	65–75	≥76	N/A
Shore	City and state beaches	N/A	N/A	N/A	N/A

Source: City of Huntington Beach. General Plan Noise Element (2017).

¹ Normally acceptable means that land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances.

² Conditionally acceptable means that land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the project or noise levels in exterior areas can be mitigated to the normally acceptable level. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

³ Normally unacceptable means that land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the project in addressing other General Plan goals and policies outweigh concerns about noise, the use should be established only where exterior areas are omitted from the project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

⁴ Interior acceptable means that the building must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

N/A = not applicable

However, for medium-high density residential, high-density residential, and mixed-use land use designations, 65 dBA CNEL is permitted. Higher exterior noise levels are more often permitted for multiple-family housing and housing in mixed-use contexts than for single-family land uses. This is because multiple-family complexes are generally located in transitional areas between single-family and commercial districts or near major arterials served by transit, and a more integrated mix of residential and commercial activity (accompanied by higher noise levels) is often desired in such locations.

The City’s standards establish maximum interior noise levels for new residential development, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL. The City’s land use compatibility standards are based first on the General Plan land use designation of the property, and secondly on the proposed use of the property. For example, in the mixed-use designation, a multiple-family use exposed to transportation-related noise would have an exterior noise standard of 65 dBA CNEL, and an interior noise standard of 45 dBA CNEL. The standards are purposefully general, and not every specific land use is identified. Application of the standards will vary on a case-by-case basis according to location, development type, and associated noise sources.

The Noise Element includes goals, objectives, and policies that are relevant to both ambient and stationary noise conditions and are designed to reduce potential noise impacts on future development and sensitive receptors.

Goal N-1 of the Noise Element is to ensure that noise-sensitive land uses are protected in area with acceptable noise levels. The policies implemented to achieve that goal are as follows:

A: Maintain acceptable stationary noise levels at existing noise-sensitive land uses such as schools, residential areas, and open spaces.

B: Incorporate design and construction features into residential, mixed-use, commercial, and industrial projects that shield noise-sensitive land uses from excessive noise.

Goal N-2 of the Noise Element is to ensure that land use patterns are compatible with current and future noise levels. The policies implemented to achieve that goal are as follows:

A: Require an acoustical study for proposed projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-2 (Table 5.13.A of this Section). The acoustical study shall be performed in accordance with the requirements set forth in this Noise Element.

B: Allow a higher exterior noise level standard for infill projects in existing residential areas adjacent to major arterials if no feasible mechanisms exist to meet exterior noise standards.

C: Minimize excessive noise from industrial land uses through incorporation of site and building design features that are intended to reduce noise impacts to sensitive land uses.

D: Encourage new mixed-use development projects to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from residential portions of the development, to the extent feasible.

Goal N-3 of the Noise Element is to ensure that the community is not disturbed by excessive noise from mobile sources. The policies implemented to achieve that goal include the following:

A: Mitigate noise created by any new transportation noise source so that it does not exceed the exterior or interior sound levels specified in Table N-2 (see Table 5.13.A in this section)

B: Prioritize use of site planning and project design techniques to mitigate excessive noise. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

C: Employ noise-reducing technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise on noise-sensitive land uses.

D: Continue to work with local, state, and federal agencies to install, maintain, and renovate highway and arterial right-of-way buffers and sound walls.

City of Huntington Beach Municipal Code. The Huntington Beach Municipal Code, Section 8.40.050, Exterior Noise Standards of the code presents the exterior noise levels standards by land use as shown in Table 5.13.B, below.

Table 5.13.B: Exterior Noise Standards (dBA)

Land Use	Time Period	Noise Level (dBA)
Residential	7:00 a.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Professional office and public institutional	Anytime	55
Commercial	Anytime	60
Industrial	Anytime	70

Source: City of Huntington Beach Municipal Code 8.40.050 Exterior Noise Standards.
dBA = A-weighted decibel

Section 8.40.060, Exterior Noise Levels Prohibited, provides time weighted limits to assess noise level impacts when activities occur for less than an hour and states the following: It shall be unlawful for any person at any location within the incorporated area of the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any residential, public institutional, professional, commercial or industrial property, either within or without the City, to exceed the applicable noise standards:

For a cumulative period of more than 30 minutes in any hour:

- Plus five db(A) for a cumulative period of more than 15 minutes in any hour;
- Plus 10 db(A) for a cumulative period of more than five (5) minutes in any hour;
- Plus 15 db(A) for a cumulative period of more than one (1) minute in any hour; or
- Plus 20 db(A) for any period of time.

In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall increase to reflect the maximum ambient noise level.

Section 8.40.090, Special Provisions, specifies that construction activities are prohibited between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sundays and federal holidays.

Federal Transit Administration. Given that the Municipal Code exempts construction activities and that no standard criteria for assessing construction noise impacts is provided, for the purposes of determining the amount of noise increase experienced at noise-sensitive uses surrounding the project, the guidelines within the FTA Manual (2018) are used in this analysis for construction noise impact identification. The guidelines for construction noise identify a noise level criterion of 90 dBA L_{eq} for residential uses. This provides reasonable criterion for assessing construction noise impacts based on the potential for adverse community reaction when the noise criterion is exceeded.

Applicable Vibration Standards

Due to the lack of vibration standards developed for projects similar to the proposed project, vibration standards included in the FTA Manual are used in this analysis to determine ground-borne vibration impacts, as shown in Table 5.13.C, below.

Table 5.13.C: Construction Vibration Damage Criteria

Building Category	PPV (inch/sec)	Approximate L_v (VdB) ¹
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA. *Transit Noise and Vibration Impact Assessment Manual* (2018).

¹ RMS vibration velocity in decibels (VdB) re 1 micro-inch/second.

FTA = Federal Transit Administration

inch/sec = inches per second

L_v = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity in decibels

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. Table 5.13.C lists the potential vibration damage criteria associated with construction activities, as suggested in the FTA Manual. FTA guidelines show that a vibration level of up to 102 vibration velocity in decibels (VdB) (an equivalent to 0.5 inch per second [inch/sec] in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 inch/sec in PPV).

Thresholds of Significance

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and the goals of the community in which the project is located. The following were used to determine whether the project would result in a significant noise impact:

For off-site transportation-related impacts:

- Where the existing ambient noise level is less than 65 dBA and a project-related permanent increase in ambient noise levels of 3 dBA CNEL or greater occurs.
- Where the existing ambient noise level is greater than 65 dBA and a project-related permanent increase in ambient noise levels of 1 dBA CNEL or greater occurs.

For non-transportation-related stationary source impacts, including operations:

- If current noise levels experienced at the surrounding sensitive uses are less than the hourly daytime noise level standards, then an exceedance of the standards listed in Table 5.13.B would constitute a potentially significant impact.
- If current noise levels experienced at the surrounding sensitive uses are greater than the hourly daytime noise level standards listed in Table 5.13.B, then a perceptible increase of 3 dBA or more would constitute a potentially significant impact.

For construction-related noise and vibration impacts:

- Lack of compliance with the Huntington Beach Municipal Code and exceedance of the FTA standards listed above in Table 5.13.C.

Existing Noise Environment

The project site is located at the northeast corner of Main Street and Yorktown Avenue on an 11.29-acre site within the existing Seaclyff Office Park. Currently, the overall site is used as an office park with five office buildings, one of which will be replaced as part of the project. The surrounding uses include the following:

- **North:** Existing Seaclyff Office Park (four office buildings and parking) and Pacific Ranch gated multi-family residences
- **South:** Yorktown Avenue and City of Huntington Beach Civic Center

- **East:** Seabluff Drive and Sunrise of Huntington Beach assisted living and memory care facility
- **West:** Main Street and Seacliff Village Shopping Center

The noise levels at the project site and surrounding areas are dominated by traffic on Main Street and Yorktown Avenue, parking lot activities at the existing business park, and operations at the commercial uses to the south and west.

Existing Noise Level Measurements. In order to assess the existing noise conditions in the area, noise measurements were gathered at the project site, Three long-term 24-hour measurements (LT-1, LT-2, and LT-3) were taken from March 31 to April 1, 2020. The results of the noise measurements are shown in Table 5.13.D below. It should be noted that the results presented in Table 5.13.D are likely reduced as compared to typical conditions due to the Statewide shelter-in-place orders that were in place during the measurements, resulting in lower traffic volumes on the surrounding roadways. The results of the noise modeling will be adjusted within the analysis based on modeling efforts.

Table 5.13.D: Existing Noise Level Measurements

Location	Description	Range of Daytime Noise Levels (dBA L _{eq})	Range of Nighttime Noise Levels (dBA L _{eq})	Average Daily Noise Level (dBA CNEL)
LT-1	Northeast corner of the intersection of Main Street and Yorktown Avenue, in the parking lot, approximately 120 ft from both centerlines.	53.7–62.9	44.5–56.5	61.5
LT-2	In front of the building at 2120 Yorktown Avenue.	50.9–59.6	43.0–53.0	57.8
LT-3	On the eastern property line of the vacant parcel, west of the multi-family uses at Pacific Ranch.	46.2–52.8	40.3–45.2	51.6

Source: Compiled by LSA (March 31–April 1, 2020).

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibel

ft = foot/feet

L_{eq} = average noise level

Existing Traffic Noise Contours. The guidelines included in the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (1977; FHWA RD-77-108) were used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. Existing traffic noise contours along modeled roadway segments are shown in Table 5.13.E which were taken from the *Noise Technical Report for the City of Huntington Beach General Plan Update* (July 2014). These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the locations where the noise contours are drawn. The combination of the two adjacent roadways would result in a noise level of 63.6 dBA CNEL at a distance of 100 ft. This resulting noise level estimate indicates that measured noise levels are approximately 2 dBA below typical conditions.

Table 5.13.E: Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 100 ft from Centerline of Roadway
Yorktown Avenue – from Main Street to Beach Boulevard	16,000	< 50	59	127	61.5
Main Street - from Garfield Avenue to Yorktown Avenue	13,000	< 50	< 50	90	59.3

Source: City of Huntington Beach, General Plan Update, *Noise Technical Report* (July 2014).
 Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
 ADT = average daily traffic
 CNEL = Community Noise Equivalent Level
 dBA = A-weighted decibels
 ft = foot/feet

See Figure 5.13-1, Noise Monitoring Locations.

Impact Analysis:

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

Less Than Significant Impact.

Noise impacts from the proposed project would be associated with construction and operational stationary noise. The project would consist of the construction and operation of a new senior assisted living facility within an existing business park and a new parking lot northeast of the existing buildings on a currently vacant lot.

Short-Term Off-site Construction Noise Impacts - Less Than Significant Impact. Short-term noise impacts would be associated with demolition of the existing structures, excavation, grading, and construction of the proposed project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the vicinity of the project site, but would no longer occur once construction of the proposed project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. During the peak condition when Phases 6 and 7 overlap, as part of the Trip Generation Analysis²⁸ for the project, construction activities would result in a daily total of 276 trips.

²⁸ LSA. 2020d. *The Seacliff of Huntington Beach Inspired Senior Living Trip Generation Analysis*. April.



FIGURE 5.13-1

LSA

LEGEND

- Project Site
- ▲ LT-1 Long-term (24-Hour) Measurement

↑
N

0 80 160
FEET

SOURCE: Bing Maps

The Seacliff of Huntington Beach Inspired Living
Noise Monitoring Locations

Although there would be a relatively high single-event noise exposure potential during heavy truck pass-bys causing intermittent noise nuisance (passing trucks at 50 ft would generate up to a maximum of 84 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be small when compared to existing daily traffic volumes of 13,000 vehicles on Main Street and 16,000 vehicles on Yorktown Avenue. Because construction-related vehicle trips would not approach the daily traffic volumes of the adjacent roadways, traffic noise would not increase by 3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term, construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of potential short-term noise impact is related to noise generated during demolition, site preparation, grading, building construction, and paving. Construction is completed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and therefore the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

The site preparation and grading phase, which includes excavation and grading of the site, tends to generate the highest noise levels because earthmoving equipment are the noisiest construction equipment. Additionally, this phase would be the longest of the phases expected to occur near the project site boundary. The three loudest pieces of equipment during this phase are estimated to include an excavator, grader, and dozer. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. In addition to the reference maximum noise level, the usage factor provided in Table 5.13.F, below, is utilized to calculate the hourly noise level impact for each piece of equipment based on the following equation:

$$L_{eq}(equip) = E.L. + 10 \log(U.F.) - 20 \log\left(\frac{D}{50}\right)$$

where: $L_{eq}(equip)$ = L_{eq} at a receiver resulting from the operation of a single piece of equipment over a specified time period

E.L. = noise emission level of the particular piece of equipment at a reference distance of 50 ft

U.F. = usage factor that accounts for the fraction of time that the equipment is in use over the specified period of time

D = distance from the receiver to the piece of equipment

Each piece of construction equipment operates as an individual point source. Utilizing the following equation, a composite noise level can be calculated when multiple sources of noise operate simultaneously:

$$Leq (composite) = 10 * \log_{10} \left(\sum_1^n 10^{\frac{Ln}{10}} \right)$$

Consistent with FTA guidance, utilizing the equations from the methodology above and the reference information in Table 5.13.F, the composite noise level of the two loudest pieces of equipment during construction, typically the concrete saw and tractor/truck, as required by the FTA criteria, would be 85.5 dBA L_{eq} at a distance of 50 ft from the construction area.

Table 5.13.F: Typical Maximum Construction Equipment Noise Levels (L_{max})

Type of Equipment	Acoustical Usage Factor	Suggested Maximum Sound Levels for Analysis (dBA L_{max} at 50 ft)
Air Compressor	40	80
Backhoe	40	80
Cement Mixer	50	80
Concrete/Industrial Saw	20	90
Crane	16	85
Excavator	40	85
Forklift	40	85
Generator	50	82
Grader	40	85
Loader	40	80
Pile Driver	20	101
Paver	50	85
Roller	20	85
Rubber Tire Dozer	40	85
Scraper	40	85
Tractor	40	84
Truck	40	84
Welder	40	73

Source: FHWA. *Highway Construction Noise Handbook* (August 2006).

dBA = A-weighted decibel(s)

FHWA = Federal Highway Administration

ft = foot/feet

L_{max} = maximum instantaneous noise level

Once composite noise levels are calculated, reference noise levels can then be adjusted for distance using the following equation:

$$Leq \text{ (at distance } X) = Leq \text{ (at 50 feet)} - 20 * \log_{10} \left(\frac{X}{50} \right)$$

In general, this equation shows that doubling the distance would decrease noise levels by 6 dBA, while halving the distance would increase noise levels by 6 dBA.

It is expected that the average noise levels during the construction of the northeastern parking lot and the new building on the southeastern portion of the project at the nearest residences would be 77 dBA L_{eq} based on an average distance of 140 ft to the nearest residence from the center of activity at each location. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project area under existing conditions, the noise impacts would no longer occur once project construction is completed and construction-related noise impacts would remain below the 90 dBA L_{eq} 1-hour construction noise level criteria established by the FTA.

Compliance with the City’s Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the project vicinity, construction noise would cease to occur once project construction is completed. In addition to compliance with appropriate construction times, Standard Condition Noise Reduction Measures (SC NOI-1) would implement measures during construction to reduce noise impacts to the greatest extent feasible. Therefore, construction activity noise impacts would be less than significant.

Long-Term Off-Site Noise Impacts

The proposed project has the potential to result in noise impacts to off-site surrounding uses from increases in traffic and operations related to parking lot activities and heating, ventilation, and air conditioning (HVAC) equipment. The following sections provide further details for these potential impacts and support the determination of less than significant requiring no mitigation.

Traffic Noise Impacts. As part of the traffic analysis for the proposed project, a *Trip Generation Analysis*²⁹ identified that a net trip generation of 310 ADT would result with the assisted living use which replaces the existing office use on site. As presented previously in Table 5.13.E, the existing ADTs along Main Street and Yorktown Avenue range from 13,000 to 16,000. The following equation was used to determine potential impacts:

$$\text{Change in CNEL} = 10 \log_{10} [V_{e+ht}/V_{\text{existing}}]$$

- where: V_{existing} = the existing daily volume
 V_{e+ht} = existing daily volumes plus haul truck
Change in CNEL = the increase in noise level due to haul truck

The results of the calculations show that an increase of approximately 0.1 dBA CNEL (Community Noise Equivalent Level measured in A-weighted decibels) is expected. A noise level increase of less than 1 dBA would not be perceptible to the human ear. Therefore, long-term, operation-related impacts would be less than significant. No mitigation is required.

Stationary Noise Impacts. The proposed project includes construction of a surface level parking lot at the northeast portion of the project site. Representative parking activities, such as persons conversing and slamming doors, would generate approximately 70 dBA L_{max} at 50 ft. The closest sensitive uses, existing multi-family residences, to the proposed parking lot are located at a distance of approximately 40 ft from the closest parking spaces, where they would be exposed to intermittent parking lot noise of up to 72 dBA L_{max} . This level is below the City’s 75 dBA L_{max} daytime noise threshold for residential uses, when the existing commercial and proposed uses would be in operations. Additionally, the existing property line wall around the proposed parking lot would further reduce noise levels related to parking lot activities.

The proposed project would have HVAC equipment. The greatest noise impact related to HVAC operations would occur at the western façade of Existing Office Building “A”, which is located east of the proposed facility. The site plan identifies 24 HVAC units that would vary in distance from 100 ft to 150 ft from the Existing Office Building “A” façade. To be conservative, it was assumed that all units would be in operation simultaneously at the closest distance to the receptor of 100 ft.

²⁹ LSA. 2020d. *The Seacliff of Huntington Beach Inspired Senior Living Trip Generation Analysis*. April.

Research of several manufacturers' (e.g., Trane) technical data revealed that that there are residential air conditioners with noise levels with an approximate range from 57 to 75 LwA (sound power level) or 42.3 to 60.3 dBA L_{eq} when measured at a distance of 5 ft.

Utilizing the equation below, a composite level of 48.1 dBA L_{eq} at the nearest building façade to the east.

$$Leq \text{ (at distance 100 feet)} = (\text{Number of Units} * 10^{\frac{Leq \text{ (at 5 feet)}}{10}}) - 20 * \log_{10} \left(\frac{100}{5} \right)$$

Additionally, the proposed 4 ft high screening walls would provide an additional reduction from the HVAC units. With the noise reduction associated with distance and additional reduction from screening walls, HVAC noise levels will be well below the 55 dBA L_{eq} standard for office uses. No mitigation is required.

Long-Term On-Site Noise Impacts

The proposed project has the potential to be exposed to noise levels that may exceed the City's exterior and interior noise level standards from surrounding roadways. The following sections provide further details for these potential impacts and support the determination of less than significant requiring no mitigation.

Exterior Traffic Noise Impacts. The proposed on-site residential uses would be exposed to traffic noise impacts primarily from Yorktown Avenue and Main Street. Although CEQA does not require an analysis of the effects of the environment on the project, the following analysis is provided to disclose noise levels experienced by future residents. The analysis is also provided to determine consistency with the City's General Plan Noise Element standards.

In order to assess the future on-site traffic noise impacts, as shown in Table 5.13.G, below, information within Table 5.13.E above and information within the City's General Plan Noise Element was utilized to estimate noise levels at the proposed façades.

Table 5.13.G: Future Build-Out Traffic Noise Level Contours

Roadway Segment	Noise Level 100 ft from Centerline of Roadway (dBA CNEL)	Distance from Centerline of Roadway to Façade (ft)	Existing Noise Level at Façade (dBA CNEL)	Increase in Noise Level for Future Conditions (dBA CNEL) ¹	Future Noise Level at Building Façade (dBA CNEL)
Yorktown Avenue – from Main Street to Beach Boulevard	61.5	67	63.3	1	64.3
Main Street - from Garfield Avenue to Yorktown Avenue	59.3	71	60.8	1	61.8

Source: Compiled by LSA (April 2020).

¹ Future noise level increase is consistent with Figure N-2 of the City of Huntington Beach General Plan Noise Element (October 2017).

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = foot/feet

As shown above in Table 5.13.G, exterior noise levels at the assisted living building could reach 64.3 dBA CNEL. For noise levels that are less than 65 dBA CNEL, the Land Use Compatibility Standards shown previously in Table 5.13.A define the noise environment as normally acceptable for residential uses; therefore, exterior traffic noise levels would remain below the City's exterior noise level standards for transportation noise. Based on this, the long-term on-site traffic noise levels would be less than significant. No mitigation is required.

Interior Traffic Noise Impacts – Less Than Significant Impact. As presented above, based on the future on-site traffic noise impacts, the exterior noise levels at the project site are expected to approach 65 dBA CNEL at the building façades, thus, a reduction of 20 dBA is necessary to achieve the 45 dBA CNEL interior noise standard.

The following analysis is based on a windows and doors closed condition, which requires mechanical ventilation (e.g., air conditioning) for all residential units so that windows and doors can remain closed for a prolonged period of time to maintain the interior noise standard of 45 dBA CNEL. INSUL, a software program for predicting interior noise environments from wall construction and window selections, was used to assess a standard exterior-to-interior noise level reduction for the proposed project. The following specifications are details for a standard wall assembly:

- 7/8-inch stucco exterior
- 2-inch by 6-inch wood studs, 24 inches off center, filled with a minimum of 3.5-inch thick fiberglass insulation
- Single layer of 5/8-inch Type-X gypsum board
- Champion Series 7100 Vinyl Windows, Sound Transmission Class (STC)-28, making up approximately 1/3 of the wall assembly area (Note that windows with the same STC ratings from other window manufacturers would provide similar noise reduction.)

It is expected that the above assembly would provide an overall noise reduction of approximately 27 dBA CNEL. With a windows closed condition, interior noise levels at the sensitive rooms of the congregate care use would be approximately 38 dBA CNEL (i.e., 65 dBA–27 dBA = 38 dBA), which is below the 45 dBA CNEL interior noise standard with windows closed for noise-sensitive land uses. If the assumed specifications for the proposed wall assembly are followed, on-site interior noise impacts would be less than significant. No mitigation is required.

Standard Conditions (SCs) and Mitigation Measures. In addition to the compliance with the hours specified in the Municipal Code, the following standard condition would reduce construction noise to the extent feasible and reasonable:

SC NOI-1 Construction Noise and Vibration. Prior to issuance of building permits, the City of Huntington Beach (City) Director of Community Development, or designee, shall verify that grading and construction plans include the following requirements:

- Ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved.

- Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards.
- Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development.
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site whenever feasible.
- The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible.
- All residential units located within 500 ft of the construction site shall be sent a notice regarding the construction schedule. A sign, legible at a distance of 50 ft, shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number for the "noise disturbance coordinator."
- A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures to reduce noise levels. All notices that are sent to residential units within 500 ft of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.

b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact.

Construction operations can generate varying degrees of ground-borne vibration depending on the construction procedures and the construction equipment used. The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receptor buildings. The results from ground-borne vibration can range from no perceptible effects at the lowest ground-borne vibration levels to low rumbling sounds and perceptible ground-borne vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibration from construction activities rarely reaches the levels that damage structures. As described above, the FTA has published standard vibration velocities for construction equipment operations. Table 5.13.H, below, lists the vibration source amplitudes for construction equipment.

Table 5.13.H: Vibration Amplitudes for Construction Equipment

Equipment	Reference PPV/L _v at 25 ft	
	PPV (inch/sec)	L _v (VdB) ¹
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer ²	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: FTA. *Transit Noise and Vibration Impact Assessment Manual* (2018).

¹ RMS vibration velocity in decibels (VdB) is 1 μin/sec.

² Equipment shown in **bold** is expected to be used on site.

μin/sec = micro-inches per second

ft = foot/feet

FTA = Federal Transit Administration

inch/sec = inches per second

L_v = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity decibels

Table 5.13.H shows the PPV and VdB values at 25 ft from the construction vibration source. Bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 0.089 inch/sec PPV of ground-borne vibration when measured at 25 ft. The greatest levels of vibration are anticipated to occur during the site preparation phase, which is expected to use a bulldozer and a loaded truck. Project construction would not require the use of pile drivers.

All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project site boundary (assuming the construction equipment would be used at or near the project site boundary) because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$$

The closest buildings to the proposed construction activities are the existing office buildings to the east, approximately 35 ft from the edge of construction. A PPV damage threshold of 0.2 inch/sec is identified previously in Table 5.13.C for these types of structures. Based on the reference data provided in the Table 5.13.H, vibration impacts created by heavy construction activities associated with the project would approach 0.061 PPV inch/sec at a distance of 35 ft. This level would not exceed the 0.2 PPV inch/sec damage threshold, and would be at a level for which there is virtually no risk resulting in architectural damage. Therefore, construction vibration impacts would be less than significant, and no mitigation is required.

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

No Impact. The proposed project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. The nearest public use airport is John Wayne Airport in unincorporated Orange County, located between the cities of Costa Mesa, Irvine, and Newport Beach, approximately 7.5 miles east of the project site (JWA 2019). As a result, the proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. Therefore, no noise related to the project site’s proximity to a public airport or any airport land use plan would occur, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.14 POPULATION AND HOUSING <i>Would the project:</i>				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Impact Analysis:

- a) *Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)?*

Less Than Significant Impact.

The proposed project includes the demolition of a multi-tenant office building, and the construction and operation of a three-story, 283-bed assisted living and memory care facility, a new surface parking area, and utility and landscaping improvements. The assisted living and memory care facility is not a typical residential use and would likely attract existing residents that already live in the City and surrounding areas rather than inducing new population growth from outside the area. Nevertheless, the project site does not currently contain any permanent residents in the existing condition. As such, implementation of the proposed project would potentially result in an increase in residents of the City.

The facility is intended to house one resident per bed. Therefore, the proposed project will induce population growth in the project vicinity by adding up to 283 new residents on the project site. The addition of 283 new residents represents 0.14 percent of Huntington Beach’s 2019 population of 201,239 (California Department of Finance 2019).³⁰ As previously discussed, given the specific services provided by an assisted living and memory care facility, it is expected that a majority of future residents would come from within a 5-7 mile vicinity of the project site. As such, it can be reasonably assumed that a portion of the facility’s 283 residents would be comprised of individuals who already live in the City, and that a population increase of 283 residents represents a

³⁰ 283 / 201,239 residents = 0.00141 or approximately 0.14 percent of the population.

conservative, worst-case scenario. Moreover, this population increase is minimal relative to the City's overall population.

During project operation, the facility would be staffed by 105 employees, staggered in shifts during which the number of employees on-site would range from 15 to 50 employees. Additionally, four of the five existing multi-tenant office buildings would remain in operation and continue to draw employees to and from the site each working day. According to the most recently data published by the U.S. Census Bureau, Orange County had 9,612 individuals employed at continuing care facilities and assisted living facilities for the elderly in 2017.³¹ Therefore, because the region's existing labor force already includes a large number of people employed in the congregate care industry, it is reasonable to assume that the assisted living and memory care facility's employees would most likely be comprised of individuals who already live in the general area. As such, it is unlikely that these employment opportunities would cause employees to relocate their residences to be close to the project site, thereby inducing growth within the City. Population growth in the area as a result of on-site employment opportunities would be negligible.

Additionally, though the project would include infrastructure improvements (such as connections to off-site utility infrastructure, and the extension of utility services throughout the project site), the project does not propose to expand surrounding utility infrastructure in the project vicinity, nor does the project include roadway expansions or improvements that would indirectly induce population growth.

For the reasons stated above, the proposed project would not result in substantial unplanned population growth, nor would the project indirectly induce population growth through utility or circulation improvements. Therefore, potential impacts related to inducement of unplanned population growth, either directly or indirectly, would be less than significant. No mitigation is required.

- b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact.

The proposed project includes demolition of an existing multi-tenant office building and construction of 197 assisted living guest rooms, 29 memory care guest rooms, and 665 surface parking and subterranean parking spaces on the project site. No housing is currently present on the project site, and therefore, there are no people living on the project site that would be displaced by the demolition of the existing structure. Conversely, the project would result in the development of 226 new assisted living units. Therefore, there would be no impacts related to the displacement of substantial numbers of people or housing units, and no mitigation is required.

³¹ U.S. Census Bureau. 2020. 2017 Economic Census for Health Care and Social Assistance. Website: <https://www.census.gov/data/tables/2017/econ/economic-census/naics-sector-62.html> (accessed May 14, 2020).

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.15 PUBLIC SERVICES <i>Would the project result in substantial adverse physical impacts associated with the provision of 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?			X	
b) Police Protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities or governmental services?			X	

Would the project result in substantial adverse physical impacts associated with the provision of 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 Huntington Beach Fire Department (HBFD) would provide fire protection services to the project site. HBFD provides response to fires, medical emergencies, marine safety, hazardous materials incidents, natural and man-made disasters, and other related emergencies. HBFD also maintains mutual aid agreements with neighboring departments (i.e., Orange County Fire Authority, Fountain Valley Fire Department, Costa Mesa Fire Department, and Newport Beach Fire Department).³²

HBFD operates eight fire stations located within the City. The closest fire station to the project site is Gothard Fire Station 1, located at 18311 Gothard Street, approximately 1.1 miles north of the project site. HBFD currently staffs 131 total safety personnel, with a total of 51 fire suppression and ambulance personnel on-duty daily.³³ According to the City’s Fiscal Year 2019/2020 Adopted Budget, HBFD provided 20,630 medical, fire, hazardous materials, and other

³² City of Huntington Beach. 2019. FY 2019/2020 Adopted Budget.

³³ City of Huntington Beach Fire Operations. 2020. Website: https://www.huntingtonbeachca.gov/government/departments/ire/fire_operations/ (accessed April 26, 2020).

emergency responses in 2018. HBFD has a goal response time of 7 minutes and 30 seconds from the time a medical or fire emergency is dispatched until the first unit arrives on scene. This equates to a 1-minute, 30-second dispatch time, a 2-minute company turnout time, and a 4-minute drive in most populated areas. In Fiscal Year 2018/2019, HBFD achieved their service goal 87 percent of the time.

Emergency access to the project site would be provided by two existing full-access driveways off of Main Street and Seabluff Drive. As discussed in Section 5.17, Transportation, the proposed project would not result in a substantial increase in traffic congestion or significant impacts to the local circulation system that would delay emergency response vehicles. Therefore, the proposed project would not impair emergency response vehicles or increase response times.

As discussed in Section 5.14, Population and Housing, the proposed project could result in an increase of up to 283 additional City residents on the project site. In addition to the increase in residents on the project site, operation of the assisted living and memory care facility would result in staff and visitors travelling to the project site, which would contribute to an increase in calls for fire protection services. However, the demolition of one of the existing on-site office buildings would reduce the number of people on the project site during normal business hours (approximately 9:00 a.m. to 5:00 p.m. daily). Due to the type of use, size, and operation of the project, as well as project impact fees, calls for service are expected to not be substantially increased beyond existing conditions. The HBFD has reviewed the project and has not cited any concerns with regards to its operation following project implementation.

The project would not impair emergency response vehicles or increase response times, and would not substantially increase calls for service to the project site. As such, construction and operation of the proposed project would not trigger the need for new or altered fire facilities. Consequently, HBFD would be able to maintain current levels of service provided to the project site following project implementation. Further, the proposed project would be required to comply with all applicable Fire Code requirements, and the proposed site plan would require approval by HBFD prior to project implementation.

The project would be subject to a Fire Facilities Development Impact Fee, as established in Chapter 17.74.040, Fire Facilities Development Impact Fee, of the City's Municipal Code (refer to Standard Condition PS-1). Project compliance with Standard Condition PS-1 would further reduce project-related impacts to fire facilities. Therefore, potential impacts related to fire protection services would be less than significant. No mitigation is required.

Standard Conditions (SCs) and Mitigation Measures. No mitigation is required; however, the proposed project would be required to comply with the City's Municipal Code, Chapter 17.74.040, Fire Facilities Development Impact Fee, as detailed below.

SC PS-1 Payment of Fire Facilities Development Impact Fee. Prior to issuance of building permits, the City of Huntington Beach (City) Director of Community Development, or designee, shall confirm that the project Applicant has paid all required Fire Facilities Development Impact Fees in accordance with Chapter 17.74.040, Fire Facilities Development Impact Fee, of the Huntington Beach Municipal Code.

b) *Police Protection?*

Less Than Significant Impact.

The Huntington Beach Police Department (HBPD) would provide police protection service to the project site. HBPD provides police protection services to the City and operates from three substations. One station is located the Civic Center, which is located immediately south of the project site across Yorktown Avenue at 2000 Main Street. This police station would be responsible for providing first-response service to the project site.

HBPD is comprised of 212 sworn police officers and 121.5 civilian positions.³⁴ As discussed in Section 5.14, Population and Housing, the proposed project would result in an increase of up to 283 additional City residents on the project site. The development of the assisted living and memory care facility would result in staff and visitors travelling to the project site, which would contribute to an increase in calls for police protection services. However, the demolition of one of the existing on-site office buildings would reduce the number of people on the project site during normal business hours (approximately 9:00 a.m. to 5:00 p.m. daily). Due to the type of use, size, and operation of the project, as well as project impact fees, calls for service are expected to not be substantially increased beyond existing conditions. The HBPD has reviewed the project and has not cited any concerns with regards to its operation following project implementation.

The project would not impair police response vehicles or increase response times, and would not substantially increase calls for service. As such, construction and operation of the proposed project would not trigger the need for new or altered police facilities. Consequently, HBPD would be able to maintain current levels of service provided to the project site following project implementation. The project would be subject to a Police Facilities Development Impact Fee, as established in Chapter 17.75.040, Police Facilities Development Impact Fee, of the City's Municipal Code (refer to Standard Condition PS-2). Project compliance with Standard Condition PS-2 would further reduce project-related impacts to police facilities. Therefore, potential impacts related to police protection services would be less than significant. No mitigation is required.

Standard Conditions (SCs) and Mitigation Measures. No mitigation is required; however, the proposed project would be required to comply with the City's Municipal Code, Chapter 17.75.040, Police Facilities Development Impact Fee, as detailed below.

SC PS-2 Payment of Police Facilities Development Impact Fee. Prior to issuance of building permits, the Director of the City Director of Community Development, or designee, shall confirm that the project Applicant has paid all required Police Facilities Development Impact Fees in accordance with Chapter 17.75.040, Police Facilities Development Impact Fee, of the Huntington Beach Municipal Code

c) *Schools?*

Less Than Significant Impact.

The City of Huntington Beach is served by five school districts which contain elementary and middle schools, and one district that contains high schools. The project site is served by the

³⁵ $283 / 1000 = .0283$; $0.283 * 5 = 1.42$ acres; $1.42 / 1073 = 0.001$ or 0.1 percent.

Huntington Beach City School District (HBCSD) for elementary and middle schools and the Huntington Beach Union High School District (HBUHSD) for high schools.

As discussed in Section 5.14, Population and Housing, the proposed project would increase the City's population by up to approximately 283 residents. However, because the majority of the residents would be comprised of individuals over the age of 80, no school-aged children would reside on the project site. Therefore, the addition of 283 residents to the project site would not generate new students to be served the City's school districts, and the proposed project would not increase demand for schools in the project vicinity.

Pursuant to California Education Code 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirements against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The project Applicant would be required to pay such fees to reduce any project-related impacts on school services as provided in Section 65995 of the California Government Code. Pursuant to the provisions of Government Code Section 65996, a project's impact on school facilities is fully mitigated through payment of the requisite school facility development fees current at the time a building permit is issued.

The HBCSD and the HBUHSD require the payment of a Development Impact Fee for all new development projects in the City to enable the districts to maintain adequate school facilities for the City's growing population. With the payment of the required fees to reduce any impacts of new development on school services (refer to Standard Condition PS-3, below), potential impacts to school services and facilities associated with implementation of the proposed project would be less than significant, and no mitigation is required.

Standard Conditions (SCs) and Mitigation Measures. No mitigation is required; however, the project Applicant would be required to pay such fees to reduce any impacts of new residential development on school services as provided in Section 65995 of the California Government Code.

SC PS-3 Payment of School Development Fee. Prior to issuance of building permits, the project Applicant shall submit proof to the City of Huntington Beach Director of Community Development, or designee, that payment of applicable school facility development fees to the Huntington Beach City School District and the Huntington Beach Union High School District has been made in compliance with Section 65995 of the California Government Code.

d) *Parks?*

Less Than Significant Impact.

As discussed in Section 5.16, Recreation, the City maintains and operates 79 park properties that account for 1,073 acres of parklands and recreational facilities. There are three parks within 0.5 mile of the project site: Discovery Well Park, McCallen Park, and Worthy Park. Amenities at these parks include basketball courts, pickleball courts, soccer fields, softball fields, children's play areas, swing sets, playground areas, picnic tables, park benches, grass areas, and shaded areas.

Given the City's parkland to resident level of service ratio of 5 acres of parkland per 1,000 residents, and the City's 2019 population of 201,239 (Department of Finance, 2019), the addition of 283 assisted living residents would create the need for 1.42 acres of parkland, which represents

approximately 0.1 percent of the City's existing total of 1,073 acres of public parkland.³⁵ Though the project would incrementally increase the need for park facilities in Huntington Beach, the increase of 0.1 percent would be negligible as it represents less than 1 percent of the City's existing parkland. Additionally, based on the City's estimated population of 201,239 (California Department of Finance 2019) and the City's parkland-to-resident ratio, the City provides 5.3 acres of parkland per resident, which exceeds the City's minimum standard. The City would continue to meet the parkland-to-resident ratio standard with the addition of 283 assisted living residents.

Approximately 18,431 sf of shared recreational area would be included as part of the project. On-site recreational amenities would include a courtyard with an outdoor kitchen, seating and shade trellises, a swimming pool with shade umbrellas and outdoor seating, a fireside lounge area with seating, and a multi-purpose lawn for lawn games, exercise classes, and movies. Indoor recreation areas would include a golf simulator and a wellness center with a gym and indoor exercise classes. Residents of the assisted living facility are not anticipated to use off-site parkland and recreational facilities, as the facility is intended to contain on-site services and amenities for the daily needs of the project's residents. Nevertheless, some project employees, residents, or their visitors may use other public recreational facilities. As a result, the proposed project would create an incremental increase in the use of area parks.

Chapter 17.76.040, Parkland Acquisition and Park Facilities Development Impact Fee, of the City's Municipal Code requires the payment of in-lieu fees for park and recreational purposes as a condition of approving new non-residential development. Payment of these in-lieu fees, as required by Standard Condition PS-4 would serve to reduce project-related impacts to parks to a less than significant level. Therefore, impacts to parks and recreational facilities would be less than significant, and no mitigation is required.

Standard Conditions (SCs) and Mitigation Measures. No mitigation is required; however, the proposed project would be required to comply with City Municipal Code Chapter 17.76.040.

SC PS-4 Payment of Park Impact Fee. Prior to the issuance of building permits, the City of Huntington Beach Director of Community Development, or designee, shall confirm that the project Applicant has paid all required park in-lieu/park impact fees as established in Chapter 17.76.040 of the Huntington Beach Municipal Code.

e) *Other public facilities or governmental services?*

Less Than Significant Impact.

The City of Huntington Beach operates a public library system consisting of five branches. The closest branch to the project site is the Main Street Branch, located at 525 Main Street, approximately 1.3 miles south of the project site. The Main Street Branch provides services such as internet and printing, community activities such as children's story time, and used book sales.³⁶

As discussed in Section 5.14, Population and Housing, the proposed project involves the construction of a three-story assisted living and memory care facility, and, consequently, would increase the City's population by up to approximately 283 residents. As such, implementation of the proposed project could incrementally increase the demand for library services in the City.

³⁵ $283 / 1000 = .0283$; $0.283 * 5 = 1.42$ acres; $1.42 / 1073 = 0.001$ or 0.1 percent.

³⁶ City of Huntington Beach. Main Street Branch Library. 2020. Website: https://www.huntingtonbeachca.gov/government/departments/library/hours_location/main_street_branch.cfm (accessed, April 26, 2020).

However, residents of the assisted living facility are not anticipated to use off-site community facilities, such as libraries, as the facility is intended to contain on-site services and amenities for the daily needs of the project’s residents. Nevertheless, some project employees, residents, or their visitors may use other public facilities, such as libraries. Overall, the impact of the new library visitors generated by the project would not significantly affect the City’s library facilities or their performance.

The City requires payment of a library facility impact fee to prevent new residential and non-residential development from reducing the quality and availability of public services provided to residents of Huntington Beach by requiring all new development to contribute a fair share of the proportional costs required for expansion of library facilities and collections. Payment of these impact fees, as required by Municipal Code Section 17.67 (refer to Standard Condition PS-5), would serve to reduce project-related impacts to libraries to a less than significant level. Therefore, impacts to library facilities would be less than significant, and no mitigation is required.

Standard Conditions (SCs) and Mitigation Measures. No mitigation is required; however, the proposed project would be required to comply with the City’s Municipal Code, Chapter 17.67, Library Impact Fee, as detailed below.

SC PS-5 Payment of Library Impact Fee. Prior to the issuance of building permits, the City of Huntington Beach Director of Community Development, or designee, shall confirm that the project Applicant has paid all required Library Impact Fees as established in Section 17.67 of the Huntington Beach Municipal Code.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.16 RECREATION <i>Would the project:</i>				
a) Increase the use of existing neighborhood, community and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

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

Less Than Significant Impact.

The City’s Community Services Department operates and manages parks and recreation facilities throughout Huntington Beach. According to the City’s General Plan Natural Resources and

Conservation Element (2017), the City contains 3,274 acres of open space. The 3,274 acres of open space includes 1,662 acres of conservation space, 701 acres of parkland, 238 acres of recreation areas, 239 acres of water recreation areas, and 434 acres of shoreline.

The City of Huntington Beach maintains and operates 79 public parklands (including parks, City-operated beaches, and public golf courses) consisting of 1,073 acres. The City maintains a parkland level of service goal of 5 or more acres of parkland per 1,000 residents. Based on the City's estimated 2019 population of 201,239 (California Department of Finance 2019) and the City's parkland-to-resident ratio, the City provides 5.3 acres of parkland per resident, which exceeds the City's minimum standard.

There are three parks within 0.5 mile of the project site: Discovery Well Park, McCallen Park, and Worthy Park. Additionally, the project site is approximately 1.2 miles from the Pacific Ocean, 1.5 miles from Harriett M. Wieder Regional Park, and 2 miles from the Bolsa Chica Ecological Preserve. Although there are many diverse parks and recreational facilities within the project vicinity, the project-related increase in the City's population could incrementally increase the use of existing neighborhood and community parks within Huntington Beach.

As discussed in Section 5.14, Population and Housing, implementation of the proposed project would result in a population increase of 283 assisted living residents. Given the City's parkland to resident level of service ratio, project implementation would create the need for 1.13 acres of parkland, which represents approximately 0.1 percent of the City's total existing 1,073 acres of public parklands. Though the project would incrementally increase the need for park facilities in Huntington Beach, the increase of 0.1 percent would be negligible as it represents less than 1 percent of the City's existing parkland. Additionally, the City currently provides 5.3 acres of parkland per resident, which exceeds the City's minimum standard.

Approximately 18,431 sf of shared recreational area would be included as part of the project. On-site recreational amenities would include a courtyard with an outdoor kitchen, seating and shade trellises, a swimming pool with shade umbrellas and outdoor seating, a fireside lounge area with seating, and a multi-purpose lawn for lawn games, exercise classes, and movies. Indoor recreation areas would include a golf simulator and a wellness center with a gym and indoor exercise classes. Residents of the assisted living facility are not anticipated to use off-site parkland and recreational facilities, as the facility is intended to contain on-site services and amenities for the daily needs of the project's residents. Nevertheless, some project employees, residents, or their visitors may use other public recreational facilities. As a result, the proposed project would create an incremental increase in the use of area parks.

Chapter 17.76.040, Parkland Acquisition and Park Facilities Development Impact Fee, of the City's Municipal Code requires the payment of in-lieu fees for park and recreational purposes as a condition of approving new non-residential development. As discussed in Section 5.15, Public Services, the project would be required to pay in-lieu fees to the City as a standard condition of project approval (refer to Standard Condition PS-4). With the payment of the required park impact fees, the project's contribution to deterioration of parks and recreational facilities would be less than significant. No mitigation is required.

- 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.

Approximately 18,431 sf of shared recreational area would be included as part of the project. On-site recreational amenities would include a courtyard with an outdoor kitchen, seating and shade trellises, a swimming pool with shade umbrellas and outdoor seating, a fireside lounge area with seating, and a multi-purpose lawn for lawn games, exercise classes, and movies. Indoor recreation areas would include a golf simulator and a wellness center with a gym and indoor exercise classes. Residents of the assisted living facility are not anticipated to use off-site parkland and recreational facilities, as the facility is intended to contain on-site services and amenities for the daily needs of the project’s residents.

The construction of shared recreational area is part of the proposed project, and the potential adverse effects associated with implementation of the proposed project have been considered through the analysis in this IS/MND. Therefore, the proposed project does not include recreational facilities that would have an adverse physical effect on the environment, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.17 TRANSPORTATION <i>Would the project:</i>				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?			X	
d) Result in inadequate emergency access?			X	

The following section is based on *The Seacliff of Huntington Beach Inspired Senior Living Trip Generation Analysis* (Trip Generation Analysis) prepared by LSA (June 2020d) and *The Seacliff of Huntington Beach Inspired Senior Living Vehicle Miles Traveled Analysis* (VMT Analysis) prepared by LSA (June 2020e), both of which are provided in Appendix I.

Impact Analysis:

- a) *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?*

Less Than Significant Impact.

The Trip Generation Analysis prepared by LSA provided a trip generation comparison between the currently occupied office buildings on site and the proposed project. In order to assess the impact of the proposed project on the surrounding circulation system, project trips that would be generated during project operation and construction were calculated based on trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017) for Land Use Code 254 (Assisted Living). An ITE regression equation for Land Use Code 710 (General Office Building) was applied to the existing office uses to account for the loss of one of the five existing office buildings upon project implementation.

The project site is developed and contains five office buildings with surface parking areas. The proposed project includes the demolition of one of the five existing office buildings, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. As discussed in Section 5.14, Population and Housing, the project is anticipated to result in a population increase of approximately 283 people. Vehicular trips associated with the proposed project would be generated primarily from employees of the facility, visitors of residents of the facility, and employees of the office buildings.

As shown on Table 5.17.A, Project Trip Generation Summary, the proposed project would generate more daily trips overall than the existing trip generation on the project site, but would reduce the number of a.m. peak hour and p.m. peak hour trips.

Table 5.17.A: Project Trip Generation Summary

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates¹									
Assisted Living		beds	2.60	0.12	0.07	0.19	0.10	0.16	0.26
Office		TSF	Regression Equations ²						
Project Trip Generation									
Assisted Living	283	beds	736	34	20	54	28	46	74
Existing Trip Generation									
Office	22.712	TSF	426	51	7	58	18	86	104
Net Trip Generation (Project - Existing)			310	(17)	13	(4)	10	(40)	(30)

¹ Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017).

Land Use Code 254 (Assisted Living)
Land Use Code 710 (General Office Building)

² ADT: $\ln(T) = 0.76\ln(X) + 3.68$; AM: $\ln(T) = 0.80\ln(X) + 1.57$; PM: $T = 1.12(X) + 78.45$

ADT = average daily trips
TSF = thousand square feet

The existing 22,712 sf of office use generates approximately 426 daily trips, including 58 a.m. peak hour trips and 104 p.m. peak hour trips. The proposed project is anticipated to generate 736 daily trips, resulting in a net increase in 310 average daily trips, but a net reduction of 4 trips in the a.m. peak hour and a net reduction of 30 trips in the p.m. peak hour. The net reduction in peak hour trips is attributable to the change in use on Parcel 1. Office employees primarily travel to and from work during the a.m. and p.m. peak hours, respectively, when traffic volumes of the surrounding roadways and intersections are typically highest. It is anticipated that the staff schedules and shift changes associated with project operation, and travel of visitors to project occupants would be distributed throughout the day, rather than concentrated within the a.m. and p.m. peak commuting hours. Based on the reduction in peak hour trips, it is anticipated that the proposed project would not have any adverse impacts on the surrounding circulation system (i.e., Main Street, Yorktown Avenue, and Seabluff Drive).

Construction of the project will include the following seven phases (including average phase, daily number of employees, and daily trucks):

1. Site Preparation and Parking Lot (3 months): 10 workers and 10 trucks
2. Demolition (3 months): 10 workers and 15 trucks
3. Grading and Excavation (4 months): 15 workers and 20 trucks
4. Foundation and Concrete (6 months): 25 workers and 50 trucks
5. Building Construction (8 months): 80 workers and 25 trucks
6. Finishes and Architectural Coating (5 months): 90 workers and 25 trucks
7. Paving and Landscaping (3 months): 13 workers and 10 trucks

Because typical construction hours are 7:00 a.m. to 5:00 p.m., each worker will arrive during the a.m. peak hour and depart during the p.m. peak hour. To present a conservative, worst-case analysis, all workers are assumed to drive themselves to/from the project site. Truck trips will occur throughout the day, including both peak hours. Table 5.17.B, Construction Trip Generation Summary, below, provides a summary for each phase of construction.

Although construction of the project would generate more peak-hour trips than the existing office use and the proposed assisted living facility, the increased traffic conditions would be temporary and cease upon the completion of project construction. The temporary increase in construction trips is not anticipated to result in a permanent adverse impact to the adjacent roadways.

Although the proposed project would generate vehicles/trucks, it would not preclude alternative modes of transportation or facilities (e.g., transit, bicycle, or pedestrian). In addition, the proposed assisted living facility is expected to provide shuttle and van service to the residents. The proposed project is consistent with the City's Circulation Element (2017), which establishes goals for pedestrian protection and traffic calming measures, and identifies a Class II bike lane along Yorktown Avenue near the project limits. The proposed project would not make any changes to the public right-of way in the project vicinity and therefore would not conflict with existing or planned pedestrian, bicycle, or transit facilities. Therefore, project impacts associated with conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant, and no mitigation is required.

Table 5.17.B: Construction Trip Generation Summary

Description	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Construction Trip Generation									
<i>Phase 1 – Site Preparation and Parking Lot (3-Month Duration: February 2021 to May 2021)</i>									
Workers ¹ (PCE = 1)	10	Vehicle	20	10	0	10	0	10	10
Trucks ² (PCE = 2)	10	Truck	40	2	2	4	2	2	4
Total			60	12	2	14	2	12	14
<i>Phase 2 – Demolition (3-Month Duration: May 2021 to August 2021)</i>									
Workers ¹ (PCE = 1)	10	Vehicle	20	10	0	10	0	10	10
Trucks ² (PCE = 2)	15	Truck	60	4	4	8	4	4	8
Total			80	14	4	18	4	14	18
<i>Phase 3 – Grading and Excavation (4-Month Duration: August 2021 to December 2021)</i>									
Workers ¹ (PCE = 1)	15	Vehicle	30	15	0	15	0	15	15
Trucks ² (PCE = 2)	20	Truck	80	4	4	8	4	4	8
Total			110	19	4	23	4	19	23
<i>Phase 4 – Foundation and Concrete (6-Month Duration: December 2021 to June 2022)</i>									
Workers ¹ (PCE = 1)	25	Vehicle	50	25	0	25	0	25	25
Trucks ² (PCE = 2)	50	Truck	200	10	10	20	10	10	20
Total			250	35	10	45	10	35	45
<i>Phase 5 – Building Construction (8-Month Duration: June 2022 to February 2023)</i>									
Workers ¹ (PCE = 1)	80	Vehicle	160	80	0	80	0	80	80
Trucks ² (PCE = 2)	25	Truck	100	6	6	12	6	6	12
Total			260	86	6	92	6	86	92
<i>Phase 6 – Finishes and Architectural Coatings (5-Month Duration: February 2023 to July 2023)</i>									
Workers ¹ (PCE = 1)	90	Vehicle	180	90	0	90	0	90	90
Trucks ² (PCE = 2)	25	Truck	100	6	6	12	6	6	12
Total			280	96	6	102	6	96	102
<i>Phase 7 – Paving and Landscaping (3-Month Duration: April 2023 to July 2023)</i>									
Workers ¹ (PCE = 1)	13	Vehicle	26	13	0	13	0	13	13
Trucks ² (PCE = 2)	10	Truck	40	2	2	4	2	2	4
Total			66	15	2	17	2	15	17
<i>Overlapping Phases 6 and 7 (3-Month Duration: April 2023 to July 2023)</i>									
Workers ¹ (PCE = 1)	103	Vehicle	206	103	0	103	0	103	103
Trucks ² (PCE = 2)	35	Truck	140	8	8	16	8	8	16
Total			346	111	8	119	8	111	119
Existing Trip Generation³									
Office	22,712	TSF	426	51	7	58	18	86	104
Net Trip Generation (Overlapping Phases - Existing)			(80)	60	1	61	(10)	25	15

= Peak of construction activities (highest construction trip generation).
¹ Each worker is anticipated to arrive during the a.m. peak hour and depart during the p.m. peak hour.
² Truck trips are anticipated to occur throughout the day, including the a.m. and p.m. peak hours.
³ Existing office trip generation from Table A
 ADT = average daily trips
 PCE = passenger car equivalent. A worker vehicle has a PCE of 1 and a truck has a PCE of 2.

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

Less Than Significant Impact.

According to *State CEQA Guidelines* Section 15064.3(a), project-related transportation impacts are generally best measured by evaluating the project's vehicle miles travelled (VMT). VMT refers to the amount and distance of automobile travel attributable to a project.

As a result of Senate Bill (SB) 743, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use on December 28, 2018. Among the changes to the guidelines was the removal of vehicle delay and level of service from consideration under CEQA. The intent of SB 743 and the revised *State CEQA Guidelines* is to promote the reduction of greenhouse gas (GHG) emissions, the development of multimodal transportation networks, and a diversity of land uses. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT.

The City has not formally adopted thresholds related to vehicle miles of travel. However, the City currently recommends conducting a VMT analysis based upon the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, dated December 2018. Additionally, State law provides guidance that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT (*State CEQA Guidelines* Section 15064.3(b)(4)). Therefore, a VMT Analysis (LSA 2020) based on these guidelines was prepared for the project. According to the VMT Analysis, the OPR Technical Advisory recommends a screening level threshold for projects that generate fewer than 110 average daily trips (ADT). Generally, small projects generating less than 110 ADT may be assumed to cause a less than significant transportation impact. This recommendation is not based on any analysis of GHG reduction but is instead based on the potential trip generation of a project that would be categorically exempt under CEQA.

The proposed project would generate four fewer trips in the a.m. peak hour and 30 fewer trips in the p.m. peak hour compared to the existing office use on site. However, the proposed project would result in a net increase of 310 ADT. The OPR Technical Advisory recommends that a project generating 110 ADT or less be screened out of a VMT analysis due to the presumption of a less than significant impact. This recommendation is not based on any analysis of GHG reductions, but is instead based on the potential trip generation of a project that would be categorically exempt under CEQA. Because the proposed project would exceed the OPR Technical Advisory recommendation by 200 ADT, the VMT Analysis examined the relationship of ADT and VMT.

Although the City has not formally adopted VMT guidelines and thresholds, as a matter of practice, the City intends to utilize and rely on the County of Orange adopted screening thresholds for VMT analyses. In addition, the VMT Analysis reviewed the VMT guidelines approved and currently being considered by other nearby agencies and cities, including potential screening criteria. The VMT Analysis determined that the County of Orange and the City of Long Beach have adopted screening thresholds of 500 ADT for VMT analyses, which is greater than the 310 net new ADT of the proposed project. The project site and City are located within Orange County. The County of Orange has screening criteria for VMT analyses that exceed the recommended 110 ADT of the OPR Technical Advisory. In addition to the County of Orange, many other cities and counties in the State have adopted higher screening thresholds than the OPR Technical Advisory. As such, the

VMT Analysis determined that the adopted screening thresholds of 500 or more ADT are a reasonable comparison and would be applicable to the City for this project. Therefore, based on the screening criteria of other surrounding jurisdictions and the project's net increase of 310 ADT, the proposed project would be screened out and would result in a less than significant transportation impact with respect to VMT. The proposed project would not be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b), and no mitigation is required.

- c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?*

Less Than Significant Impact.

Vehicular access to the project site would be provided via two existing full-access driveways off of Main Street and Seabluff Drive, and an internal circulation system throughout the surface parking areas within the project site. As previously discussed in Response 5.17(a), project implementation would result in a reduction of both a.m. and p.m. peak hour trips, therefore minimizing the strain on the surrounding circulation system when traffic volumes are typically the highest. Vehicular traffic to and from the project site would utilize the existing network of regional and local roadways that currently serve the project site area. The proposed project would not introduce any new roadways or introduce a land use that would conflict with existing urban land uses in the surrounding area. The proposed project includes an internal access road that would provide access to the subterranean garage for the assisted living and memory care facility, the existing surface parking areas surrounding the office buildings, and the proposed surface parking area in the northeastern portion of the project site. Design of the proposed project, including the internal access roadway, ingress, egress, and other streetscape changes, would be subject to review by the City's Department of Public Works and HBFD to ensure adequate fire engine access and turning radius throughout the development. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curve or dangerous intersection) or incompatible uses (e.g., farm equipment), and no mitigation would be required.

- d) *Would the project result in inadequate emergency access?*

Less Than Significant Impact.

Emergency access to the project site would be provided via two existing full-access driveways off of Main Street and Seabluff Drive, and an internal circulation system throughout the surface parking areas within the project site. While the Natural and Environmental Hazards Element makes recommendations for emergency evacuation and access, it only designates official evacuation routes in the event of tsunamis. In the event of tsunamis, Main Street/Gothard Street is one of 12 designated emergency evacuation routes for the western portions of the City located in a tsunami risk zone. It is anticipated that project occupants would utilize Main Street as an evacuation route in the event of an emergency. The proposed project is not anticipated to result in any substantial traffic impacts or queuing on nearby streets during short-term construction activities, and all construction equipment would be staged within the project site. The proposed project does not include any changes to the existing circulation system surrounding the project site and would not interfere with existing emergency evacuation routes. As such, access to Main Street during construction and operation would not be impeded. Access to and from the site must be designed to City and HBFD safety standards and would be subject to the review and approval of the City and HBFD. Therefore, approval of the project plans would ensure that the proposed project's

impacts related to emergency access would be less than significant, and no mitigation would be required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.18 TRIBAL CULTURAL RESOURCES				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

The following section is based on tribal consultation correspondence, which is provided in Appendix J.

- a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*
 - i) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*

No Impact.

As discussed in Section 5.5, Cultural Resources, the project site does not contain any buildings or structures that meet any California Register of Historical Resources (California Register) criteria or qualify as “historical resources” as defined by CEQA. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in

Section 15064.5 of the *State CEQA Guidelines* or PRC Section 5020.1(k). No impact would occur in this regard, and no mitigation is required.

ii) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (Sources: 5,6)*

Potentially Significant Unless Mitigated.

Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register or included in a local register of historical resources (PRC Section 21074). AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource falling outside of the definition stated above nonetheless qualifies as a "tribal cultural resource."

Also, per AB 52 (specifically, PRC 21080.3.1), a CEQA Lead Agency must consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project and have previously requested that the Lead Agency provide the tribe with notice of such projects.

The City initially contacted the Native American Heritage Commission (NAHC) on April 2, 2020 to request a list of potential Native American contacts for the AB 52 tribal consultation process. The NAHC responded on April 3, 2020, and provided a contact list of the following sixteen Tribal Representatives to be contacted:

- Campo Band of Diegueno Mission Indians, Ralph Goff, Chairperson
- Ewiiapaayp Band of Kumeyaay Indians, Robert Pinto, Chairperson, and Michael Garcia, Vice Chair
- Jamul Indian Village, Lisa Cumper, Tribal Historic Preservation Officer
- Jamul Indian Village, Erica Pinto, Chairperson
- La Posta Band of Diegueno Mission Indians, Gwendolyn Parada, Chairperson
- La Posta Band of Diegueno Mission Indians, Javaughn Miller, Tribal Administrator
- Manzanita Band of Kumeyaay Nation, Angela Elliott Santos, Chairperson
- Mesa Grande Band of Diegueno Mission Indians, Michael Linton, Chairperson
- Sycuan Band of Kumeyaay Nation, Cody Martinez, Chairperson
- Viejas Band of Kumeyaay Indians, John Christman, Chairperson
- Gabrieleno Band of Mission Indians – Kizh Nation, Andrew Salas, Chairperson

- Gabrielino/Tongva San Gabriel Band of Mission Indians, Anthony Morales, Chairperson
- Gabrielino/Tongva Nation, Sandonne Goad, Chairperson
- Gabrielino Tongva Indians of California Tribal Council, Robert Dorame, Chairperson
- Gabrielino-Tongva Tribe, Charles Alvarez
- Juaneño Band of Mission Indians Acjachemen Nation – Belardes, Matias Belardes, Chairperson

The City sent notices to all of the contacts listed above on April 13, 2020, regarding the proposed project. The notices (provided in Appendix J of this IS/MND) provided each tribe with the opportunity to request consultation with the City regarding the project. In compliance with AB 52, tribes had 30 days from the date of receipt of notification to request, in writing, consultation on the project. Information provided through tribal consultation is intended to inform the assessment as to whether the tribes believe any tribal cultural resources are present on the project site.

One response was received in response to the City’s AB 52 letters within the 30-day timeframe. On April 13, 2020, the Juaneño Band of Mission Indians Acjachemen Nation, Belardes emailed City staff to discuss the project. Joyce Perry, Tribal Manager for the tribe, requested information regarding the age of the building that is proposed for demolition. Ms. Perry’s email also asked if a Sacred Lands File (SLF) search and a California Historical Resources Information Systems (CHRIS) search had been completed for the project site and requested the results of those searches, if they had been completed. An SLF search was requested on April 20, 2020, for the project, and the City received notice on April 22, 2020, regarding a positive result. City staff informed Ms. Perry of the positive result and the status of the CHRIS search.

On June 11, 2020, City staff held a consultation call with Ms. Perry regarding the proposed project. During the call, Ms. Perry requested that the City prepare mitigation measure language outlining a limited archaeological and Native American monitoring procedure for the tribe’s consideration. City staff shared draft mitigation language with Ms. Perry, which was subsequently approved by the Juaneño Band of Mission Indians Acjachemen Nation, Belardes. The approved mitigation language is incorporated in this IS/MND as Mitigation Measure TCR-1, provided below.

As discussed in Section 5.5, Cultural Resources, the project site has been previously evaluated for cultural resources and contains no previously recorded prehistoric or historic resources. On June 1, 2020, LSA archaeologist Aaron McCann conducted a pedestrian survey of the project site. The survey did not identify any cultural or archaeological resources in the project area and concluded that there is little potential for the proposed project to impact prehistoric resources.

Nonetheless, the inclusion of Mitigation Measure TCR-1 is recommended to protect any unknown tribal cultural resources on the project site. In the unlikely event archaeological resources are discovered at any time during construction, those activities would be halted in the vicinity of the find until any resources could be assessed for significance by a qualified archaeologist (see Mitigation Measure TCR-1). Implementation of Mitigation Measure TCR-1 would reduce any potential impacts to previously undiscovered archaeological resources to a less than significant level. No additional mitigation is required. Therefore, with implementation of Mitigation Measure TCR-1, the proposed project would result in less than significant impacts related to tribal cultural resources, and no mitigation would be required.

Mitigation Measures:

MM TCR-1 Native American Monitoring. During the geotechnical trenching to locate the Newport/Inglewood Fault on the project site, an archaeologist and a Native American monitor shall be present on site to observe exposed soils to determine if cultural deposits exist. If cultural deposits are discovered or are likely to be discovered based on the condition of the soil, the archaeologist and Native American monitor shall observe the excavation of the subterranean parking structure to determine if cultural material is present. If cultural material is discovered and it is determined by the archaeologist in consultation with the Native American monitor to be significant, a Cultural Resource Recovery Plan shall be submitted to the Director of Community Development for approval prior to any grading within 25 feet of the cultural material.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.19 UTILITIES AND SERVICE SYSTEMS <i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Impact Analysis:

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

Less Than Significant Impact.

Water. Domestic water service in Huntington Beach is provided by the City's Utilities Division of the City Public Works Department. According to the 2015 Urban Water Management Plan (UWMP), which was amended in 2018, the City's water supply is approximately 72 percent groundwater and 28 percent imported water. The City supplements its local groundwater, which is obtained from the Lower Santa Ana River Groundwater Basin (also known as the Orange County Groundwater Basin) with imported water purchased from Metropolitan through the Municipal Water District of Orange County (MWDOC). It is projected that by the year 2040, the water supply mix will shift from approximately 70 percent groundwater and 30 percent imported water.

Water demand associated with the proposed project would be typical of an assisted living facility and multi-tenant office buildings. The project site contains existing water services in support of the existing multi-tenant office buildings, but services would need to be extended to the point of connections for the newly developed residential development. According to the 2015 UWMP, the City's projected water supply is able to meet projected water demands in the years 2020, 2025, 2030, 2035, and 2040 during normal years, single dry years, and multiple dry years. In 2015, the actual water supply was 27,996 acre-feet (af). The total projected water supply in 2020 is approximately 29,966 af annually. In 2040, the total projected water supply is 31,580 af annually, with supply increasing incrementally every 5-year period between 2020 and 2040. Although projected water supplies increase incrementally, projected water demand also increases incrementally. In 2015, the actual water demand was 27,996 af. The total projected water demand in 2020 is approximately 28,090 af annually. In 2040, the total projected water demand is 30,396 af annually, with demand totals increasing in every 5-year increment between 2020 and 2040. As such, there would be a surplus of water supply until 2040. Therefore, the City's existing water supplies are projected to meet full service demands through the year 2040.

The assisted living facility and landscape improvements associated with the proposed project are anticipated to use approximately 20,496,570 million gallons per year, or 56,155 gallons per day (gpd) of water. Though four of the five multi-tenant office buildings would remain on-site, the water usage associated with each is considered part of the existing condition, and therefore, the associated water use is considered to have been previously planned for in the 2015 UWMP. As such, it is assumed that the City's Utilities Division has adequate supply to continue to meet the water needs of the four multi-tenant office buildings. The water use required for the continued operation of the four multi-tenant office buildings would not require new or expanded water facilities or entitlements. The project-related water use of 20,496,570 million gallons per year, or 56,155 gpd of water represents approximately 0.2 percent of the 2020 water supply in the City's service area.³⁷ Consequently, anticipated water usage by the proposed project is negligible (less than 1 percent) compared to the City's total annual water supply. Further, with the approval of a CUP, the proposed use would be consistent with the General Plan and land use designation, which is used to estimate the annual water demand as described in the City's UWMP. As such, the water demand associated with the proposed project is planned for in the UWMP. Therefore,

³⁷ 20,496,570 mgd = 62.94 afy. 62.94 afy / 29,966 afy = 0.0021 or approximately 0.2 percent.

implementation of the proposed project would not require or result in the relocation or construction of new or expanded water treatment facilities, and no mitigation would be required.

Wastewater. The Utilities Division of the City’s Public Works Department operates and maintains the local sewer collection pipes that feed into the Orange County Sanitation District’s (OCSD) sewer system. The City’s sewer system includes 360 miles of sewer lines, 10,000 manholes, and 27 lift stations. Wastewater in the City would be conveyed to OCSD’s Plant No. 2, which has a capacity of 312 mgd. Plant No. 2 also has a 120-inch diameter ocean outfall that extends 4 miles off the coast of the City, and a 78-inch diameter emergency outfall that extends 1.3 miles off of the coast.

In the existing condition, the project site is served by a 10-inch sewer main in Yorktown Avenue, beginning at the intersection of Lake Street/Rancho Lane and terminating at a transmission main in Delaware Street. The proposed project is anticipated to generate approximately 50,540 gpd of wastewater.³⁸ The total amount of wastewater generated by the project represents approximately 0.02 percent³⁹ of the daily treatment capacity at OCSD’s Plant No. 2. Consequently, wastewater generated by the proposed project would be negligible (less than 1 percent) compared to the treatment facility’s available capacity. Further, with the approval of a CUP, the proposed use would be consistent with the General Plan and land use designation. As such, the wastewater generated by the proposed project is anticipated by the City’s Public Works Department and OCSD. Further, the *Sewer Feasibility Study* (David Evans and Associates, Inc., June 2020) prepared for the project concluded that the existing 10-inch sewer main has sufficient capacity to accommodate the proposed project. As such, development of the proposed project would not require, nor would it result in, the construction or relocation of new or expanded wastewater treatment or collection facilities other than those facilities required for connections to be constructed on site. Therefore, project impacts related to the construction of wastewater treatment or collection facilities would be less than significant, and no mitigation would be required.

Stormwater Drainage Facilities. Project improvements would include the addition of an on-site storm drain that would run south and connect to the existing storm drain system near the northern project boundary near the adjacent multi-family residential development and the southeastern project boundary near Yorktown Avenue. Implementation of the proposed project would increase the impervious surface area on the project site by 1.31 acres, which would increase stormwater runoff from the project site. As specified in Standard Condition WQ-4, a Final Hydrology Study would be approved by the City and would demonstrate that the on-site drainage facilities are designed and adequately sized to convey and reduce runoff such that on-site and off-site drainage facility capacity would not be exceeded during a design storm. With implementation of Standard Condition WQ-4, the proposed project would not exceed the capacity of downstream stormwater drainage facilities or cause the expansion of existing facilities. Additionally, the proposed project would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities beyond the improvements included as part of the proposed project. Therefore, impacts to stormwater drainage facilities would be less than significant with the incorporation of Standard Condition WQ-4. No mitigation is required.

Electric Power. Refer to Section 5.6, Energy, for further discussion related to the project’s impacts with respect to existing and projected supplies of electricity. As discussed further in Section 5.6,

³⁸ In the absence of an official wastewater generation rate, wastewater can be reasonably assumed to be 90 percent of water use. $56,155 \text{ gpd} * .9 = 50,539.5$ or approximately 50,540 gpd.

³⁹ $50,540 \text{ gpd} / 312,000,000 \text{ gpd} = \text{approximately } 0.00016$ or 0.02 percent.

the project would not require or result in the relocation or construction of new or expanded electric power facilities, the construction of which could cause significant environmental effects. No mitigation would be required.

Natural Gas. Natural gas is provided in the City by the Southern California Gas Company (SoCal Gas). Natural gas lines would be extended throughout the project site and would connect to existing gas lines in the public right-of-way within Main Street and Yorktown Avenue. The Applicant would be responsible for construction connections to these existing distribution facilities. Natural gas lines would be constructed throughout Parcel 1 to provide connections to the assisted living and memory facility. The surface parking area would not require any natural gas connections.

Refer to Section 5.6, Energy, for further discussion related to the project's impacts with respect to existing and projected supplies of natural gas. As discussed further in Section 5.6, the project would not require or result in the relocation or construction of new or expanded gas facilities, the construction of which could cause significant environmental effects. No mitigation would be required.

Telecommunications. Cable, internet, and telephone services are provided to the City's residents by major third-party purveyors. Cellular services provided by all major cellular networks are available in the City. Construction activities associated with the proposed project would not increase the demand for telecommunications facilities. In addition, the proposed project would not involve the construction or relocation of new or expanded telecommunications facilities. As discussed in Section 5.14, Population and Housing, the project is anticipated to result in a population increase of approximately 283 people; the increase in population resulting from the proposed project comprises less than 1 percent of the total population of Huntington Beach and does not represent a substantial increase in population. Further, the proposed assisted living facility is replacing an office use that is currently served by telecommunications services. Therefore, implementation of the proposed project would not result in impacts related to the construction or relocation of existing telecommunications facilities, and no mitigation would be required.

Summary: With the exception of minimal off-site modifications to install manholes for connection to the existing sanitary sewer system within Seabluff Drive and Yorktown Avenue, the supply and distribution network of utilities and service systems would remain unchanged. The water, wastewater, stormwater drainage, natural gas, electricity, and telecommunications needs generated by the proposed project would not exceed the existing supply and distribution network, or the available service capacities of the respective service providers. Levels of service to off-site users would not be adversely affected. Effects related to utility improvements and connections proposed as part of the project would be less than significant. No mitigation is required.

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

Less Than Significant Impact.

As previously stated in Response 5.19(a), above, the project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Taking projected population growth into account, the City's Utilities Division anticipates a surplus in water supply for years 2020, 2025, 2030, 2035, and 2040. As previously established, the project is anticipated to use approximately 63 acre-feet per year (afy)

of water.⁴⁰ The total annual amount of water usage by the project represents approximately 0.2 percent of the projected water supply in the Utilities Division's service area in 2020, 2025, 2030, 2035, and 2040. Furthermore, the Utilities Division projects a surplus in available supply ranging from 880 afy to 1,595 afy for the single dry year and multiple dry year scenarios from 2020 through 2040. As such, the estimated annual water use that would be required for operation of the proposed project would not cause the Utilities Division's available supply to be exceeded in the single dry year or multiple dry year scenarios. Therefore, water demand from the proposed project would be within the Utilities Division's current and projected water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts related to water supplies would be less than significant, and no mitigation is required.

- c) *Would the project 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.

The proposed project includes the demolition of one existing office building, the development of a three-story assisted living and memory care facility with a subterranean parking garage, a surface parking lot, and landscaping and utility improvements. Infrastructure components to be completed as part of the proposed project would require connections to existing infrastructure within Seabluff Drive and Yorktown Avenue. Two off-site sewer manholes are proposed as part of the proposed project. The construction of these manholes would not result in any off-site impacts to the existing sanitary sewer system, or to vehicular access and circulation within the Seabluff Drive and Yorktown Avenue right-of-way.

Refer to Response 5.19(a). Although the proposed project is anticipated to generate 50,540 gpd of wastewater, the total amount of wastewater generated represents approximately 0.02 percent of the daily treatment capacity at wastewater treatment plants serving Huntington Beach. Consequently, the wastewater flows from the proposed project can be accommodated within the existing design capacity of the wastewater treatment plants serving the City. Further, with the approval of a CUP, the proposed use would be consistent with the General Plan and land use designation. As such, the wastewater generated by the proposed project is anticipated by OCSD. Additionally, wastewater generated from the proposed project would be typical of residential wastewater flows in Huntington Beach. As such, OCSD's Plant No. 2 would have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments. The project would not result in any of the wastewater treatment plants discussed above exceeding wastewater treatment requirements. Therefore, impacts related to wastewater generation are less than significant, and no mitigation would be required.

- d) *Would the project generate solid waste in excess of State and local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Less Than Significant Impact.

Solid waste collection and transport in Huntington Beach is handled by contracted private firms that haul collected materials to regional landfills and materials recycling facilities. Solid waste collected in the City of Huntington Beach is transported to the Frank R. Bowerman Landfill in

⁴⁰ 20,496,570 mgd = 62.9 or approximately 63 acre-feet/year.

Irvine, approximately 17 miles northeast of the project site. The landfill, which is expected to remain in operation until approximately 2053, is permitted to receive 11,500 tons per day (tpd).⁴¹ On average, 8,500 tons are disposed daily.⁴² As such, the landfill has an average daily surplus disposal capacity of 3,000 tons. The Frank R. Bowerman Landfill has a total remaining capacity of 205,000,000 cubic yards (cy).⁴³

As described in Section 5.14, Population and Housing, implementation of the proposed project would result in an increase of approximately 283 residents on the project site. The proposed project would generate approximately 0.15 ton of solid waste per day (51.56 tons per year) during project operation.⁴⁴ As stated previously the Frank R. Bowerman Landfill has the capacity to process an additional 3,000 tons of solid waste per day. The total amount of solid waste generated by the proposed project would constitute less than 0.1 percent of the remaining daily available capacity at the Frank R. Bowerman Landfill. Additionally, because the assisted living and memory care facility would replace a multi-tenant office building, which currently generates waste, new waste-generating uses would not be introduced to the project site. As such, solid waste generated by the proposed project would not cause the capacity of the Frank R. Bowerman Landfill to be exceeded. The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. Moreover, the project would not otherwise impair the attainment of State solid waste reduction goals. Therefore, the project would result in a less than significant impact to solid waste and landfill facilities, and no mitigation would be required.

- e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less Than Significant Impact.

The California Integrated Waste Management Act of 1989 (AB 939) changed the focus of solid waste management from landfill to diversion strategies (e.g., source reduction, recycling, and composting). The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 established mandatory diversion goals of 25 percent by 1995 and 50 percent by 2000. AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the State that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020 and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the State's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies to assist the State in reaching the 75 percent goal by 2020.

According to the General Plan Public Services and Infrastructure Element (2017), City efforts to increase waste diversion include maximizing recycling, composting, and source reduction to ensure continued compliance with State regulations. The City plans to eliminate landfill waste by improving waste collection services and increasing community knowledge of available waste diversion practices. These efforts will collectively improve the City's total waste diversion rate. In addition, the proposed project would be required to comply with all federal, State, and local

⁴¹ OC Waste and Recycling. Frank R. Bowerman Landfill. Website: <http://www.oilandfills.com/landfill/active/bowerman> (accessed May 1, 2020).

⁴² Ibid.

⁴³ CalRecycle. 2019. Solid Waste Information System (SWIS). Website: <https://www2.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0360/Detail> (accessed May 1, 2020).

⁴⁴ California Emissions Estimator Model (CalEEMod). Compiled by LSA (August 2020).

regulations related to solid waste. Furthermore, the proposed project would comply with all standards related to solid waste diversion, reduction, and recycling during Project construction and operation. Therefore, the proposed project is anticipated to result in less than significant impacts related to potential conflicts with federal, State, and local management and reduction statutes and regulations pertaining to solid waste, and no mitigation would be required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.20 WILDFIRE <i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to the slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Impact Analysis:

- a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

No Impact.

According to the Natural and Environmental Hazards Element (2017) of the City of Huntington Beach (City) General Plan, the project site and surrounding area is not located within a Very High Fire Hazard Severity Zone (VHFHSZ), or within a State Responsibility Area (SRA).

The proposed project would not substantially impair an adopted emergency response plan or evacuation plan. The City’s Natural and Environmental Hazards Element outlines goals and policies aimed at reducing the potential risk of loss of life, injury, property damage, and economic and social dislocation resulting from a disaster, accident, or other hazards in Huntington Beach. Emergency events addressed in the Natural and Environmental Hazards Element include those associated with seismically induced conditions, slope instability, geologic hazards, flooding,

wildland and urban fires, evacuation routes, coastal hazards, hazardous material exposure, aircraft hazards, and disaster and emergency preparedness.

The proposed project does not include any characteristics (e.g., permanent road closures or long-term blocking of road access) that would substantially impair or otherwise conflict with an emergency response plan or emergency evacuation plan. As discussed in Section 5.17, Transportation/Traffic, the proposed project is not anticipated to result in any substantial traffic impacts or queuing on nearby streets during short-term construction activities, and all construction equipment would be staged within the project site. Therefore, impacts related to emergency response and evacuation plans associated with construction of the proposed project would be less than significant.

The proposed project does not include any changes to public or private roadways that would physically impair or otherwise conflict with an emergency response or the use of emergency evacuation routes. In addition, during the operational phase of the proposed project, on-site access would be required to comply with standards established by the City and the Huntington Beach Fire Department (HBFD). The size and location of fire suppression facilities (e.g., hydrants) and fire access routes would be required to conform to City and HBFD standards. The proposed project would provide adequate emergency access to the site via the existing driveways off of Main Street and Seabluff Drive. Both driveways would connect to the project's internal access way that would ensure adequate access and turning radius for emergency vehicles within the interior of the site. Access to and from the project site for emergency vehicles would be reviewed and approved by HBFD and the City as part of the project approval process to ensure the proposed project is compliant with all applicable codes and ordinances for emergency vehicle access. Further, the project site is not located in or near an SRA or lands classified as VHFHSZ. Therefore, because the project site is not located in or near an SRA or lands classified as VHFHSZ, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan in the event of wildfire. No mitigation is required.

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

No Impact.

The project site is relatively flat, and the surrounding area does not contain significant natural or manufactured slopes. The majority of the project site and the surrounding area are currently developed, and therefore, lack the combustible materials and vegetation necessary for the uncontrolled spread of a wildfire.

The project proposes the development of an assisted living and memory care facility, a surface parking lot, and utility and landscaping improvements in an area characterized by residential, commercial, and office uses. As such, the project itself would not exacerbate wildfire risks as compared to existing conditions because it is representative of existing development in the area and is replacing an existing fully developed office use. Further, the project site is not located in or near an SRA or lands classified as VHFHSZ. Therefore, due to the lack of slopes on site and other factors, the proposed project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No mitigation is required.

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

No Impact. The project does not require the installation or maintenance of associated infrastructure (including roads, fuel breaks, emergency water sources, power lines, or other utilities) that would exacerbate fire risk or that would result in impacts to the environment. Although the project includes a the development of an assisted living and memory care facility, the project does not include any changes to public or private roadways that would exacerbate fire risk or that would result in impacts to the environment. Although utility improvements, including domestic water, recycled water, sanitary sewer, and storm drain lines, proposed as part of the project would be extended throughout the project site, these utility improvements would be underground and would not exacerbate fire risk. Project design and implementation of utility improvements would be reviewed and approved by the City's Public Works Department and the HBFD as part of the project approval process to ensure the proposed project is compliant with all applicable design standards and regulations. Therefore, no project-related impacts are anticipated. No mitigation is required.

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

No Impact.

Landslides. Landslides and other forms of mass wasting, including mudflows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and downslope runoff caused by rain following a fire. As previously discussed in Section 5.7, Geology and Soils, Response 3.6(a)(iv), landslides and other forms of slope instability do not represent a significant hazard to the project because the site is located in a relatively flat area, and there is no evidence of landslides in the project vicinity. Additionally, the project site does not lie within a designated Landslide Hazard Zone. The proposed project would not exposure people or structures to significant risks, such as landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, the project would not result in impacts to project occupants related to post-wildfire landslide risks. No mitigation is required.

Flooding. According to the Federal Emergency Management Agency (FEMA) Floor Insurance Rate Map (FIRM), the project site is not within a 100-year floodplain. As established in Section 5.10, Hydrology and Water Quality, during project construction soil would be exposed and disturbed, and drainage patterns would be temporarily altered due to grading, and there would be an increased potential for flooding compared to existing conditions. With the implementation of Standard Condition WQ-1, the project would incorporate Site Design BMPs, which would be included into project design to reduce runoff. In addition, compliance with the proposed operational BMPs would ensure on-site storm drain facilities would be adequately sized to accommodate stormwater runoff from the project site so that on-site flooding would not occur. Operation of the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding. The proposed project would not exposure people or structures to significant risks, such as flooding, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, the project would not result in impacts to project occupants related to post-wildfire flooding risks. No mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
5.21 MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially 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, substantially 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?		X		
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.)		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a) *Does the project have the potential to substantially 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, substantially 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?*

Potentially Significant Unless Mitigated.

Based on the discussion in Section 5.4, Biological Resources, of this IS/MND, the proposed project is anticipated to result in less than significant impacts related to habitat, wildlife species, and/or plant and animal communities. With implementation of Standard Condition BIO-1, impacts to nesting birds would be less than significant. The proposed project would neither eliminate a plant or animal community nor would it substantially reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section 5.5, Cultural Resources, Response 5.5(a), the project site does not contain any buildings or structures that meet any of the California Register of Historical Resources (California Register) criteria or qualify as “historical resources” as defined by CEQA. Further, the project site is not designated as a historical/archaeological landmark by the City. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource.

As discussed in Section 5.18, Tribal Cultural Resources, the results of a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) for the project site were positive. Based on the NAHC's recommendation, City staff informed the Juaneño Band of Mission Indians Acjachemen Nation, Belardes of the positive result and engaged in consultation with the tribe regarding the project. Section 5.18, Tribal Cultural Resources, contains Mitigation Measure TCR-1, which has been approved by the Juaneño Band of Mission Indians Acjachemen Nation, Belardes. Mitigation Measure TCR-1 provides for archaeological and Native American monitors to be present on site to determine if any cultural or tribal cultural resources are discovered during geotechnical trenching. If cultural deposits are discovered or are likely to be discovered based on the condition of the soil, the archaeologist and Native American monitor would be required to observe the excavation of the subterranean parking structure to determine if cultural material is present. With the implementation of Mitigation Measure TCR-1, potential impacts to previously undiscovered cultural or tribal cultural resources would be less than significant.

In addition, as discussed in Response 5.7(f) in Section 5.7, Geology and Soils, of this IS/MND, the project site is underlain by a geologic unit that has a high paleontological sensitivity; therefore, there is a potential for the project to impact scientifically significant paleontological resources. Mitigation Measure PAL-1 has been incorporated to address the discovery of paleontological resources, should any be unearthed during construction. With the implementation of Mitigation Measure PAL-1, potential impacts to previously undiscovered paleontological resources would be less than significant.

For the reasons stated above, the project does not have the potential to substantially 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, substantially 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. With implementation of Standard Condition BIO-1 and Mitigation Measures TCR-1 and PAL-1, impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measures PAL-1 (Section 5.7, Geology and Soils) and TCR-1 (Section 5.18, Tribal Cultural Resources), and Standard Condition BIO-1 (Section 5.4, Biological Resources).

- 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.)*

Potentially Significant Unless Mitigated.

The proposed project involves the demolition of one of five existing multi-tenant commercial office buildings and the construction of an assisted living and memory care facility, and surface parking area. The site is currently developed with five multi-tenant commercial office buildings. The project site is located in an urban area that is predominantly built-out with various residential, commercial, and civic uses.

Mitigation measures have been added to ensure that impacts regarding geology and soils (MM GEO-1), paleontological resources (MM PAL-1), hazards and hazardous materials (MM HAZ-1, MM HAZ-2, MM HAZ-3, and MM HAZ-4), and tribal cultural resources (MM TCR-1) would be

less than significant. In addition, the project would be required to comply with various regulations, which are outlined as standard conditions or regulatory compliance measures in this IS/MND. Compliance with the standard conditions and adherence to the regulations described in the regulatory compliance measures related to aesthetics (SC AES-1), biological resources (SC BIO-1), cultural resources (RCM CUL-1), hydrology and water quality (SC WQ-1 through SC WQ-5), noise (SC NOI-1), and public services (SC PS-1 through SC PS-5) would also ensure that impacts to those resource areas would be less than significant. There is no indication that the proposed project would have environmental impacts that could cause other facilities or projects to be adversely affected.

The area is highly urbanized and, therefore, subject to mostly infill development and redevelopment projects. Based on the analysis contained in this IS/MND, the proposed project would not have cumulatively considerable impacts with implementation of project mitigation measures, standard conditions, and regulatory compliance measures. Implementation of mitigation measures, standard conditions, and regulatory compliance measures at the project level would reduce the potential for the incremental effects of the proposed project to be considerable when viewed in connection with the effects of past projects, current projects, or probable future projects for all environmental parameters.

Mitigation Measures: Refer to Mitigation Measures GEO-1 (Section 5.7, Geology and Soils), PAL-1 (also in Section 5.7), HAZ-1 through HAZ-4 (Section 5.9, Hazards and Hazardous Materials), and TCR-1 (Section 5.18, Tribal Cultural Resources).

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

Potentially Significant Unless Mitigated. Previous sections of this IS/MND reviewed the proposed project's potential impacts, and standard conditions and mitigation measures related to aesthetics (SC AES-1), cultural resources (RCM CUL-1), geology and soils (MM GEO-1 and MM PAL-1), hazards and hazardous materials (MM HAZ-1, MM HAZ-2, MM HAZ-3, and MM HAZ-4), hydrology and water quality (SC WQ-1 through SC WQ-5), noise (SC NOI-1), public services (SC PS-1 through SC PS-5), and tribal cultural resources (MM TCR-1). As concluded in these previous discussions, the proposed project would result in less than significant environmental impacts with compliance with the standard conditions, adherence to the regulations described in the regulatory compliance measures, and implementation of the recommended mitigation measures in this IS/MND. Therefore, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.

Mitigation Measures: Refer to Mitigation Measures GEO-1 (Section 5.7, Geology and Soils), PAL-1 (also in Section 5.7), HAZ-1 through HAZ-4 (Section 5.9, Hazards and Hazardous Materials), and TCR-1 (Section 5.18, Tribal Cultural Resources).

6.0 EARLIER ANALYSIS/SOURCE LIST

Earlier analyses may be used where, pursuant to tiering, a program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration (Section 15063 (c)(3)(D)). Earlier documents prepared and utilized in this analysis, as well as sources of information are as follows:

Reference #	Document Title	Available for Review at:
1	City of Huntington Beach General Plan	City of Huntington Beach Community Development Department, 2000 Main Street, Huntington Beach and at: http://www.huntingtonbeachca.gov/Government/Departments/Planning/gp/index.cfm
2	City of Huntington Beach Zoning and Subdivision Ordinance	City of Huntington Beach City Clerk's Office, 2000 Main Street, Huntington Beach and at: http://www.huntingtonbeachca.gov/government/elected_officials/city_clerk/zoning_code/index.cfm
3	City of Huntington Beach Municipal Code	City of Huntington Beach City Clerk's Office, 2000 Main Street, Huntington Beach and at: http://www.huntingtonbeachca.gov/government/charter_codes/municipal_code.cfm
4	California Emissions Estimator Model (CalEEMod) (2020)	See Appendix A
5	Biological Resources Technical Memorandum	See Appendix B
6	Cultural Resources Study and Historic Resources Evaluation	See Appendix C
7	Preliminary Geotechnical Investigation and LACM Paleontological Resources Records Search	See Appendix D
8	Phase I Environmental Site Assessment Report	See Appendix E
9	Phase II Subsurface Investigation Report	See Appendix F
10	Preliminary Hydrology Report	See Appendix G
11	Water Quality Management Plan	See Appendix H
12	Trip Generation Analysis and VMT Analysis	See Appendix I
13	Tribal Consultation Correspondence	See Appendix J

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