



Sunrise Senior Living Manhattan Beach Project

Draft Environmental Impact Report

prepared by

City of Manhattan Beach
Community Development Department
1400 Highland Avenue
Manhattan Beach, California 90266
Contact: Angelica Ochoa, Associate Planner

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

April 2021



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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed Sunrise Senior Living Manhattan Beach Project (proposed project). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

Project Synopsis

Project Applicant

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Project Description

This EIR has been prepared to examine the potential environmental effects of the Sunrise Senior Living Manhattan Beach Project. The following is a summary of the full project description, which can be found in Section 2, Project Description.

The project site consists of five parcels located at 250-400 North Sepulveda Boulevard on the southeast corner at the intersection of North Sepulveda Boulevard and 5th Street in the City of Manhattan Beach. The project site slopes downward over a distance of 355 feet from south to north with an upper elevation of approximately 190 feet above sea level at the southwest corner and a lower elevation of approximately 148 feet above sea level at the northeast corner. The proposed project would replace three existing buildings that currently contain a mix of office, retail, personal services, and restaurant uses with a new 95-room Sunrise Senior Living assisted living community. The project would consist of approximately 79,772 square feet (sf) of floor area, 64 assisted living rooms and 31 memory care rooms for a total of 95 rooms. The project includes one building that varies in height between two- and three-stories above a partially subterranean parking garage with 61 spaces. The project also includes 2 at-grade parking spaces. The project site is located in an area largely characterized by commercial and residential uses. The project site is bordered by North Sepulveda Boulevard and commercial development to the west, residential development to the east, 5th Street and commercial/office development to the north, and commercial development to the south. Surrounding development includes a two-story motel and restaurants to the west of the project site, two and three-story single and multi-family residential buildings to the east, one-story

automotive services, and office buildings to the north, and one-story automotive services buildings to the south.

The project site has a General Plan land use designation of General Commercial in the Land Use Element of the General Plan. The site is zoned CG-D8 (General Commercial, Sepulveda Boulevard Corridor Overlay), as defined by the City's Zoning Ordinance in the Manhattan Beach Municipal Code (MBMC).

Project Characteristics

The proposed project would involve demolition of 14,562 square feet of commercial space contained in three existing commercial buildings, three existing driveways on North Sepulveda Boulevard, one existing driveway on 5th Street, and 37,387 square feet of existing paved parking lot/internal driveways. After demolition, a new assisted living facility with a 26,754 square-foot building footprint would be constructed. The 26,754 square-foot building footprint would occupy approximately 50.3 percent of the 53,181 square-foot project site.

Table ES-1 summarizes the project characteristics.

Table ES-1 Project Characteristics

Address	250-400 N. Sepulveda Blvd.
APN	4167-024-031 through 034
Total Rooms	95 Rooms
	64 Assisted Living Rooms
	31 Memory Care Rooms
Height/Stories	30 feet above average grade (maximum building height elevation of 204.65 feet minus the average grade across the site of 174.65 feet).
	2-3 stories above grade
	Subterranean parking structure
Lot Area	53,181 square feet (sf)
Building Footprint	Approximately 26,754 sf
Total Floor Area	79,772 sf
Parking Level 1	3,158 sf
1 st Floor	26,754 sf
2 nd Floor	26,622 sf
3 rd Floor	23,238 sf
Landscaped Area	4,293 sf
Parking	63 spaces (61 below grade, 2 at grade)
sf = square feet	

Parking and Site Access

The proposed project would include one level of subterranean parking with 61 parking spaces. Three spaces would be accessible to persons with disabilities. The project would include infrastructure for 4 electric vehicle (EV) charging stations and 16 EV parking spots. The main vehicular access to the subterranean parking garage would be provided on Sepulveda Boulevard with a separate service access (trash and deliveries) on 5th Street. The auto court access off

Sepulveda Boulevard would allow for the pick-up and drop-off of residents and visitors. This area would provide two surface parking spaces.

Pedestrians would access the proposed building from a door entrance in the auto court on North Sepulveda Boulevard, and a door entrance in the seated courtyard on the east side of the building. A total of 4 long-term and 4 short-term bicycle parking spaces would be provided.

The project would also operate a local shuttle service for residents for activities such as medical appointments and activity programming, such as trips to the local mall.

Building Characteristics

The proposed building would be constructed over a 3,158 square-foot subterranean parking structure. The elevation of the existing sidewalks on Sepulveda Boulevard and 5th Street would not change. A portion of the first two floors of assisted living would be below existing grade toward the southern end of the project site. Immediately adjacent to the existing auto repair and auto detailing, two full stories would be located above existing grade as the site slopes down toward the east. The proposed main pedestrian entry off North Sepulveda Boulevard would include an auto court and two surface parking spaces near the northern portion of the site. The first, second, and third floors would be above existing grade on the northern end of the site along 5th Street. The garage would be accessed from 5th Street and include 61 parking spaces and mechanical equipment areas. The trash enclosures and loading spaces would be accessed from 5th Street. An outdoor courtyard/covered patio with seating would be provided on the ground level at the rear (southeast) of the building. A perimeter walking path would connect the courtyard with the streets and other parts of the site.

Table ES-2 compares existing conditions to the proposed project with respect to building area and height.

Table ES-2 Summary of Proposed Changes

	Existing Development	Proposed Project	Change
Building Area	400 N. Sepulveda Blvd: 2,564 sf 350 N. Sepulveda Blvd: 8,398 sf 250 N. Sepulveda Blvd: 3,600 sf Total: 14,562 sf	79,772 sf	+65,210 sf
Height	400 N. Sepulveda Blvd.: 10 feet 350 N. Sepulveda Blvd.: 25 feet 250 N. Sepulveda Blvd.: 14 feet	30 feet	+5 feet
Parking	Site: 73 spaces	63 spaces	-10 spaces

Lighting and Signage

Lighting included in the project is characteristic of a building in an urban environment and includes lighting for safety and functional purposes. The project would include low intensity bollard type lighting at pathways and wall-mounted lighting where applicable. Accent lighting would be proposed at landscape features, canopies, and architectural overhangs. In addition, night lighting for security and wayfinding would be provided by lampposts approximately 3 to 4 feet in height located along pedestrian pathways. Overall lighting and foot-candles would comply with City requirements, including those related to glare shielding. All exterior wall-mounted lighting would be of low intensity, low-glare design, and would be hooded to direct light downward onto the project site and

prevent spill-over. Exterior wall-mounted fixtures on the eastern and northern building façades would be dimmed after 10:00 p.m. No upward directed exterior lighting is proposed.

Project signage would be compatible with the project's architectural style and other signage in the area. Signage would include a monument sign for the main entry off Sepulveda.

Landscaping

The project includes 4,293 square feet of landscaping. Native and adaptive trees, shrubs and groundcover would be planted around the structure. Open space areas include the auto court/main entry to North Sepulveda Boulevard on the west side, the main courtyard on the east side of the building, and the pedestrian path that carves its way around the east, south, and west sides of the building. Three existing trees would be removed to accommodate the proposed project design. One 40-inch diameter tree (*Grevillea robusta*) would be removed from the southeast corner of the site, one palm tree would be removed from the northwest corner of the site, and one palm tree would be removed at the south boundary of the site adjacent to the vehicle sales use at 250 North Sepulveda Boulevard.

To comply with water efficiency regulations, landscaping would include in-line drip tubing distribution to eliminate evaporation or wasted water from overspray onto buildings and hardscape. The project would also include irrigation valve areas that respond to soil types, grading, exposures, and hydrozones. The plant palette for the project has a water use rating of low and very low.

Utilities

Water and sewage would be provided to the project site by the City of Manhattan Beach. Electricity would be provided by Southern California Edison and gas would be provided by Southern California Gas Company. One emergency generator (diesel-fueled) would be provided in an-acoustically-treated enclosure in the subterranean garage.

Construction and Grading

The project construction, including demolition, is expected to commence in late 2021 and take approximately 20 months to complete. The operational year for the project would be 2023. The project is expected to require exporting approximately 41,000 cubic yards of cut/exported soil.

Sustainability

The building would meet California's 2019 Title 24 building energy efficiency standards. Low flow plumbing fixtures (i.e., toilets, lavatory faucets, shower-heads) will be required. "Cal-Green" requirements also include, infrastructure for future PV panels. Additionally, infrastructure for four future charging stations and 16 EV spaces will be required. Eight bicycle parking spaces will be provided on site.

Project Objectives

The objectives for the proposed project are to:

- Provide 24-hour non-medical care to seniors in need of assistance by operating a financially viable assisted living facility.
- Provide an assisted living facility that serves the local population and does not create compatibility conflicts with adjacent uses.

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following three alternatives. Based on the alternatives analysis, Alternative 2 was determined to be the environmentally superior alternative.

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Intensity Project
- Alternative 3: Retail Alternative

Alternative 1 (No Project Alternative), required by CEQA, assumes that no new development would be constructed on the project site and that conditions would not change. Current uses on the project site would continue to consist of a one-story restaurant and medical office building located at 400 North Sepulveda Boulevard; a two-story retail, restaurant and personal services building located at 350 North Sepulveda Boulevard; and a one-story restaurant building at 250 North Sepulveda Boulevard. Analysis of this alternative is required by CEQA, but the No Project Alternative would not fulfill any project objectives since the existing conditions would not provide housing or medical care to seniors, nor provide an assisted living facility.

Alternative 2 (Reduced Intensity Project) would also involve demolition of existing on-site development and construction of an assisted living facility and subterranean parking area. However, Alternative 2 would reduce the project height by 10 feet (from a maximum height of 204.65 feet above mean sea level to 194.65 feet above mean sea level) and reduce the room unit count by 38 rooms (from 95 rooms to 57 rooms). This purpose of this alternative is to consider a project that would be a reduced intensity development compared to the proposed project.

This alternative meets the basic objectives of providing an assisted living facility that is compatible with adjacent uses, but it is unlikely to be financially viable as these types of facilities are licensed by the State of California to operate as a residential care facility for the elderly, as such, there are operational requirements and specific regulations regarding construction type that drive costs. Due to costs associated with operational requirements and construction type, a 57-room assisted living facility would not be financially viable. Therefore, this alternative would not meet the project's objective to operate a financially viable facility.

Overall, in comparison to the proposed project, Alternative 2 would reduce impacts of the proposed project in nearly all categories without increasing any impacts, and would generate less traffic, noise, air quality, and greenhouse gas emissions than the existing conditions. Therefore, Alternative 2 would be the environmentally superior alternative.

Alternative 3 (Retail Alternative) would involve construction of a retail development with an at-grade parking lot. Based on the total acreage of the site (~53,000 square feet), this retail building alternative assumes a two-story building with a footprint of approximately 20,000 square feet and total building area of 40,000 square feet (20,000 square feet footprint doubled for the second story). This size of building would require an average of approximately 80 parking spaces¹. Therefore, the at-grade lot would be approximately 24,000 square feet and the remaining 9,000 square feet is assumed to be landscaping area. Retail facilities are assumed to include retail, restaurant, office and/or medical uses up to a height of 30 feet above existing grade. The purpose of this alternative is

¹ Because MBMC parking space requirements for commercial uses vary from 1 space per 200 square feet to 1 space per 1,000 square feet, this alternative assumes a parking space requirement of 1 space per 500 square feet.

to consider a project allowed under the current General Plan land use designations and zoning that would not require excavation for subterranean parking and associated environmental impacts. Like the proposed project, this alternative would involve demolition of existing on-site development. However, Alternative 3 would not fulfill any project objectives because it would not provide housing or medical care to seniors, nor would it provide an assisted living facility. Overall, in comparison to the proposed project, Alternative 3 would increase air quality, GHG emissions, noise, and traffic impacts as compared to the proposed project. Only land use and planning impacts would be lessened. As such, Alternative 3 would not be the environmentally superior alternative.

Refer to Section 6, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The EIR scoping process did not identify any areas of known controversy for the proposed project. Responses to the Notice of Preparation (NOP) of a Draft EIR and input received at the EIR scoping meeting held by the City are summarized in Section 1, *Introduction*.

Issues to be Resolved

The proposed project would require demolition, grading, and building permits. In addition, City Council approval of a Conditional Use Permit and Tentative Parcel Map would be required.

Environmental Issues Found not to be Significant

Table 1-2 in Section 1.4 summarizes issues from the environmental checklist that were addressed in the Initial Study (Appendix A). As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur to the following issue areas: Agricultural Resources, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities. Impacts to Aesthetics, Geology and Soils, Land Use and Planning, Noise, and Transportation and Traffic were found to be potentially significant and are addressed in this EIR.

Summary of Impacts and Mitigation Measures

Table ES-3 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Although distinct from mitigation measures, project design features (PDFs) are also listed because they will be included as conditions of approval by the City to avoid potential biological and geological impacts. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.

- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-3 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure (s)	Residual Impact
Aesthetics		
Impact AES-1. The project would alter the visual character and quality of the site by replacing commercial development that does not exhibit a unified design standard with an assisted living project that increases building height and changes the style, massing, and arrangement of the built and landscaped environment on the site. Project architectural design, exterior finishes, and landscaping would be compatible with surrounding commercial and residential development and would be consistent with the design standards in the Sepulveda Boulevard design guidelines. Furthermore, the unified design, varied exterior finishes, and increased landscaping would improve the visual quality of the site compared to existing conditions. Replacement of existing on-site buildings with the proposed facility would introduce new sources of shade and shadow, but increased shading would be limited to two residential properties in late afternoon hours during winter months. Therefore, the project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be less than significant.	None required	Less than significant without mitigation
Impact AES-2. The project would introduce new sources of light that would adhere to City municipal code requirements and would be designed to avoid light spillover that could affect views in the area. The project would not create significant glare. Impacts would be less than significant.	None required	Less than significant without mitigation
Air Quality		
Impact AQ-1. Project construction would generate temporary increases in criteria air pollutant emissions of ozone precursors NO _x and VOC as well as CO, SO ₂ , PM ₁₀ , and PM _{2.5} . However, construction emissions would not exceed SCAQMD regional construction thresholds or localized significance thresholds; therefore, project construction 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 ambient air quality standard. Construction-related air quality impacts would be less than significant.	None required	Less than significant without mitigation

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Impact	Mitigation Measure (s)	Residual Impact
Impact AQ-2. Project operation would generate area, energy, mobile, and stationary source emissions. However, because operational emissions would not exceed SCAQMD thresholds, project operation 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 ambient air quality standard. Operational air quality impacts would be less than significant.	None required	Less than significant without mitigation
Impact AQ-3. The proposed project would not expose sensitive receptors to substantial concentrations of carbon monoxide or TACs. Therefore, impacts would be less than significant.	None required	Less than significant without mitigation
Geology and Soils		
Impact GEO-1. Seismically-induced ground shaking could damage structures and infrastructure, resulting in loss of property or risk to human safety; therefore, impacts would be potentially significant. Implementation of Mitigation Measure GEO-1 would be required to ensure that the design and construction of the proposed development implements the recommendations contained in the preliminary geotechnical report.	GEO-1: Geotechnical Recommendations. On-site development shall comply with, all recommendations contained in Section 5.0, <i>Discussion and Recommendations</i> , of the <i>Preliminary Geotechnical Report for the Proposed Senior Living Center, 350 N. Sepulveda Blvd., Manhattan Beach, California</i> (Group Delta 2016). At a minimum, any buildings considered essential facilities, as defined in the CBC, shall be designed to withstand upper bound earthquake ground motion. The calculated design base ground motion for the site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All on-site structures shall comply with applicable provisions of the CBC and the MBMC. Compliance with these requirements shall be verified by the City of Manhattan Beach Building and Safety Division prior to issuance of a grading permit.	Less than significant
Impact GEO-2. The project site is not located in a potential liquefaction zone and on-site soils are not susceptible to liquefaction. Therefore, impacts related to liquefaction would be less than significant.	None required	Less than significant without mitigation

Impact	Mitigation Measure (s)	Residual Impact
Impact GEO-3. Project construction would temporarily expose on-site soils to erosion. In accordance with National Pollutant Discharge Elimination System requirements, the project would develop and implement a Stormwater Pollution Prevention Plan that would reduce erosion during construction. In addition, the project development would be required to prepare a Standard Urban Storm Water Management Plan to reduce erosion during project operation. Erosion impacts would be less than significant.	None required	Less than significant without mitigation
Impact GEO-4. The project site is not located in an area susceptible to liquefaction, subsidence, lateral spreading, or landslides. However, the project site is underlain by potentially expansive and collapsible soils as well as corrosive soils. Therefore, impacts related to expansive and collapsible corrosive soils would be potentially significant. Implementation of Mitigation Measure GEO-4 would be required to ensure that the design of the proposed development adequately addresses these soil hazards.	GEO-4: Expansive and Collapsible Soils Evaluation and Design. A Registered Civil Engineer shall conduct a final analysis of surficial and near-surface soils at the site to verify whether expansive and/or collapsible soils are present. Depths of analysis would include soil depths subsequent to grading, prior to excavation, and after excavation. This analysis will be completed prior to on-site construction to determine whether expansive and/or collapsible soils are present. In the event that expansive and/or collapsible soils are present, foundations shall be designed to accommodate expansive and/or collapsible soils, and project foundations and structures may be placed on a blanket of non-expansive and/or non-collapsible fill soils to prevent structural damage and/or failure. Foundation design shall be reviewed and approved by a Registered Civil Engineer.	Less than significant
Greenhouse Gas Emissions		
Impact GHG-1. The project would generate temporary and long-term GHG emissions. However, the project would not exceed the efficiency threshold of 3.3 MT of CO ₂ e per service person per year. Impacts would be less than significant.	None required	Less than significant without mitigation
Impact GHG-2. Mitigation would not be required because impacts from GHG emissions would be less than significant. The proposed project would be consistent with the Manhattan Beach General Plan, the Manhattan Beach Energy Efficiency Climate Action Plan, the SCAG RTP/SCS, and the 2017 Scoping Plan. Therefore, impacts related to consistency with GHG plans and policies would be less than significant.	None required	Less than significant without mitigation

City of Manhattan Beach
Sunrise Senior Living Manhattan Beach Project

Impact	Mitigation Measure (s)	Residual Impact
Land Use and Planning		
Impact LU-1. The project would include reconstruction of public sidewalks along 5th Street and North Sepulveda Boulevard. The reconstruction would temporarily close the sidewalks. However, the project would not create any new permanent barriers between existing residential and commercial neighborhoods and would improve the condition of sidewalks in the long term. Impacts would be less than significant.	None required	Less than significant without mitigation
Impact LU-2. The proposed project would be consistent with Manhattan Beach zoning standards and would be primarily consistent with General Plan policies. Impacts related to consistency with plans, policies, and regulations would be less than significant.	None required	Less than significant without mitigation
Noise		
Impact N-1. Project construction would expose nearby receivers to a temporary increase in noise. However, noise levels during construction would be limited to the daytime pursuant to the City's Municipal Code, and construction noise levels would be temporary and intermittent. Impacts would be less than significant.	None required	Less than significant without mitigation
Impact N-2. Project operation would expose nearby receivers to a permanent increase in noise. However, noise levels during operation would be similar to those of the adjacent single-family residences, and parking lot and mechanical equipment noise would be shielded by its placement in the subterranean structure. Impacts would be less than significant.	None required	Less than significant without mitigation
Impact N-3. Project operation would alter traffic patterns in the area, but the project would generate fewer daily trips than are generated by the current uses of the site. Traffic-related noise impacts would be less than significant.	None required	Less than significant without mitigation
Impact N-4. Project construction would expose nearby sensitive receivers to a temporary increase in vibration. Vibration levels at residences to the east would not exceed 94 VdB, the FTA threshold for distinctly perceptible vibration and would be less than significant.	None required	Less than significant without mitigation
Transportation and Traffic		
Impact T-1. The project would result in a net decrease of 28 vehicle trips during the weekday AM peak hour, a net increase of 22 vehicle trips would occur during the weekday PM peak hour, and a net decrease of 95 vehicle trips would occur during the Saturday mid-day peak hour. Impacts would be less than significant.	None required	Less than significant without mitigation
Impact T-2. The project meets the VMT screening criteria because it would not result in a net increase of 110 or more daily trips would result in fewer trips and therefore have a less than significant VMT impact.	None required	Less than significant without mitigation

1 Introduction

This document is an Environmental Impact Report (EIR) for a proposed assisted living facility located on five parcels 250-400 North Sepulveda Boulevard, at the southeast corner of Sepulveda Boulevard and 5th Street in the City of Manhattan Beach, California. The proposed Sunrise Senior Living Manhattan Beach Project (hereafter referred to as the “proposed project” or “project”) would be constructed on a site currently occupied by three detached commercial buildings, consisting of office and restaurant uses. The project would involve demolition of the existing commercial buildings, removal of the paved parking lot, and construction of a three-story building over a partially subterranean garage for a Residential Care, General use. Other components of the project include one level of partially subterranean parking, two loading spaces for pick-up/drop-off, internal trash storage, outdoor courtyard/covered patio, and a total of 63 parking spaces for building occupants.

This section discusses (1) the project and EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) issue areas found not to be significant by the Initial Study; (5) the lead, responsible, and trustee agencies; and (6) the environmental review process required under the California Environmental Quality Act (CEQA). The proposed project is described in detail in Section 2.0, *Project Description*.

1.1 Environmental Impact Report Background

The City of Manhattan Beach distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period started on December 5, 2018 and ended on January 3, 2019. In addition, the City held an EIR Scoping Meeting on December 5, 2018. The meeting, which started at 6:00 PM, was aimed at providing information about and receiving input regarding the proposed project to members of public agencies, interested stakeholders and residents/community members. The meeting was held at Mt. Whitney Banquet Hall located at Manhattan Heights Park, 1600 Manhattan Beach Boulevard, in the City of Manhattan Beach. The City received a comment letter from one citizen in response to the NOP during the public review period, as well as various verbal and written comments during the EIR Scoping Meeting. The NOP is presented in Appendix A of this EIR, along with the Initial Study that was prepared for the project and the NOP responses received. Table 1-1 on the following page summarizes the content of the letters and verbal comments and where the issues raised are addressed in the EIR.

1.2 Purpose and Legal Authority

The proposed project requires the discretionary approval of the City of Manhattan Beach Planning Commission under Section 10.06.020 of the Manhattan Beach Code of Ordinances; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR has been prepared as a project EIR pursuant to Section 15161 of the *CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:

This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.

This EIR is to serve as an informational document for the public and City of Manhattan Beach decision makers. The process will include public hearings before the Planning Commission to consider certification of a Final EIR and approval of the proposed project.

Table 1-1 NOP Comments and EIR Response

Comment Topic	Comment/Request	How and Where it was Addressed
Public Comments		
Project Description	Consider building parking structure first for workers	Comments are addressed in Section 2, <i>Project Description</i> .
	Number of employees at facility at one time	
	Parking waivers and conditions for guests and visitors, and parking allocations (number of spaces for staff, residents, and visitors)	
	Agreements with existing tenants	
	Location of all proposed parking. Where will staff park?	
	Hours of construction	
	Project ingress and egress locations and turn restrictions, including the provision of separate entrances for emergency personnel/ambulance services and delivery trucks	
	Refuse storage and pick-up locations (and hours for pick-up)	
	Building specifics	
	Are only 24-hour clients permitted?	
	Will units house more than one resident?	
Aesthetics	Consider City Code height requirements, building would exceed 30-foot limit	Comments are addressed in Section 4.1, <i>Aesthetics</i> .
	Changes to community character due to loss of existing businesses	
	On-site lighting impacts, including on neighboring residences	
	Building shadows cast on adjacent residences on 5 th Street	
Geology and Soils	Hillside stability	Comments are addressed in Section 4.3, <i>Geology and Soils</i> .
Land Use and Planning	Loss of walkable coffee/restaurant	Comments are addressed in Section 4.5, <i>Land Use and Planning</i> .
	Consistency with Sepulveda guidelines	
	Any other residential facilities similar to proposed project that would place residential uses in a general commercial zone?	
	Does the City's General Plan indicate the needs for this type of facility in the proposed location?	

Comment Topic	Comment/Request	How and Where it was Addressed
Noise	Construction vibration impacts and noise impacts (construction and operation) on adjacent residences Heating and air conditioning equipment noise impacts on adjacent residences Existing noise from traffic on Sepulveda Boulevard. Ambulance noise and increased paramedic/traffic noise	Comments are addressed in Section 4.6, <i>Noise</i> .
Traffic	Adequacy of a single entrance driveway and its proposed location on 5th Street. Suggest moving entrance to Sepulveda Boulevard. Holiday traffic generation and overflow parking areas Traffic concerns on 5th street, including between 7:00 a.m. and 8:00 a.m. trips from high school students, and general existing number of trips on this street Safety concerns with the use of 5th Street instead of 2nd Street, with the steep incline and limited street lighting Deceleration lanes Long-term traffic monitoring/counts Sufficiency of provided parking and consider off-site parking for overflow Trip generation based on monitoring of existing Sunrise facility, and compare traffic flow to similar facilities Safety of residents leaving property Delivery traffic, including where trucks will park and during what hours Monitor parking in adjacent neighborhood Construction truck travel routes Trip distribution and traffic flow handling Low visibility at Johnson and 5th intersection, increased traffic would worsen this existing safety concern Traffic safety at blind corners	Comments are addressed in Section 4.7, <i>Transportation and Traffic</i> .
Alternatives	Consider alternative sites, such as the old BMW dealership	Comments are addressed in Section 6, <i>Alternatives</i> .
Initial Study	Population and housing, and utilities and service systems should be re-evaluated in the EIR, and their respective boxes were not checked on page 13 Wastewater effects on surrounding residences Stormwater effects Project will double residential density. Water pressure on 5th Street is an issue Population density in small land area	Comments are addressed in the Initial Study (included in Appendix A), and are therefore included in Section 1.4, <i>Issues Not Studied in EIR</i> , below.
Non-CEQA Issues	Tax generation Impact to local businesses Adjacent property values	Per Section 15131(a) of the <i>CEQA Guidelines</i> , economic or social effects are not considered to be significant environmental effects.

1.3 Scope and Content

This EIR addresses impacts identified by the Initial Study to be potentially significant. The following issues were found to include potentially significant impacts and have been studied in the EIR:

- Aesthetics
- Air Quality
- Geology and Soils
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Transportation and Traffic

Pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents were used in preparing the EIR. A full reference list is contained in Section 7, *References*.

The alternatives section of the EIR (Section 6) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and three alternative development scenarios for the project area.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *Guidelines* state:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.4 Issues Not Studied in Detail in the EIR

Table 1-2 summarizes issues from the environmental checklist that were addressed in the Initial Study (Appendix A), and therefore not studied in detail in this EIR. As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur in any of these issue areas.

Table 1-2 Issues Not Studied in the EIR

Issue Area	Initial Study Findings
Agricultural Resources	The project site is within an urbanized area of Manhattan Beach that lacks agricultural lands or forests. In addition, no portion of the City of Manhattan Beach is zoned for agricultural or forest land, nor are any lands in the City under a Williamson Act contract, according to the General Plan (City of Manhattan Beach 2003). No impact would occur with respect to this issue and further analysis in an EIR is not warranted. No impact to these resources would occur.
Biological Resources	The project site is within an urbanized area and no threatened, endangered or rare species or their habitats; locally designated species; locally designated natural communities; wetland habitats; or wildlife corridors are known to exist on the site. Under the proposed project, three palm trees would be removed from the site, to clear space for the proposed development. Palm trees are ornamental and are not considered rare or endangered species, the removal of the tree would not conflict with local policies or ordinances regarding tree preservation. Additionally, the project would include 4,293 square feet of landscaping. Impacts would be less than significant.
Cultural Resources	The project site is currently developed with three structures not considered to be historic, and there are no unique paleontological and architectural resources known to be present on site. Impacts would be less than significant.
Hazards & Hazardous Materials	Local, state, and federal regulations and standards are in place to regulate the transportation, use, and disposal of hazardous materials, including Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Impacts would be less than significant. The site is not within 0.25 mile (1,320 feet) of an existing or proposed school. The project site is approximately 2,800 feet northeast of Robinson Elementary School and 4,600 feet Manhattan Beach Middle School. Operation of the project site would not involve the use or transport of hazardous materials. However, construction of the proposed developments would involve demolition of the existing on-site structures and surface parking lots. All existing buildings on the site would be demolished as part of the project. Demolition of existing buildings may require the removal of hazardous materials, and would be required to comply with existing regulations, including SCAQMD Rule 1403 (Asbestos Demolition and Renovation Activities) and CalOSHA regulations regarding lead-based materials. Impacts would be less than significant. No Leaking Underground Storage Tanks (LUSTs) were found within one mile of the project site, according to a database search. Permitted USTs (approximately 500 feet south of the project site) are the closest hazardous material sites listed in the Geotracker database. There is no evidence to suggest that any contamination from these sites have caused contamination at the project site. Consequently, there would be no impact and further analysis of this issue in the EIR is not warranted. The project site is located approximately 4.2 miles south of the Los Angeles International Airport. The project site is not within an area covered by an airport land use plan, nor is it located in the vicinity of a private air strip. Impacts would be less than significant. The main vehicular access to the subterranean parking garage would be provided on North Sepulveda Boulevard with a separate service access for trash collection and deliveries provided via 5th Street. During each phase of development, onsite access would be required to comply with standards established by the City's Public Works Department, and all applicable City codes and regulations pertaining to emergency response and evacuation plans maintained by Manhattan Beach Police Department (MBPD) and Manhattan Beach Fire Department (MFPD). Pursuant to the City's Municipal Code, the project would implement measures to facilitate the passage of people and vehicles through or around any required road closures during construction activities associated with the project. Impacts to emergency response plans or emergency evacuation plans would not occur. The project site is in an urbanized area and is not in a wildland fire hazard area. No impact would occur and further analysis of this issue in an EIR is not warranted.

Issue Area	Initial Study Findings
Hydrology & Water Quality	Regulations under the federal Clean Water Act require compliance with the National Pollutant Discharge Elimination System (NPDES) storm water permit for projects disturbing more than one acre during construction. All components of the project would be required to comply with the NPDES Multiple Separate Storm Sewer System (MS4) Permit issued by the Los Angeles RWQCB, which would require implementation of Best Management Practices (BMPs). BMPs would be required to reduce polluted runoff from the project site by retaining, treating, or infiltrating polluted runoff onsite. The project developer would also be required to prepare a Standard Urban Storm Water Management Plan (SUSMP), which requires the integration of post-construction BMPs into the site's overall drainage system. This would further reduce the potential for pollutants to enter the storm drain system. The project site is located in an urbanized area and is almost entirely covered with impervious surfaces, and would generally remain so under the proposed project, though the project proposed 4,271 square feet of landscaping, or 8 percent of the project site. Irrigation design would employ the latest methods of conserving water, including smart irrigation controller with weather tracking technology, in-line drip tubing distribution to eliminate evaporation or wasted water from overspray onto buildings and hardscape, and irrigation valve areas that respond to soil types, grading, exposures and hydrozones. The project would conform with the NPDES permitting system and MS4 permit requirements would reduce water quality and waste discharge impacts from runoff during long-term operational activities. The NPDES permit requires the project to develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which includes Best Management Practices BMPs that prevent construction pollutants from contacting stormwater and reduce erosion impacts on receiving waters. Therefore, impacts would be less than significant and further analysis of this issue in an EIR is not warranted. The City of Manhattan Beach is the direct provider of water in Manhattan Beach and owns the right to pump 3.8 million gallons per year of groundwater from the West Coast Basin. Because the project site is already developed, the project would not increase impervious surface area or otherwise hinder groundwater recharge; the project would include 4,271 square feet (8 percent of the project site) of landscaping. Therefore, impacts would be less than significant. The project site is in Flood Zone X, which is an area outside of the 100-year flood. Additionally, the project would not involve construction of a building that would impede flood flows. No impact related to flooding would occur and further analysis of this issue in an EIR is not warranted. The project site is located in a potential tsunami inundation area. The City of Manhattan Beach has an Emergency Response Plan for tsunami operations within the potential tsunami inundation area with an elevation over 50 feet above sea level (the project site has an average grade of 175 feet). Because the project would not cause or exacerbate the potential for a tsunami, no impact would occur and further analysis of this issue in an EIR is not warranted.
Mineral Resources	The project site is located in an urbanized area of Manhattan Beach that is not used for mineral resource extraction. No oil extraction activities have historically occurred or are presently conducted on the project site. Therefore, the proposed project would not affect mineral resources. No impact would occur and further analysis of this issue in an EIR is not warranted.
Population & Housing	The proposed project involves the construction of an assisted living facility, which would cause a direct increase in the City's population. The project includes 115 beds in 95 rooms and would employ 77 full-time and 30 part-time employees. SCAG forecasts that the population of the City would increase to approximately 37,100 by the year 2040, which is an increase of 1,109 residents, and employment would increase to approximately 20,700 by the year 2040, which is an increase of 2,700 employees from 2012. The level of population and employment growth associated with the proposed project would be within regional population projections. The operation of the project would not generate any long-term increase in population. Additionally, the proposed project is a public/semi-public use, not a residential use. Impacts would be less than significant.

Issue Area	Initial Study Findings
Public Services	The project site is currently developed with three commercial structures that would be demolished as part of the proposed project. The proposed project would not displace housing or people or necessitate the construction of replacement housing. No impact would occur and further analysis of this issue in an EIR is not warranted. The Manhattan Beach Fire Department (MBFD) would serve the project site. The proposed project may incrementally increase demand for fire protection and associated emergency medical services, but would be required to comply with all applicable Fire Codes, and the development site is within the existing service area of the MBFD. The proposed project would not result in the need for new or expanded fire/emergency medical facilities. Impacts would be less than significant and further analysis of this issue in an EIR is not warranted. The Manhattan Beach Police Department's (MBPD) average response time to emergency calls is two minutes and nineteen seconds. The average response time for Priority 1 and 2 calls is four minutes and twenty seconds. The proposed project would incrementally increase demand for police protection services. However, it would not affect service ratios such that new or expanded police facilities would be needed. Impacts would be less than significant and further analysis of this issue in an EIR is not warranted. The project involves an assisted living facility that would not generate students or increase demand for parks or other government services or facilities. There would be no impact and further analysis of this issue in an EIR is not warranted.
Recreation	The project involves an assisted living facility that would not increase the use of neighborhood and regional parks or other recreational facilities. Therefore, the project doesn't include recreational facilities or require the construction or expansion of recreational facilities. There would be no impact and further analysis of this issue in an EIR is not warranted.
Utilities	The project would generate a total of 19,813 gallons of wastewater per day. This is less than 0.02 percent of the remaining treatment capacity of 120 million gallons per day at the JWPC Plant. Therefore, the existing JWPC Plant has sufficient capacity to treat wastewater generated by the project and construction of a new or expanded treatment facility would not be required. Potential impacts would be less than significant. The project would not substantially alter site drainage and would comply with applicable federal, state, and local regulations pertaining to control of stormwater runoff. Therefore, impacts would be less than significant. The project would use approximately 36 acre feet of water per year for indoor and outdoor use. According to the MBUWMP, the City has accounted for a demand increase of 886 acre feet between 2015 and 2025, and a demand increase of 81 acre feet between 2020 and 2035. Therefore, the City would have sufficient water supplies to serve the project. Impacts to the City's water supplies would be less than significant. Project construction would include exporting and disposing of an estimated 40,000 cubic yards of excavated soil. At least 80 percent of construction material, by weight, would be recycled. Operation of the project would generate approximately 51 tons of solid waste per year. The estimated remaining capacity of the El Sobrante Landfill is 141 million tons and the landfill has an expected lifespan of about 54 years. In addition, the estimated remaining capacity of the Mid-Valley Sanitary Landfill is 67.5 million cubic yards. Area landfills have enough capacity to accommodate solid waste from the project. Impacts would be less than significant.

1.5 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Manhattan Beach is the lead agency for the project because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. Responsible agencies include the SCAQMD, which regulates air quality in the region. The EIR will also be submitted to these agencies for review and comment.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed project.

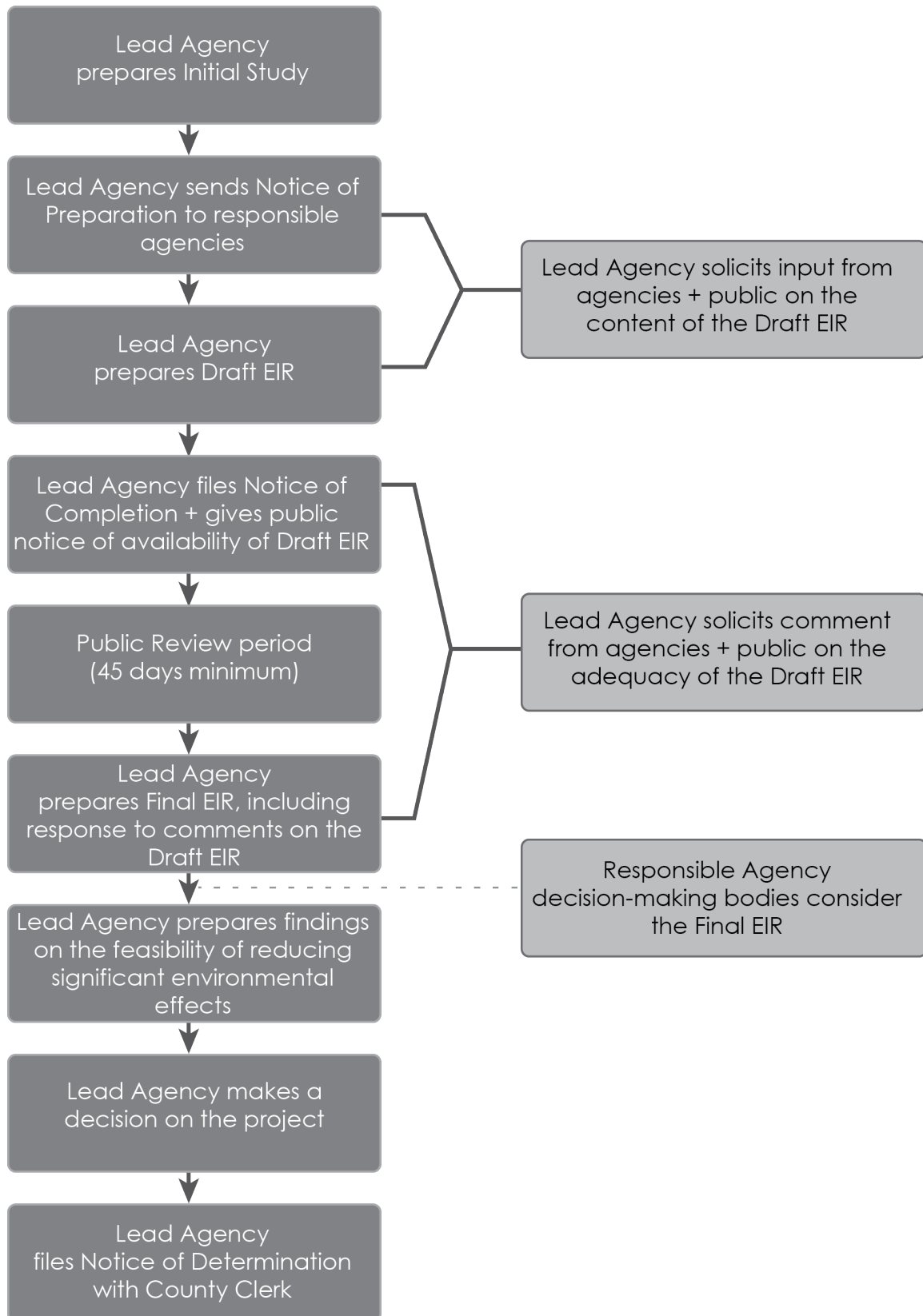
1.6 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation (NOP) and Initial Study.** After deciding that an EIR is required, the lead agency (City of Manhattan Beach) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received (Public Resources Code Sections 21104). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).
4. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
5. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).

6. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



2 Project Description

This section describes the proposed project, including the project applicant, the project site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Project Applicant

Sunrise Development, Inc.
Philip Kroskin
7902 Westpark Drive
McLean, Virginia 22102

2.2 Lead Agency Contact Person

Angelica Ochoa, Associate Planner
City of Manhattan Beach
Community Development Department
1400 Highland Avenue
Manhattan Beach, California 90266
Email: aochoa@citymb.info

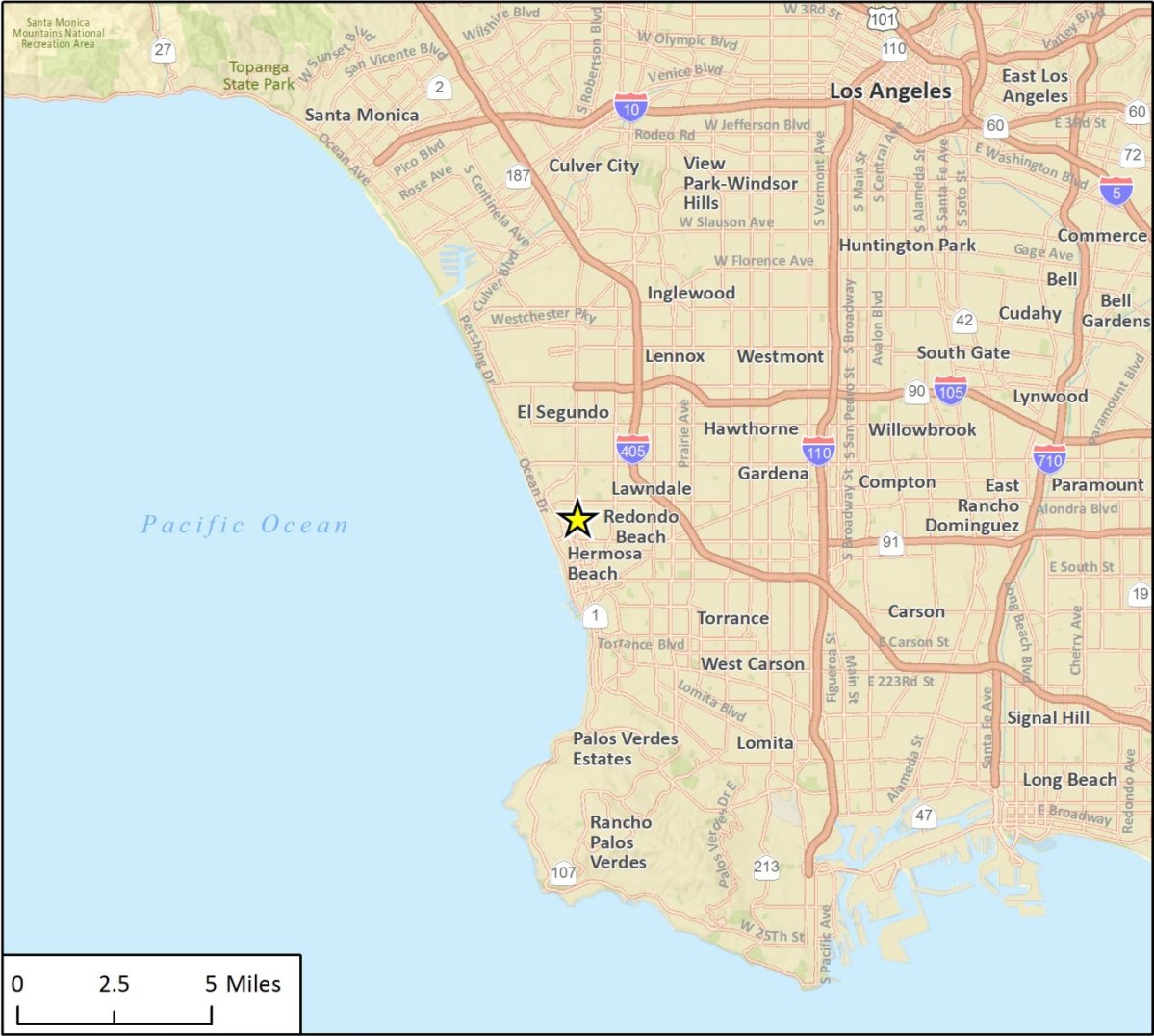
2.3 Project Location

The project site is located at the southeast corner of North Sepulveda Boulevard and 5th Street, with associated addresses of 250-400 North Sepulveda Boulevard, in the City of Manhattan Beach. The site is a rectangular-shaped property and approximately 53,181 square feet (1.22 acres) in area. The site's Assessor Parcel Numbers (APN) are 4167-024-033 (400 North Sepulveda Boulevard), 4167-024-034 (350 North Sepulveda Boulevard), 4167-024-032 and 4167-023-031 (250 North Sepulveda Boulevard), and a fifth parcel, a vacated street with no APN. Figure 2-1 shows the location of the site in the region and Figure 2-2 shows the project site in its neighborhood context.

The project site slopes downward over a distance of 355 feet from south to north with an upper elevation of approximately 191.77 feet above sea level at the southwest corner and a lower elevation of approximately 148.43 feet above sea level at the northeast corner. The private properties located adjacent to the east are residential and located at lower elevations than the site. The northeast corner of the site has a retaining wall with the surface elevation dropping from approximately 170 feet to 158 feet above mean sea level. The average grade across the site is 174.65 feet.

The site is regionally accessible two miles east via the 405 Freeway (I-405), and approximately 3.4 miles north from 105 Freeway (I-105). The site is locally accessible from Sepulveda Boulevard, which runs along the western site boundary, Manhattan Beach Boulevard, approximately 0.5 mile north of the project site, and Artesia Boulevard/Gould Avenue, approximately 0.5 mile south of the project.

Figure 2-1 Regional Location



★ Project Location

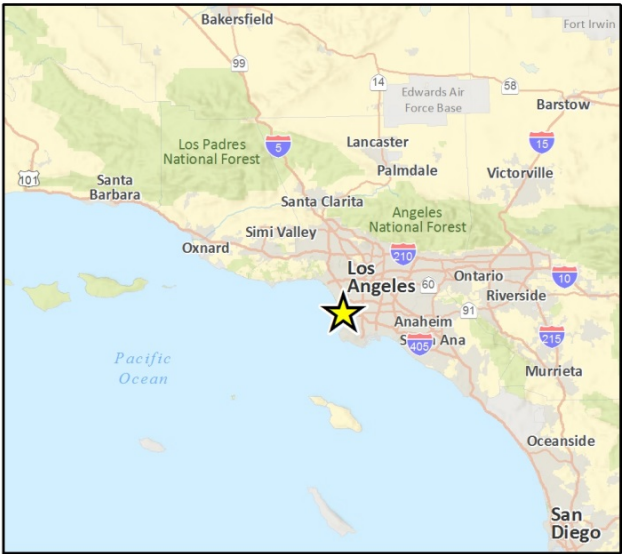
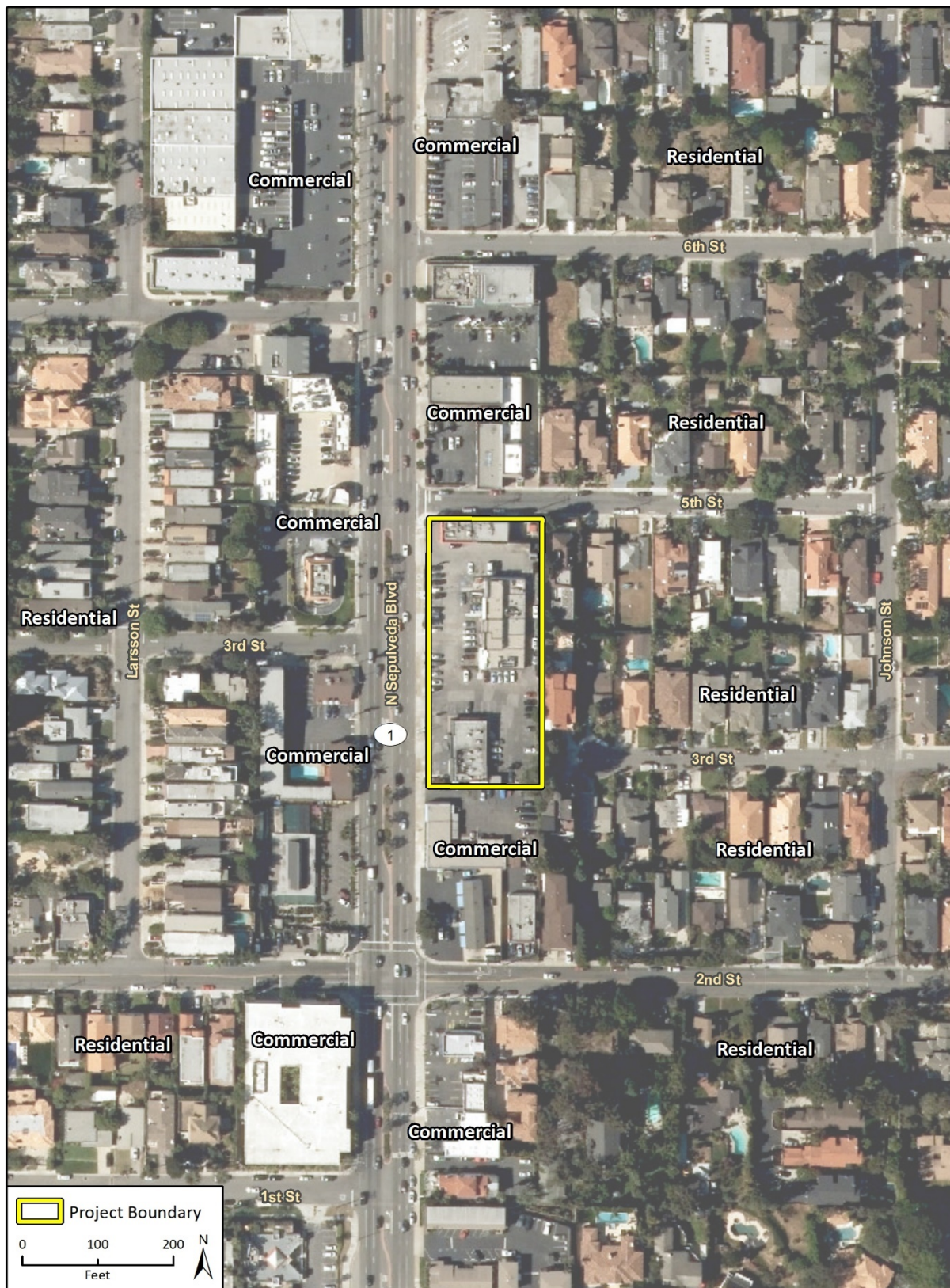


Fig 1 Regional Location

Figure 2-2 Project Site Location



Imagery provided by Los Angeles County, 2013.

Fig. 2-2 Project Location

2.4 Existing Site Characteristics

2.4.1 Current Land Use Designation and Zoning

The project site has a General Plan land use designation of General Commercial in the Land Use Element of the General Plan. The site is zoned CG-D8 (General Commercial, Sepulveda Boulevard Corridor Overlay), as defined by the City's Zoning Ordinance in the Manhattan Beach Municipal Code (MBMC). Uses permitted in the CG Commercial Zone include a full range of retail and service businesses deemed suitable for location in Manhattan Beach. The project would be allowed subject to approval of a Conditional Use Permit pursuant to MBMC section 10.16.020.

under the Residential Care, General Land Use classification, which is a Public and Semi-Public use classification in the MBMC. Therefore, the proposed project would be considered a commercial use within the CG-D8 zone and would be allowed with a Conditional Use Permit approved by the Manhattan Beach Planning Commission. The proposed project would not require amendments to the City's General Plan or the MBMC.

2.4.2 Existing Land Uses

The project site is currently developed with an existing commercial shopping center within three structures. See Figure 2-3 for site photographs. Existing development includes a one-story restaurant and chiropractic office building located at 400 North Sepulveda Boulevard, a two-story retail, office, restaurant, and personal services building located at 350 North Sepulveda Boulevard, and a one-story electric golf cart vehicle sales building at 250 North Sepulveda Boulevard.

The northern lot at 400 N. Sepulveda Boulevard is approximately 12,021 square feet in area and contains a 2,564 square foot one story building currently occupied by tenants Lucifers Pizza and Schwarz Chiropractic. The middle lot is approximately 18,005 square feet in area and contains an 8,398 square foot, two-story building, with approximately 11 commercial rooms, including Rinaldi's Italian Deli, Fruition Organic Market, Two Guns Espresso, edenLA Furniture Interiors, Dance 2B Fit, Nail & Skin Care, and accounting and real estate offices at 350 North Sepulveda Boulevard. The southern lots comprise approximately 23,257 square feet of area and contain a 3,600 square foot one story building, currently occupied by Mars Cars, an electric golf cart sales facility, at 250 North Sepulveda Boulevard. The buildings are surrounded by parking lots and associated driveways. The buildings are served by three existing access driveways on North Sepulveda Boulevard and one service access on 5th Street to the building at 400 North Sepulveda Boulevard.

2.4.3 Surrounding Land Uses

The project site is located in an area largely characterized by commercial and residential uses, as shown in Figure 2-2 and Table 2-1. Figure 2-4 depicts the General Plan and Zoning designations of the site and its surroundings. The project site is bordered by North Sepulveda Boulevard and commercial development to the west, residential development to the east, 5th Street and commercial/office development to the north, and commercial development to the south. Surrounding development includes a two-story motel and restaurants to the west of the project site, two and three-story single and multi-family residential buildings to the east, one-story automotive services, and office buildings to the north, and one-story automotive services buildings to the south.

Figure 2-3 Site Photographs



Photograph 1. View of Mars Cars vehicle sales use looking east from Sepulveda Boulevard

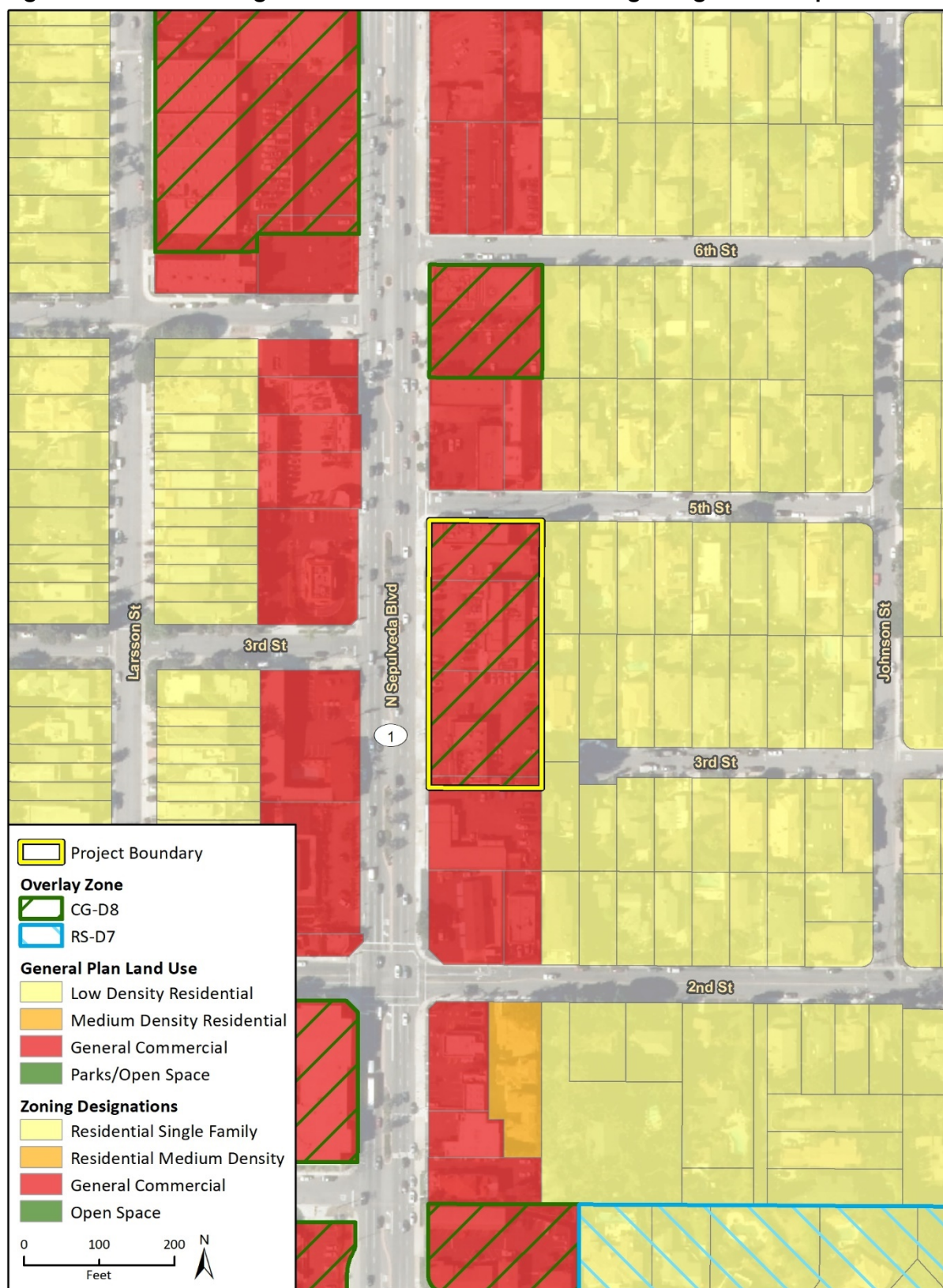


Photograph 2. View of Lucifers Pizza and parking lot looking north from east side of Sepulveda Boulevard



Photograph 3. View other of existing uses looking east from Sepulveda Boulevard

Figure 2-4 Surrounding General Plan Land Use and Zoning Designation Map



Imagery provided by Los Angeles County, 2013.
Additional data provided by Manhattan Beach, 2019.

Fig 2-4 Land Use and Zoning Overlay

Table 2-1 Existing Surrounding Land Uses and Zoning

Direction	Existing Zoning	Existing General Plan	Existing Land Use
North	General Commercial (CG)	General Commercial	The project site is bound by 5 th St. to the north. An automotive repair shop is located across 5 th St. in the General Commercial Zone.
South	General Commercial (CG)	General Commercial	The adjacent property is developed and current uses include automotive repair and auto detailing in the General Commercial Zone.
East	Single Family Residential (RS)	Low Density Residential	The project is bound by single-family residences in the Residential Single Family Zone to the east.
West	General Commercial (CG), Single Family Residential (RS)	General Commercial, Low Density Residential	The project site is bound by N. Sepulveda Blvd. to the west. Commercial uses, including a fast food restaurant, motel, office, and retail are located across N. Sepulveda Blvd. in the General Commercial zone. Single family residential exists further west beyond the commercial uses, in the Residential Single Family zone.

Source: Manhattan Beach General Plan, 2003

2.5 Project Characteristics

The proposed project would involve demolition of 14,562 square feet of commercial space contained in three existing commercial buildings, three existing driveways on North Sepulveda Boulevard, one existing driveway on 5th Street, and 37,387 square feet of existing paved parking lot/internal driveways. After demolition, a new assisted living facility with a 26,754 square-foot building footprint would be constructed. The 26,754 square-foot building footprint would occupy approximately 50.3 percent of the 53,181 square-foot project site.

The proposed building would consist of two to three building levels above existing grade, and one level of partially subterranean parking. The level of partially subterranean parking includes 61 parking spaces and mechanical equipment rooms. The proposed building would have a maximum height of 30 feet (maximum building height elevation of 204.65 feet minus the average grade across the site of 174.65 feet).

The building would contain approximately 79,772 square feet of floor area, consisting of 95 rooms (115 total beds), a facility kitchen, common areas (foyer, parlor, bistro, private dining room, general dining rooms, activity rooms, and staff rooms), two loading spaces for deliveries, and internal trash storage. The project would include 64 assisted living rooms and 31 memory care rooms for Alzheimer's patients and individuals with memory loss. The rooms would range from approximately 336 to 576 square feet and would contain one or two bedrooms (shared rooms). The rooms would not contain kitchens or cooking facilities.

The project would also include an outdoor courtyard/covered patio, and an auto court with two parking spaces for pick up/drop off of visitors and residents. Approximately 0.39 acre would be paved for parking and hardscape. The project would have approximately 77 full-time equivalent employees and 30 part-time jobs, which would span three daily work shifts. The first shift from 7:00 a.m. to 3:00 p.m. would include approximately 33 employees; the second shift from 3:00 p.m. to 11:00 p.m. would include approximately 16 employees; and the third shift from 11:00 p.m. to 7:00 a.m. would include approximately five employees. The project would also include removal and

replacement of the sidewalks on 5th Street and North Sepulveda Boulevard, as well as installation of an accessible ramp on northwest corner of 5th Street and Sepulveda Boulevard.

Table 2-2 shows the characteristics of the proposed building.

Table 2-2 Project Characteristics

Address	250-400 North Sepulveda Boulevard
APNs	4167-024-031 through 034
Total Rooms	95 Rooms 64 Assisted Living Rooms 31 Memory Care Rooms
Height/Stories	30 feet (maximum building height elevation of 204.65 feet minus the average grade across the site of 174.65 feet). 2- 3 stories above grade Subterranean parking structure
Lot Area	53,181 square feet (sf)
Building Footprint	Approx. 26,754 sf
Total Floor Area	79,772 sf
Parking Level 1	3,158 sf
1 st Floor	26,754 sf
2 nd Floor	26,622 sf
3 rd Floor	23,238 sf
Landscaped Area	4,293 sf
Parking	63 spaces (61 below grade, 2 at grade)
sf = square feet	

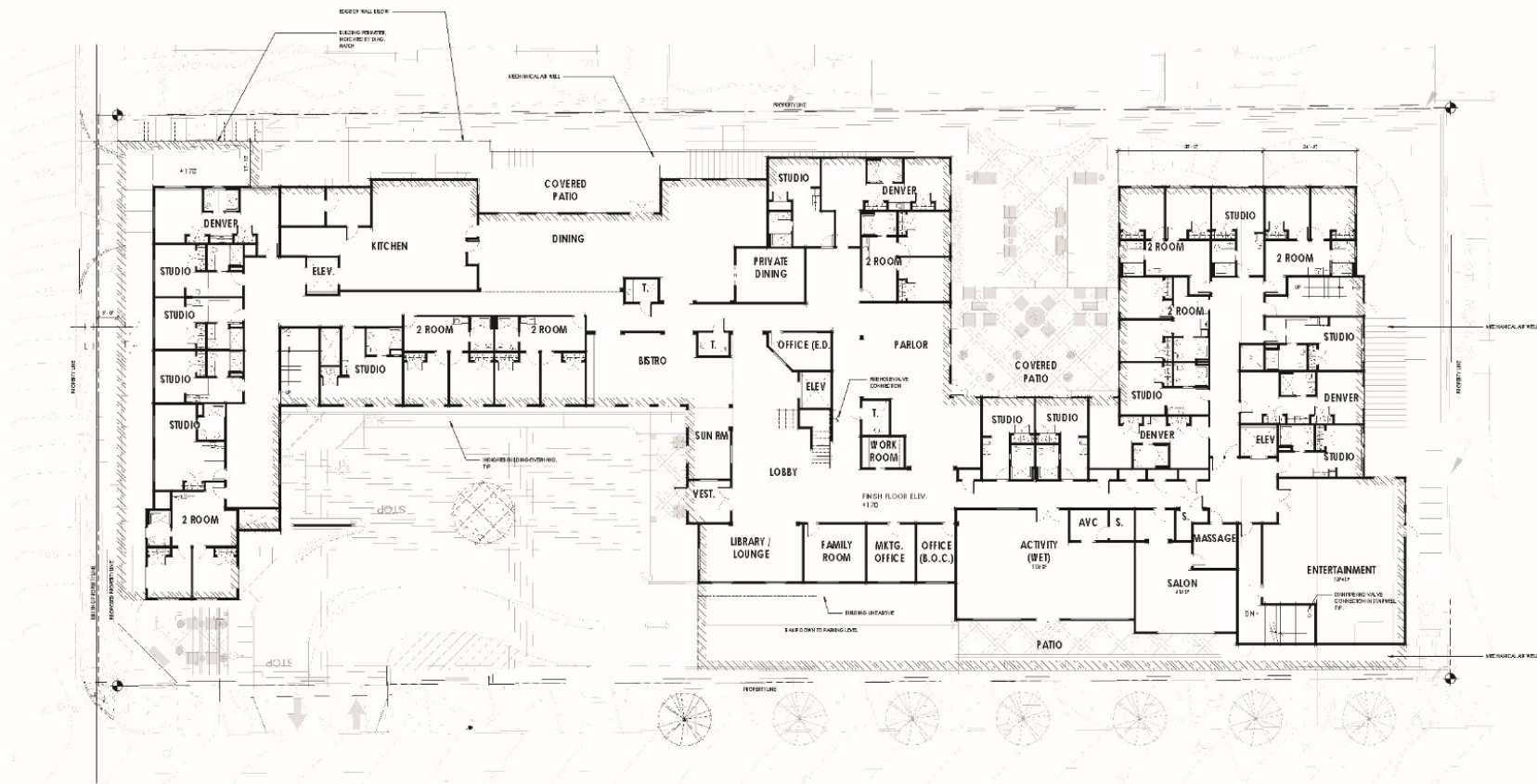
2.5.1 Proposed Site Plan

The building would be constructed over a 3,158 square-foot partially subterranean parking structure. The elevation of the existing sidewalks on Sepulveda Boulevard and 5th Street would not change. A portion of the first two floors of assisted living would be below existing grade toward the southern end of the project site. Immediately adjacent to the existing auto repair and auto detailing, two full stories would be located above existing grade as the site slopes down toward the east. The proposed main entry off North Sepulveda Boulevard would include an auto court and two surface parking spaces near the northern portion of the site. The first, second, and third floors would be above existing grade on the northern end of the site along 5th Street. The garage would be accessed from 5th Street and include 61 parking spaces and mechanical equipment areas. The trash enclosures and loading spaces would be accessed from 5th Street. An outdoor courtyard/covered patio with seating would be provided on the ground level at the rear (southeast) of the building. A perimeter walking path would connect the courtyard with the streets and other parts of the site.

Figure 2-5 through Figure 2-10 show proposed site plan, subterranean parking plan, floor plans, and rooftop plan. Figure 2-11 and Figure 2-12 show the project elevations.

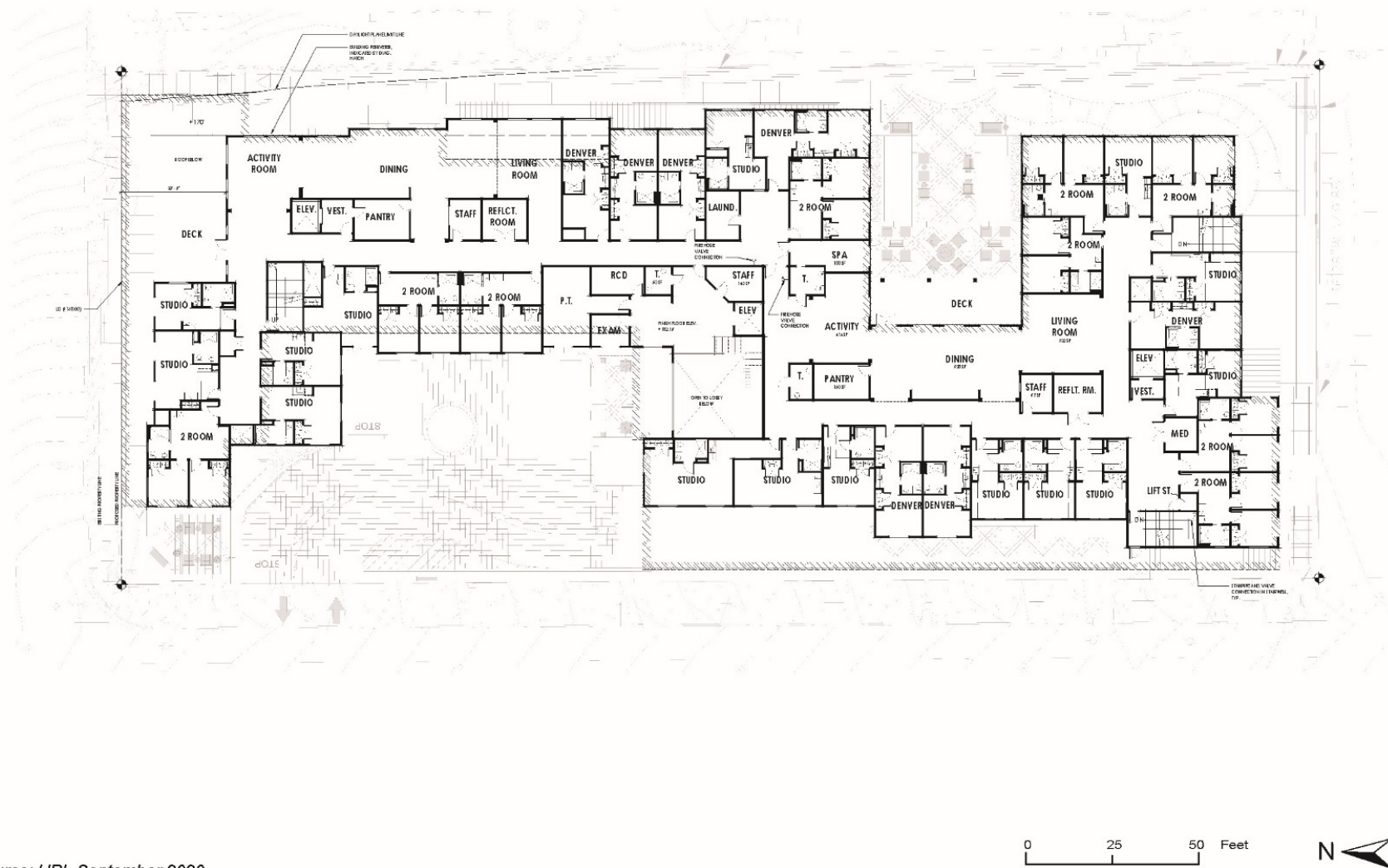


Figure 2-7 First Floor Plan



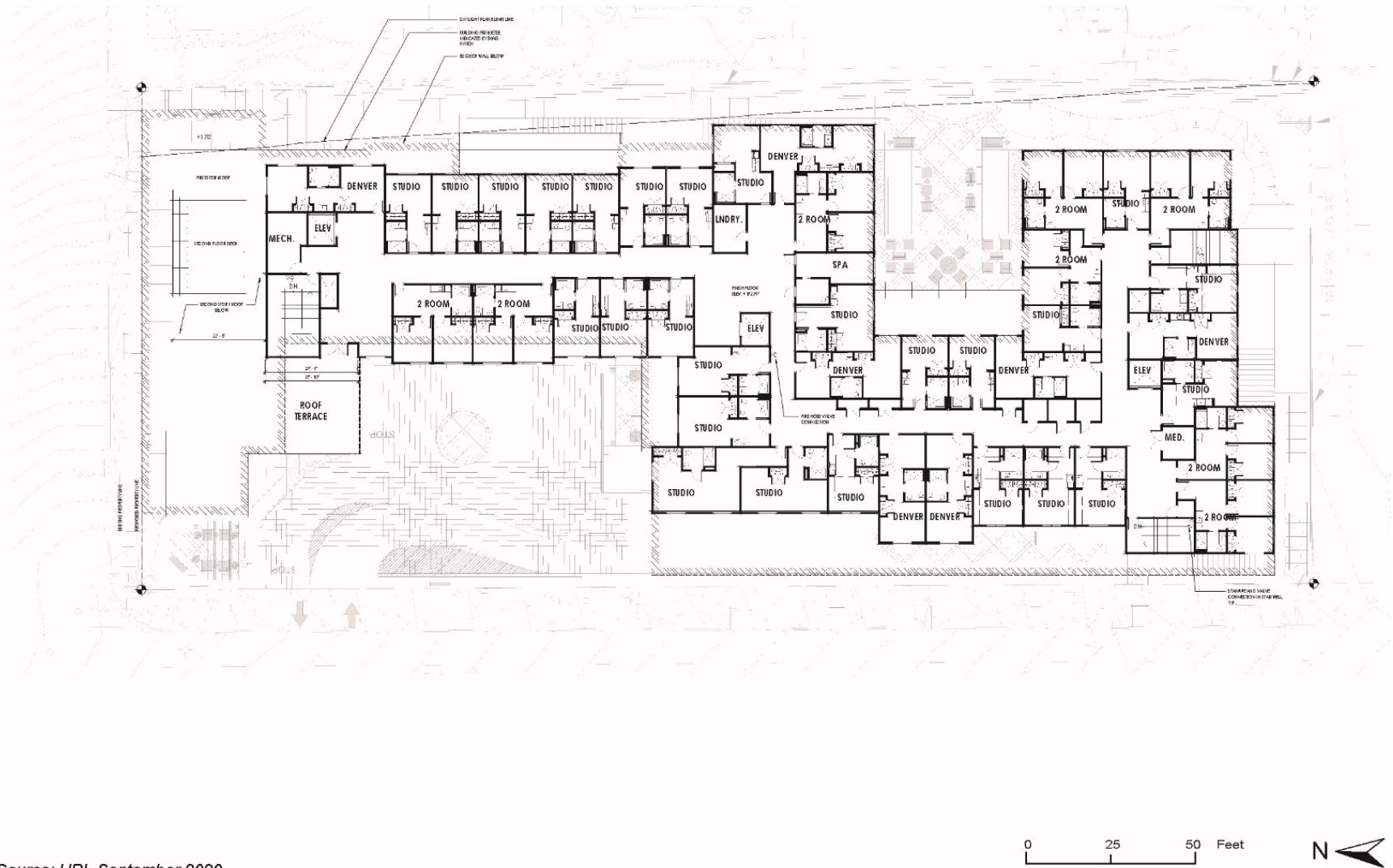
Source: HPI, September 2020.

Figure 2-8 Second Floor Plan



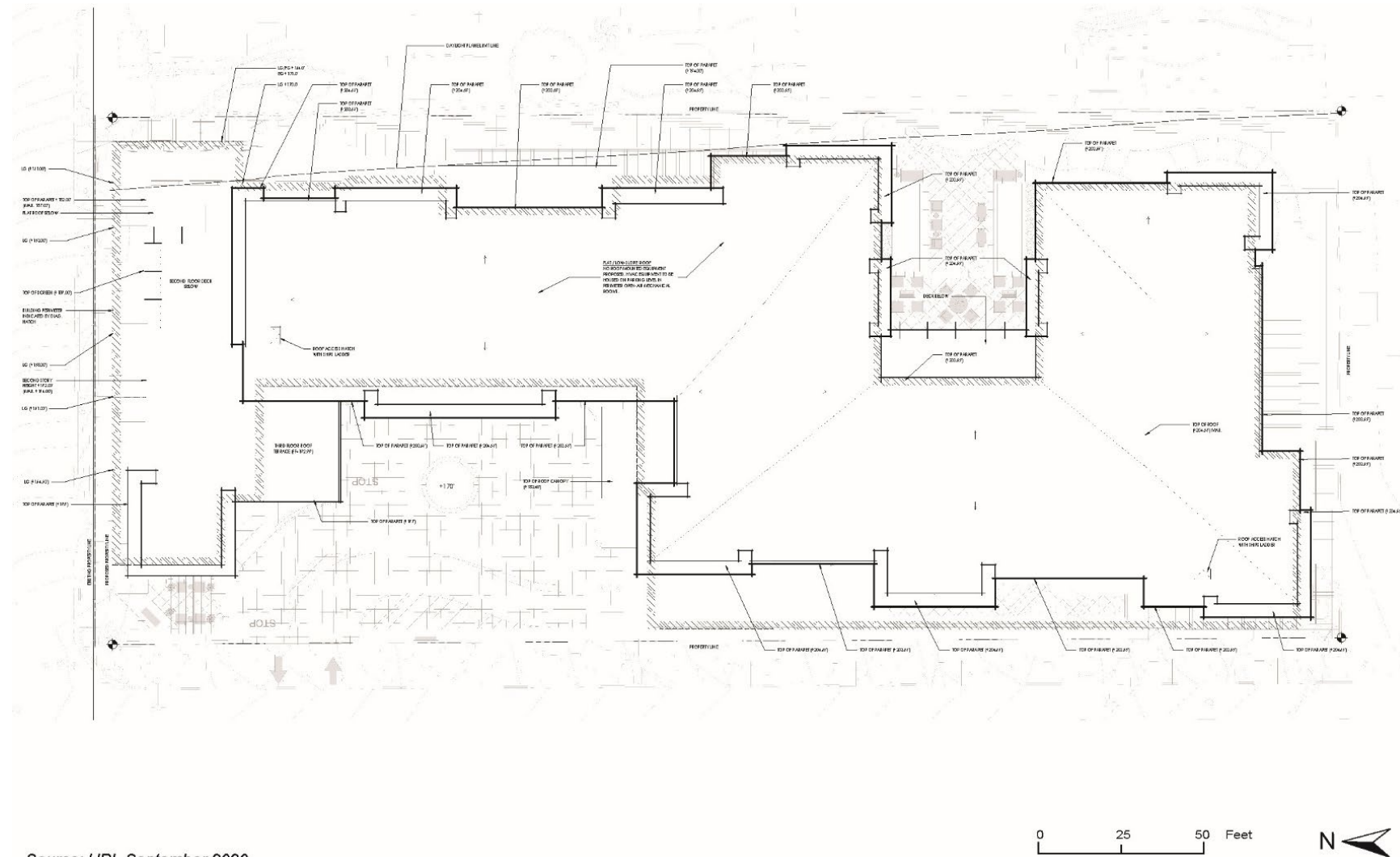
Source: HPI, September 2020.

Figure 2-9 Third Floor Plan



Source: HPI, September 2020.

Figure 2-10 Rooftop Plan



Source: HPI, September 2020.

Figure 2-11 North/South Elevations



Source: HPI, September 2020.

Figure 2-12 East/West Elevations



Table 2-3 compares existing conditions to the proposed project with respect to building area and height.

Table 2-3 Summary of Proposed Changes

	Existing Development	Proposed Project	Change
Building Area	400 N. Sepulveda Blvd: 2,564 sf 350 N. Sepulveda Blvd: 8,398 sf 250 N. Sepulveda Blvd: 3,600 sf Total: 14,562 sf	79,772 sf	+65,210 sf
Height	400 N. Sepulveda Blvd: 10 feet 350 N. Sepulveda Blvd: 25 feet 250 N. Sepulveda Blvd: 14 feet	30 feet ¹	+5 feet
Parking	Site: 73 spaces	63 spaces	-10 spaces
¹ Maximum building height elevation of 204.65 feet minus the average grade across the site of 174.65 feet.			

2.5.2 Parking and Site Access

The proposed project would include one level of partially subterranean parking with 61 parking spaces. Three spaces would be accessible to persons with disabilities. The project would include infrastructure for 4 electric vehicle (EV) charging stations and 16 EV parking spots. The main vehicular access to the subterranean parking garage would be provided on Sepulveda Boulevard with a separate service access (trash and deliveries) on 5th Street. The auto court access off Sepulveda Boulevard would allow for the pick-up and drop-off of residents and visitors. This area would provide two surface parking spaces.

Pedestrians would access the proposed building from a door entrance in the auto court on North Sepulveda Boulevard, and a door entrance in the seated courtyard on the east side of the building. A total of 4 long-term and 4 short-term bicycle parking spaces would be provided.

The project would also operate a local shuttle service for residents for activities such as medical appointments and activity programming (i.e., trips to the local mall).

2.5.3 Utilities

Water and sewer service would be provided to the project site by the City of Manhattan Beach. Electricity would be provided by Southern California Edison and gas would be provided by Southern California Gas Company. One emergency generator (diesel-fueled) would be provided in an-acoustically-treated enclosure in the subterranean garage.

2.5.4 Construction and Grading

The project construction, including demolition, is expected to commence in late 2021/ early 2022 and take approximately 20 months to complete. Construction would be completed in one phase. The operational year for the project would be 2023. Demolition would be approximately eight weeks. Site preparation would be approximately four weeks. The entire 1.22-acre site would be graded in approximately eight weeks. Building construction would be completed in approximately 16 months. All construction staging would be located onsite. The project is expected to require approximately 41,000 cubic yards of cut/exported soil that would be hauled away in trucks with a capacity of 15 cubic yards. Excavation up to 35 feet is planned for the project. The existing

uncertified fill soils are not suitable to support the proposed structure on shallow foundation. If existing uncertified fill soils can be removed and replaced with properly compacted fill soils, the proposed structure may be supported on shallow foundation and floor slab may be supported on grade. A drill rig, two front-end loaders, two dump trucks, two bobcats, an excavator, a paving machine, a plaster pump with hopper, two boom reaches, three extended reach forklifts, and two cranes would be used during demolition and construction. Some difficulty may be encountered in the drilling of soldier beams because of caving in the sandy soils. Special techniques and measures, such as casing or drilling mud, may be used for proper installation of the soldier piles and/or tie-back anchors.

2.5.5 Architecture Style

The building style would be contemporary beach style in keeping with the architectural character of the surrounding neighborhood. Simulated stone, stained wood siding, lap and shingle siding, stucco, and metal roofing would complement the varied forms of the site plan. The proposed roof would be flat to accommodate a reduced average grade reference point, and no mechanical equipment would be placed on the roof, though there would be a parapet wall.

2.5.6 Lighting and Signage

The project would include low level bollard type lighting at pathways and wall mounted lighting where applicable. Accent lighting would be proposed at landscape features, canopies, and architectural overhangs. In addition, night lighting for security and wayfinding would be provided by lampposts approximately 3 to 4 feet in height located along pedestrian pathways. Overall lighting and foot-candles would comply with City requirements, including those related to glare shielding. All exterior wall-mounted lighting would be of low intensity, low-glare design, and would be hooded to direct light downward onto the project site and prevent spill-over. Exterior wall-mounted fixtures on the eastern and northern building façades would be dimmed after 10:00 p.m. No upward directed exterior lighting is proposed.

Project signage would be compatible with the project's architectural style and other signage in the area. Signage would include a monument sign for the main entry off Sepulveda.

2.5.7 Landscaping Plan

The project includes 4,293 square feet of landscaping. Native and adaptive trees, shrubs and groundcover would also be planted around the structure. Open space areas include the auto court/main entry to North Sepulveda Boulevard on the west side, the main courtyard on the east side of the building, and the pedestrian path that carves its way around the east, south, and west sides of the building. See Figure 2-13 and Figure 2-14 for the Landscaping Plan. The project would incorporate streetscape landscaping along North Sepulveda Boulevard. Vertical trees and layered ground plane plantings would be used along the edges of the site to provide separation from adjacent residential and commercial uses.

Three existing trees would be removed to accommodate the proposed project design. One 40-inch diameter tree (*Grevillea robusta*) would be removed from the southeast corner of the site, one palm tree would be removed from the northwest corner of the site, and one palm tree would be removed at the south boundary of the site adjacent to the vehicle sales use at 250 North Sepulveda Boulevard.

Figure 2-13 Landscape Plan

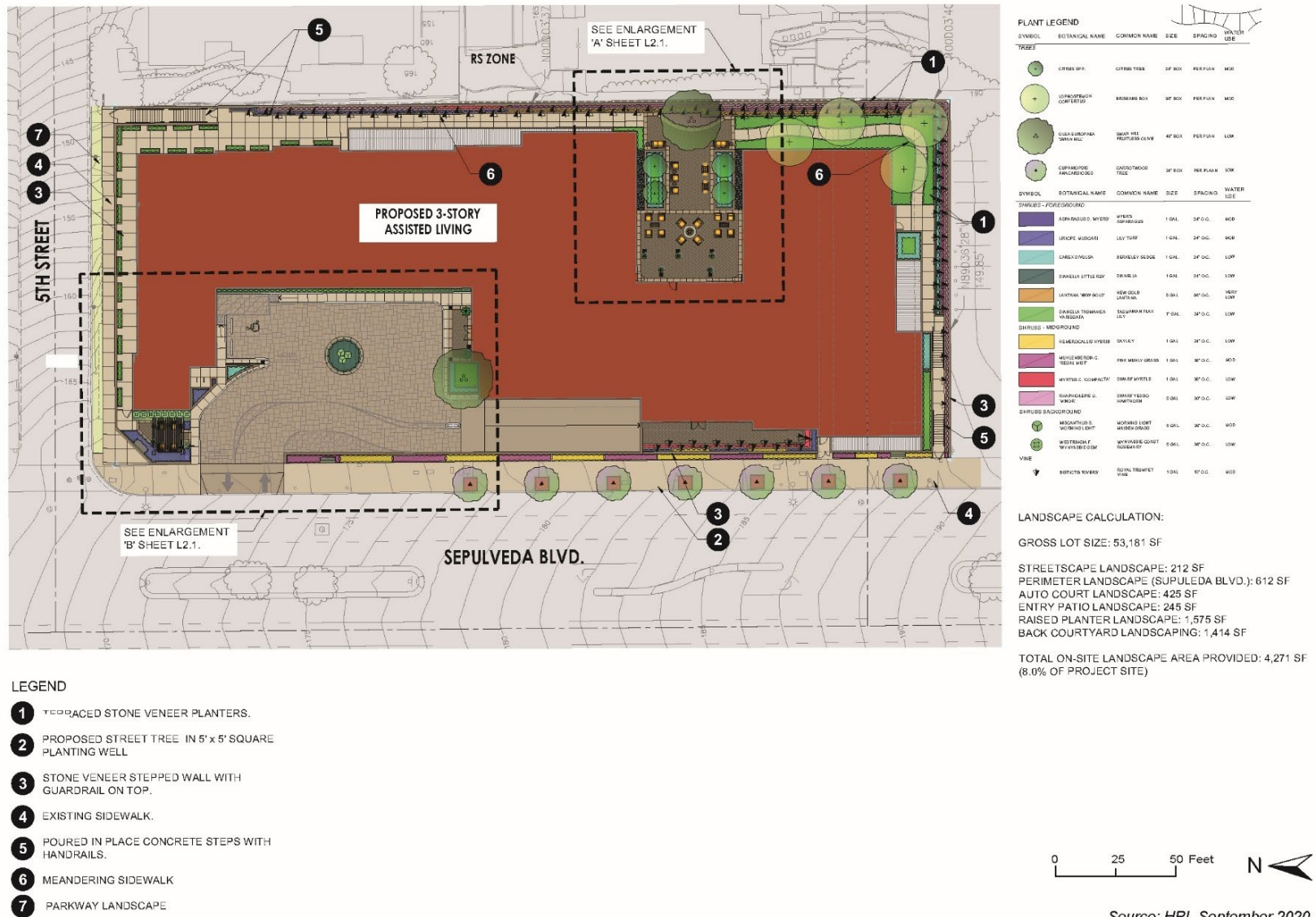
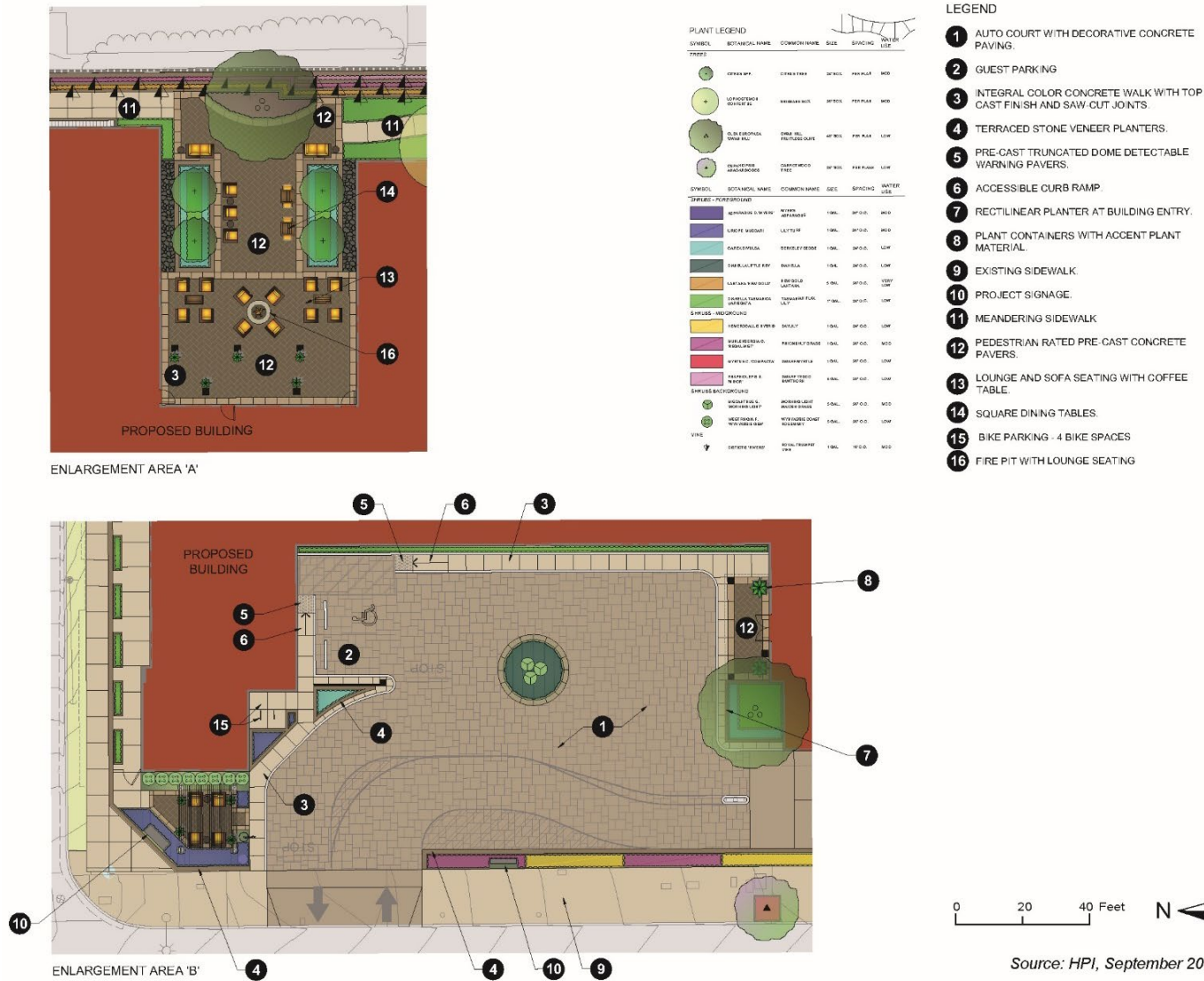


Figure 2-14 Landscape Plan Courtyard Enlargements



Landscaping would include in-line drip tubing distribution to eliminate evaporation or wasted water from overspray onto buildings and hardscape. The project would also include irrigation valve areas that respond to soil types, grading, exposures, and hydrozones. The plant palette for the project has a water use rating of low and very low.

2.5.8 Sustainability

The building would meet 2019 Title 24 California's building energy efficiency standards. Low flow plumbing fixtures (i.e., toilets, lavatory facets, showerheads) would be required. "Cal-Green" requirements also include infrastructure for future PV panels. Additionally, infrastructure for four future charging stations would be required. Eight bicycle parking spaces would be provided on-site for guests and employee use along the north-facing wall of the auto court on North Sepulveda Boulevard, as shown in Figure 2-5.

2.6 Project Objectives

The objectives for the proposed project are to:

- Provide 24-hour non-medical care to seniors in need of assistance by operating a financially viable assisted living facility.
- Provide an assisted living facility that serves the local population and does not create compatibility conflicts with adjacent uses.

2.7 Required Approvals

The City of Manhattan Beach is the lead agency for the project and no discretionary approvals are required from any other agency. The proposed project would require a demolition, grading and building permit for on-site work as well as various Public Works permits for work conducted in the public right-of-way.

The proposed assisted living facility in the General Commercial zoning designation would require the Planning Commission to approve a Use Permit pursuant to MBMC Section 10.16.020 to establish a "Residential Care, General" use in the General Commercial (CG) zoning designation and D-8 overlay zone.

The project site contains five parcels. A Tentative Parcel Map pursuant to MBMC Section 11.12.020 would be obtained to merge the parcels into a single parcel for development of the project.

The project site is located adjacent to California State Highway 1 and will require ministerial permits and approvals from Caltrans prior to final inspection. An encroachment permit from both the City and Caltrans would also be required for the construction work in the highway right-of-way.

A ministerial sign permit will be required during plan check for any proposed site signage on the site.

A permit to construct/operate the proposed emergency generator would be obtained from the Southern California Air Quality Management District (SCAQMD). The generator would meet SCAQMD's requisite criteria for emissions.

The project would be licensed by the State of California as a Residential Care Facility for the Elderly (RCFE) pursuant to California Health & Safety Code Section 1569.20.

3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project site is located in the City of Manhattan Beach, approximately fourteen miles southwest of the civic center of the City of Los Angeles. It is located on the southeast corner of the intersection of North Sepulveda Boulevard and 5th Street. The 53,181 square-foot site is currently occupied by three commercial buildings. Figure 2-1 in Section 2, *Project Description*, shows the location of the project site in the region. Figure 2-2 shows the location of the project site in relationship to the surrounding neighborhood.

A grid system of east-west and north-south roadways, including arterials, collectors, and local streets, provide vehicular access throughout the City. The major roadways include Manhattan Beach Boulevard, Sepulveda Boulevard (California State Highway 1), Ardmore Avenue, Valley Drive, Gould Avenue, Artesia Boulevard, and Aviation Boulevard. The closest freeways are Interstate 405 (I-405) and Interstate 105 (I-105). I-405 is located approximately two miles east of the project site, and I-105 is located approximately 3.4 miles north of the project site.

The Mediterranean climate of the region and the coastal influence produce moderate temperatures year-round, with rainfall concentrated in the winter months. Although air quality in the area has steadily improved in recent years, the Los Angeles region remains a nonattainment area for ozone (urban smog). The City of Manhattan Beach is located on the coastline of the Pacific Ocean.

3.2 Project Site Setting

As shown in Figure 2-2 in Section 2, *Project Description*, the project site is bordered by commercial development and North Sepulveda Boulevard to the west, single and multi-family residential development to the east, commercial development and 5th Street to the north, and commercial development to the south. There is a two-story motel to the west, across North Sepulveda Boulevard. Two and three-story residences are located to the east, one-story office and automotive services buildings are located to the north across 5th Street, and one-story automotive services buildings are located to the south.

The project site is currently occupied by three commercial buildings and has a General Plan land use designation of General Commercial. The site is zoned CG-D8 (General Commercial, Sepulveda Boulevard Corridor Overlay), as defined by the City's Zoning Ordinance and the Land Use Element of the General Plan. Uses permitted in the CG designation include a full range of retail and service businesses deemed suitable for location in Manhattan Beach.

3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more

Sunrise Senior Living Manhattan Beach Project

individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in Manhattan Beach and surrounding areas, including the cities of Hermosa Beach, El Segundo, and Redondo Beach, are listed in Table 3-1. In particular, all of the Manhattan Beach Projects and the Hermosa Beach project at 2420 Pacific Coast Highway are either located in close proximity or along the same major arterial as the project site and construction schedules may overlap. These projects are considered in the cumulative analyses in Section 4, *Environmental Impact Analysis*.

Table 3-1 Cumulative Projects List

Project Name	Project Location	Land Use/Description	Non-Residential Square Footage	Other	Status
City of Manhattan Beach¹					
Water Reservoir Replacement Project	1800 N. Peck Ave.	Rebuild existing City Water Facility	–	–	Under construction
Office Conversion	516 N. Sepulveda Blvd.	Commercial/convert Restaurant Building into Office Use	10,900	–	Completed Spring 2019
Mothers Market	1700 Rosecrans Ave.	Commercial/convert portion of Grocery Store to Dining and add Patio Dining	600	Add 375 sq.ft.	Completed 2018/2019
Mixed use building	3920 Highland Ave.	Residential/2 Condos and Artist Studio	3,000	–	In Plan Check
Mixed use building	1701 Artesia Blvd.	Residential/Office/7 Condos and Medical Office	3,000	–	In Plan Check
Van Zanten Apt.Bldg.	1214 Tennyson St.	Residential/11-unit Apt. Bldg.	–	3 additional dwelling units	Completed 2019
REMAX Medical Office conversion	400 S. Sepulveda	Office/Medical	40,000	Replace 40,000 general office	Completed Spring 2016
Manhattan Village Shops Renovation	3200-3600 N. Sepulveda Blvd	Commercial/Retail	127,000	–	Under construction
General Office building	865 Manhattan Beach Blvd.	General Office, Deli	15,700 (15,000 general office, 700 deli use)	–	Completed 2019

Project Name	Project Location	Land Use/Description	Non-Residential Square Footage	Other	Status
–	1000 N. Sepulveda Blvd.	Office/Commercial/ Medical Office, Pharmacy, Coffee Shop	25,430 (23,050 medical office, 665 pharmacy, 1,715 coffee shop, 5,400 less existing restaurant)	–	Completed 2019
Gelson's Market	707 N. Sepulveda Blvd.	Commercial/Grocery Store, Restaurant, Bank	34,500 (27,500 grocery market use, 7,000 bank, 52 seat restaurant, 31,720 less existing auto care)	–	Completed
Office building	2205 N. Sepulveda Blvd.	General Office	4,700 (1,040 less existing hair studio)	–	Completed
Chocolate Factory	326 13th St.	Commercial/replace Duplex with Manufacturing and Retail	2,250	–	Completed
Residential Condo Building	757 Manhattan Beach Boulevard	Residential/ Condominium	–	5 dwelling units (6 less existing apartment units)	Completed summer 2018
Medical office building	1101 Aviation Blvd.	Medical Office	5,000	–	Completed Fall 2018
Wells Fargo Bank and Retail	1129 N. Sepulveda Blvd.	Commercial/Retail	6,000 (4,000 bank, 2,000 retail)	Demo. existing gas station	Bank completed 2009. Retail on hold indefinitely
Kinecta	1100 Manhattan Beach Blvd.	Bank, Coffee Shop and possible Grocery Store	13,000	Existing 8,600 square-foot gas station removed	Under construction I
Skechers Design Center and Executive Offices	305, 309, and 317 S. Sepulveda Blvd., 1050 Duncan Ave.	Office	37,174	12,422 less office, retail, and auto shop	Under construction
Skechers Office Building Addition	330 S. Sepulveda Bl.	Office	20,328	–	Under construction
Proposed Hotel	600 S. Sepulveda Bl.	Hotel, Retail and Office	81,775 hotel, 6,893 retail and 9,375 offices	–	In entitlement review

City of Manhattan Beach
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Project Name	Project Location	Land Use/Description	Non-Residential Square Footage	Other	Status
Civic Center/Metlox Development	15th St, Manhattan Beach Blvd, 13th St., Highland Ave, Morningside Dr.	Public/Commercial	186,759	42,668 existing public buildings, 54,332 proposed public buildings, 186,759 proposed commercial	Completed
Subtotal – City of Manhattan Beach			514,813		
City of Hermosa Beach²					
H2O Hotel	1429 Hermosa Ave.	Commercial/Hotel	–	30 rooms	Under construction
	2101 Pacific Coast Highway	Office	10,124	–	Completed
	906 Hermosa Ave.	Office	8,870	–	Under Construction
	824 1st St.	Office	3,000	–	Approved
Strand and Pier Hotel		Commercial/Hotel	13,619 (5,406 retail, 8,213 restaurant, 9,300 less existing restaurant, 6,000 less existing retail)	100 rooms	Environmental review completed; project on hold
Hope Chapel/Lazy Acres Grocery Market	2420 Pacific Coast Hwy.	Mixed-Use	62,269 (32,191 church, 30,078 grocery/market use, 15,000 less existing office, 29,653 less existing recreation	–	Construction completed
OTO Development Hotel	Beach Dr./11th St.	Commercial/Hotel		100 rooms	Withdrawn
Transpacific Submarine Fiber Optic Cable Systems		Industrial	–	–	Completed
Sketchers Design Center and Executive Offices	2851, 2901, 3001, and 3125 Pacific Coast Hwy.	Office	120,503	–	Under construction
	70 10th St.	Commercial/Office	2,744 (428 retail, 2,188 commercial office	Single-family residence converting to single-unit motel (1,841 sf)	In permitting process
Subtotal – City of Hermosa Beach			221,129	231 hotel rooms	

Project Name	Project Location	Land Use/Description	Non-Residential Square Footage	Other	Status
City of El Segundo³					
El Segundo Power Plant Redevelopment	45 th St.	Utility	—	—	Undergoing environmental review
Plaza El Segundo	Sepulveda Blvd, Rosecrans Ave.	Commercial	850,000	—	Approved
Chick-Fil-A	Sepulveda Blvd., Maple Ave.	Commercial/ Restaurant	4,696	8,101 less office	In Operations
Mattel	455 Continental Blvd., 1955 E. Grand Ave.	Office	Add 300,000 SF R&D and office 810-space parking structure New 355,000SF	—	Entitlements pending
Topgolf	400 S. PCH	Pro Shop and Driving Range	71,000	—	Under construction
Park Place Extension and Grade Separation	Allied Way, Nash St.	Transportation	—	—	Undergoing environmental review
Subtotal – City of El Segundo			1,715,588		
City of Redondo Beach⁴					
South Bay Galleria	1815 Hawthorne Blvd.	Commercial/Retail Office and Outdoor Skate Park	1,950,565	971,101 demolished/redesigned (650 additional residential units)	Entitlements approved; permit submittal pending
Subtotal – City of Redondo Beach			1,950,565	650 dwelling units	
Total All			4,402,095		

¹ City of Manhattan Beach staff communication and Online List of Current Projects/Programs
<https://www.citymb.info/departments/community-development/planning-zoning/current-projects-programs>

² City of Hermosa Beach <http://www.hermosabch.org/index.aspx?page=504>.

³ City of El Segundo <https://www.elsegundo.org/depts/planningsafety/planning/default.asp>

⁴ City of Redondo Beach https://www.redondo.org/depts/community_development/planning/south_bay_galleria_draft_eir.asp

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4 Environmental Impact Analysis

This section discusses the possible environmental effects of the Sunrise Senior Living Manhattan Beach Project for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. “Significant effect” is defined by the *CEQA Guidelines* §15382 as:

“...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3.0, *Environmental Setting*.

The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

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4.1 Aesthetics

This section analyzes the project's aesthetic impacts, including visual compatibility with surrounding land uses; impacts to visual character and quality; shade and shadow; and light and glare.

4.1.1 Setting

a. Visual Character of the Project Site Vicinity

The project site is located in the central portion of Manhattan Beach along North Sepulveda Boulevard. The neighborhood in which the project site is located is characterized by a mix of residential and commercial uses. The segment of the Sepulveda Boulevard corridor near the project site is characterized by one- to three-story commercial development and is divided by a median landscaped with mature trees and low-lying plants. Commercial buildings in the project vicinity are of varying architectural styles and include a one-story car wash and auto center to the south; a one-story auto repair center and two-story office building to the north; a two-story motel, a one-story diner, a one-story Taco Bell, and a one- to two-story retail center to the west. A residential neighborhood is located to the northeast and east of the project site, along 5th Street and 3rd Street. Single-family residences in this neighborhood are one to three stories in height and are designed in a mix of contemporary beach style and Spanish style architecture. Existing walls and fencing separate the project site from the residences immediately adjacent to the east. The Pacific Ocean is not visible from surrounding roadways or from the residential neighborhood east and northeast of the project site due to intervening development and topography. Figure 4.1-1 through Figure 4.1-4 show existing views of and from the project site along North Sepulveda Boulevard, 5th Street, and 3rd Street.

b. Visual Character and Quality of the Project Site

The project site slopes downward over a distance of 355 feet from south to north with an upper elevation of approximately 190 feet above sea level at the southwest corner and a lower elevation of approximately 149.85 feet above sea level at the northeast corner. The site is developed with a commercial shopping center comprising three structures in a variety of architectural styles, building materials, and colors. These include a one-story Lucifers Pizza with a flat roof, red awning, and ground-to-roof tinted glass windows; a chiropractic office building is directly adjacent to the Pizza Hut and has a similar, flat-roofed design, with white stucco walls and large windows. There is limited landscaping in the parkway next to the sidewalk on Sepulveda Boulevard, with a mature palm at the corner, low grasses, and ground cover. South of the Lucifers Pizza, a two-story building houses retail, restaurants, and personal service businesses. These feature a mix of facades with varied rooflines, exterior stairs, and some awnings in a range of styles, reminiscent of a "Main Street" style. The shops are painted in colors as diverse as gray, yellow, green, and brown, with no apparent unifying design. Some have signs attached to the building fronts. A surface parking lot is located between the Lucifers Pizza and the commercial center and extends to the area adjacent to Sepulveda Boulevard. A mix of landscaped and ruderal vegetation grows low in the parkway between the sidewalk and parking area. At the southern end of the project site, a one-story Mars Cars LLC electric golf cart vehicle sales building features stucco walls and a flat roof, with a tiled overhang in a vernacular style. It has large, lighted signage installed in the tiled overhang on all sides. Surface parking extends between the commercial center and the electric gold cart vehicle sales building, and landscaping includes small palm trees, ruderal vegetation, and some potted plants near the buildings

Commercial signs that advertise the tenants are situated along the Sepulveda Boulevard frontage and range in height from 8 to 18 feet. To the north and west of the project site existing light industrial and commercial buildings are of similar, one-story, flat-roofed design (e.g., tire store), and two-story vernacular style architecture (e.g., motel), with low-height landscaping in the parkway and surface parking. Because of the slope in Sepulveda Boulevard, from the project site looking north, long-range views are available across the city, with the built environment forming a human-made ridgeline against the expanse of sky. Looking across the project site from Sepulveda Boulevard in an easterly direction, views are obscured by existing development. Scattered mature trees rise above the tallest buildings, but do not contribute to a unified sense of landscape design or coherence with the built environment.

Throughout the area, and particularly on the site, the architecture is varied in a manner that does not seem to be governed by a clear design vision. The structures themselves are maintained to various degrees. The unremarkable landscaping in the parkway that features unmaintained ruderal vegetation also detracts from the visual quality and does not contribute to a unity of design or sense of place. While some of the buildings nearby, north and south on Sepulveda Boulevard, are newer or better maintained, this lack of unity detracts from the overall visual quality, which is moderate.

From adjacent neighborhoods, the project site is undifferentiated from the surrounding built environment, the context of which includes above-ground utility lines, landscaping in various stages of maturity and maintenance, and commercial, light industrial, and residential development that appears in various states of maintenance. Residential areas feature denser landscaping which softens the varied styles of architecture looking toward the project site. See Figure 2-3 in Section 2, *Project Description*, for site photographs. Views of the project site from adjacent streets follow.

Figure 4.1-1 View of Project Site Looking Northeast from North Sepulveda Boulevard



Figure 4.1-2 View of the Northern Portion of the Project Site from 5th Street



Figure 4.1-3 View to the West across North Sepulveda Boulevard from the Project Site



Figure 4.1-4 View Northeast across from the Project Site looking west toward 5th Street



c. Shade and Shadows

Shadow-sensitive uses include routinely useable outdoor spaces associated with residential, recreational, or institutional uses (e.g., schools, convalescent homes), as well as some commercial uses (such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas), plant nurseries, and existing solar collectors. These uses are considered sensitive because sunlight is important to their function, physical comfort, and/or commerce. The shadow-sensitive uses nearest to the project site include residences located immediately east and northeast of the project site.

In general, shadows cast by buildings are shortest on the summer solstice (June 21) and longest on the winter solstice (December 21). The existing 30-foot building on the project site casts shadows during some parts of the year onto the residences approximately 35 feet east of the site. Additionally, the upper stories of these residences are almost entirely below the existing grade of the project site and, therefore, experience shadowing due to the grade difference.

d. Light and Glare

Light

The project site is in an urbanized area with moderate levels of existing lighting due to on-site and surrounding development. Major on-site light sources include a light pole that illuminates the parking lot and exterior and interior lighting of commercial buildings. Due to the nature of the businesses that occupy the existing buildings, exterior and interior commercial light sources are not substantial because the majority of businesses close by 6:00 p.m. with the exception of some restaurants, including Lucifers Pizza and El Tarasco, which close by 11:00 p.m. on weekdays and

midnight on weekends. In addition, the on-site commercial buildings face North Sepulveda Boulevard; therefore, lighting generated by these buildings is directed primarily toward North Sepulveda Boulevard rather than at residences immediately east of the project site. Two streetlights are located along the segment of North Sepulveda Boulevard that fronts the project site. Primary sources of light adjacent to the project site include streetlights along North Sepulveda Boulevard; lighting associated with existing commercial buildings, residences, and parking lots; and headlights from vehicles along North Sepulveda Boulevard.

Light-sensitive land uses include residences, natural areas, and commercial or institutional uses that require minimal nighttime illumination for proper function, physical comfort, or commerce. The light-sensitive land uses closest to the project site include residences located immediately to the east and northeast.

Glare

Glare, or “unwanted source luminance,” is defined as “a phenomenon caused by a bright light source that inhibits the ability to view a task or scene, due to an uncomfortable or even blinding effect on the viewer (Shuster 2014). The intensity of glare ranges from the worst case of “disability glare,” where visibility is lost, to “discomfort glare,” where the light is distracting and uncomfortable. Discomfort glare, an annoying or painful sensation when people are exposed to a bright light in the field of view, is a subjective phenomenon and has not been directly linked to a physiological cause (Shuster 2014). The amount of glare depends on various factors, such as the size of the source, the contrast between background light and the glare source, and the age of the viewer (Hiscocks 2011).

There is no absolute threshold for glare, since it is contextual and may not be considered problematic unless it is directed at a sensitive receptor and/or interferes with a specific activity. The Illuminating Engineering Society identifies three general categories of glare: discomforting (annoying without interfering with activities), disabling (reducing contrast and therefore impairing visual performance), and blinding (of sufficient intensity to cause residual loss of visual distinction of objects, colors, or brightness).

Daytime glare is typically caused by the sun shining on highly reflective surfaces at or above eye level, such as the windshields of parked cars or building windows. Reflective surfaces can also be highly polished or include broad, light-colored pavement areas. Daytime glare is generally most pronounced during early morning and late afternoon hours when the sun is at a low angle and the light can reflect in a way that interferes with vision while driving. Daytime glare may also hinder outdoor activities, such as sports, conducted in surrounding areas.

Nighttime glare refers to direct, intense, focused light, as well as reflected light, and hampers visibility. Glare caused by direct sources of light generally originates from mobile and therefore, transitory sources, such as automobiles. Glare may also originate from particularly intense, stationary sources, such as floodlights. As with daytime sun glare, such intense light may cause undesirable interference with driving or other activities.

The project site is in an urbanized area with existing light on building exteriors and in parking lots for safety and streetlights along Sepulveda Boulevard and other roadways. Vehicles traveling in the area produce intermittent nighttime light/glare from headlights, but this is temporary as they are mobile. Parked cars could produce glare in areas where street and parking lot trees are scarce or non-existent. Street lighting on North Sepulveda Boulevard and parking lot lighting on-site and on surrounding commercial properties is generally shielded and directed downward. The existing

commercial buildings on the site and other development in the area do not feature highly reflective surfaces and, therefore do not produce substantial glare.

Glare-sensitive land uses include those where glare may interfere with vision or comfort, including residences, schools, roadways, outdoor sports facilities, and public open space areas. The glare-sensitive receptors nearest to the project site are motorists along North Sepulveda Boulevard and residences located immediately north, northeast, and east of the project site.

e. Regulatory Setting

The following policies and regulations from the City's General Plan, the Manhattan Beach Municipal Code (MBMC), and the Sepulveda Boulevard Development Guide provide standards for development to protect the visual character of the city.

City of Manhattan Beach General Plan

The City of Manhattan Beach General Plan Land Use Element includes the following land use goals and policies that are relevant to the aesthetics of the project:

Goal LU-1: Maintain the low-profile development and small-town atmosphere of Manhattan Beach.

Policy LU-1.1: Limit the height of new development to three stories where the height limit is 30 feet, or to two stories where the height limit is 26 feet, to protect the privacy of adjacent properties, reduce shading, protect vistas of the ocean, and preserve the low-profile image of the community.

Policy LU-1.2: Require the design of all new construction to utilize notches, balconies, rooflines, open space, setbacks, landscaping, or other architectural details to reduce the bulk of buildings and to add visual interest to the streetscape.

Goal LU-3: Achieve a strong, positive community aesthetic.

Policy LU-3.1: Continue to encourage quality design in all new construction.

Policy LU-3.2: Promote the use of adopted design guidelines for new construction in Downtown, along Sepulveda Boulevard, and other areas to which guidelines apply.

Policy LU-3.5: Ensure that the sign ordinance provides for commercial signage that is attractive, non-intrusive, safe, and consistent with overall City aesthetic goals.

Goal LU-5: Protect residential neighborhoods from the intrusion of inappropriate and incompatible uses.

Policy LU-5.1: Require the separation or buffering of residential areas from businesses which produce noise, odors, high traffic volumes, light or glare, and parking through the use of landscaping, setbacks, or other techniques.

Policy LU-5.2: Work with all commercial property owners bordering residential areas to mitigate impacts and use appropriate landscaping and buffering of residential neighborhoods.

Manhattan Beach Municipal Code (MBMC)

MBMC Chapter 10 sets development standards for parking, building heights, setbacks, density, lot coverage, open space requirements, and signs. The project site is currently zoned CG (General Commercial); no changes to the existing zoning are proposed. Chapter 10.16.030 regulates height of

roof structures for commercial zones; Chapter 10.16.030(K) regulates the walls and fences in commercial zones; and Section 10.72.050 includes the sign requirements and regulations for commercial zones, such as the height of signs and types of signs that are permitted.

MBMC Section 10.60.120(D)(1) prohibits covering more than 20 percent of a building surface visible from a street with mirror or highly reflective glass unless the applicant can demonstrate to the satisfaction of the Community Development Director that use of such glass would not significantly increase glare visible from adjacent streets or pose a hazard for moving vehicles.

MBMC Section 10.60.120(D)(2) states that security lighting may be indirect or diffused or shall be shielded or directed away from a residential (R) district within 200 feet.

MBMC Section 10.64.170 restricts lighting of off-street parking and loading areas by requiring that all light fixtures possess sharp cut-off qualities at all property lines and shielding as necessary. The maximum illumination level is prohibited from exceeding 0.5 foot-candle in a residential (R) district.

Sepulveda Boulevard Development Guide

The Sepulveda Boulevard Zoning Standards and the Sepulveda Boulevard Development Guidelines (published collectively as the Sepulveda Boulevard Development Guide), were adopted by the Manhattan Beach City Council in October 1997 and updated in 1999. The Sepulveda Boulevard Development Guidelines contain recommendations for on-site circulation, vehicular and pedestrian access, building orientation, visual aesthetics, landscaping, signage, and utilities for properties located along Sepulveda Boulevard. The Sepulveda Boulevard Development Guidelines contain the following aesthetic recommendations applicable to the project (City of Manhattan Beach 1999):

- **Building Orientation.** Buildings, storefronts, and windows should be oriented toward Sepulveda Boulevard when possible. Site and building designs that focus on, and directly relate to the street create a more attractive, comfortable, and interesting environment for the Boulevard.
- **Visual Aesthetics.** Visually less desirable elements such as large parking areas, parking structures, vehicle service areas, blank walls, storage areas, and trash areas should be hidden, or less prominent as viewed from Sepulveda Boulevard.
- **Landscaping.** Required landscaping should be enhanced/supplemented as follows:
 - Install landscaping in areas that would otherwise be unused pavement.
 - Use landscape planters and other decorative treatments around buildings to avoid direct building-to-asphalt/concrete contact areas.
 - Provide tree-lined landscape buffers in parking lots along residential boundaries
- **Signs.** Signs and sign copy should be compatible with their related buildings, and not be crowded within their locations or backgrounds. Harsh plastic or illuminated backgrounds should be avoided.

Additionally, the City launched an effort in late 2017 to address opportunities for improvements along Sepulveda Boulevard, including economic vitality, planning, parking, traffic and overall beautification in order to promote walkability and diverse uses in the commercial corridor. This process led to the Sepulveda Boulevard Corridor Overlay (D-8), which was added to Section 10.44.010 of the MBMC in 2019. This overlay is used where more flexible development standards are needed to promote desirable development, uses, and economic vitality in the General Commercial (CG) zone.

4.1.2 Impact Analysis

a. Methodology and Significance Thresholds

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This evaluation measures the existing visual resources against the proposed project, analyzing the nature of the anticipated change to the project site and the surrounding vicinity. The project site was observed and photographically documented. A shadow analysis was also performed to determine if the project would cause extended periods of shade or shadow on any surrounding sensitive uses.

In accordance with Appendix G of the CEQA Guidelines an impact is considered significant if the project would:

1. Have a substantial adverse effect on a scenic vista
2. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
3. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

During the scoping process for the Environmental Impact Report, the City received a comment regarding potential shadows on residences on 5th Street. While this is not a topic specifically listed in Appendix of the CEQA Guidelines, a shadow analysis was prepared and is described below. The City does not have any adopted thresholds for shadow impacts. As discussed in the Initial Study (Appendix A), no scenic vistas can be seen from the project site or the immediate surrounding area, there are no scenic resources on-site, and Sepulveda Boulevard is not a State scenic highway. Therefore, no impacts related to scenic vistas, scenic resources, or State scenic highways would occur, and thresholds 1 and 2 are not discussed further in this section.

b. Project Impacts

Threshold 3 Would the project conflict with applicable zoning and other regulations governing scenic quality?
--

Impact AES-1 THE PROJECT WOULD ALTER THE VISUAL CHARACTER AND QUALITY OF THE SITE BY REPLACING COMMERCIAL DEVELOPMENT THAT DOES NOT EXHIBIT A UNIFIED DESIGN STANDARD WITH AN ASSISTED LIVING PROJECT THAT INCREASES BUILDING HEIGHT AND CHANGES THE STYLE, MASSING, AND ARRANGEMENT OF THE BUILT AND LANDSCAPED ENVIRONMENT ON THE SITE. PROJECT ARCHITECTURAL DESIGN, EXTERIOR FINISHES, AND LANDSCAPING WOULD BE COMPATIBLE WITH SURROUNDING COMMERCIAL AND RESIDENTIAL DEVELOPMENT AND WOULD BE CONSISTENT WITH THE DESIGN STANDARDS IN THE SEPULVEDA BOULEVARD DESIGN GUIDELINES. FURTHERMORE, THE UNIFIED DESIGN, VARIED EXTERIOR FINISHES, AND INCREASED LANDSCAPING WOULD IMPROVE THE VISUAL QUALITY OF THE SITE COMPARED TO EXISTING CONDITIONS. REPLACEMENT OF EXISTING ON-SITE BUILDINGS WITH THE PROPOSED FACILITY WOULD INTRODUCE NEW SOURCES OF SHADE AND SHADOW, BUT INCREASED SHADING WOULD BE LIMITED TO TWO RESIDENTIAL PROPERTIES IN LATE AFTERNOON HOURS DURING WINTER MONTHS. THEREFORE, THE PROJECT WOULD NOT CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The existing visual character of the project site and surrounding commercial corridor along North Sepulveda Boulevard is urban and commercial, and the aesthetic quality is moderate due to the mix of styles, degree of maintenance, vernacular architecture, and poorly maintained landscaping. As discussed above, the project site is developed with older commercial buildings, a parking lot, a mix of signage, and scattered landscape plants mixed with unmaintained, ruderal vegetation along Sepulveda Boulevard. The project would alter the visual character and quality of the site by replacing commercial development with an assisted living community, increasing building height and changing the volume and distribution of building massing on-site. Impacts to the visual character and quality of the site along North Sepulveda Boulevard, 5th Street, and 3rd Street are discussed separately below.

North Sepulveda Boulevard

The proposed three-story development would be 30 feet in height when measured as the maximum building height elevation of 204.65 feet minus the average grade across the site of 175 feet, which would be similar to the height of existing on-site development. However, the project site would be graded below North Sepulveda Boulevard, and the proposed development would only extend approximately 15 to 36 feet above the existing grade of North Sepulveda Boulevard. Building height would be like that of the Seahorse Inn immediately west of the project site across Sepulveda Boulevard.

The proposed building would feature contemporary style architecture, with a flat roof. The simple rectilinear massing would be interrupted by a variety of surface treatments and window designs that include stone, wood, and stucco in shades of brown and gray. Windows could include false shutters and external balcony railings would further vary the appearance of the buildings such that they seem to comprise clustered complexes of individual structures rather than one undifferentiated mass. The visible portion of the partially subterranean parking structure would have earth-colored roll up doors and entrances set in a highly textured stone finished walls that give the sense of extending the sloping lot on which the project would be constructed. Materials such as stone, stained wood siding, lap and shingle siding, stucco and metal roofing would create the varied forms making up the overall clustered massing of the building. The architecture and design of the

proposed project would be more unified throughout the site and integrate more than the existing uses with the adjacent residential neighborhoods. This would, therefore, improve the visual quality of the site in terms of its unity with the design of existing development. While more contemporary in design than the Seahorse Inn, immediately west of the project site across Sepulveda Boulevard, the project would nonetheless be compatible in terms of color, height, and general massing with surrounding development.

The project would increase building coverage on the site to approximately 50 percent, in such a way that the buildings would be closer to North Sepulveda Boulevard and would create a more densely massed front along that roadway than under existing conditions. However, increased building massing along Sepulveda Boulevard is not out of keeping with an urban setting such as exists in the area where the project site occurs. Furthermore, as indicated in the conceptual plans provided in Section 2, *Project Description*, the varied distances of the building fronts to the street and increased landscaping on the north end of the project site would create a visually interesting frontage for drivers, pedestrians, and others traveling along Sepulveda Boulevard. Finally, the auto court proposed approximately mid-way in the building creates an open space/park area with flagstone paving, large shade trees, and seating areas that would add visual interest. Overall, the unified design, increased landscaping, and denser development would improve the site's visual quality, in keeping with applicable City design guidelines.

The project would eliminate the large expanse of surface parking and introduce a subterranean parking garage and a two-space auto court. The loading area would be located in the northeastern portion of the project site off 5th Street and the trash enclosure would be located in the subterranean parking garage. Therefore, the proposed project would be consistent with the recommendations for building orientation and visual aesthetics contained in the Sepulveda Boulevard Development Guidelines. Furthermore, the project would improve the visual character of the site by locating less visually desirable elements, such as large parking areas, loading areas, and trash areas out of view from North Sepulveda Boulevard.

The project would also include a monument sign for the main entry off North Sepulveda Boulevard as well as directional signage along 5th Street for parking access and deliveries. As discussed in Section 2.5.6, *Lighting and Signage*, signage would be compatible with the project's architectural style and other signage in the area, which would be consistent with the signage recommendations contained in the Sepulveda Boulevard Development Guidelines.

As shown in Figure 2-13 in Section 2, *Project Description*, proposed landscaping would include street trees, ornamental trees, and shrubs. The landscaping would soften the overall visual character and improve the visual quality of the site at ground level, particularly along North Sepulveda Boulevard. All areas not occupied by the auto court or the on-site pedestrian pathway and benches would be landscaped. Therefore, the proposed landscaping plan would minimize direct building-to-asphalt/concrete contact areas and unused pavement areas, consistent with the landscaping recommendations contained in the Sepulveda Boulevard Development Guidelines.

The pedestrian experience along North Sepulveda Boulevard would be improved by the reduction in the number of driveways interrupting the sidewalk along Sepulveda Boulevard, the increased building massing along Sepulveda Boulevard, and by the installation of shade trees, curving sidewalks, and variation surface textures provided by exterior building finishes. Because the southern portion of the project site is higher than the northern portion of the site, the first two floors of the proposed building at the southern end of the project site would be below grade. Even though the elevation of the sidewalk would not change, the pedestrian experience would be different as the view would consist of the top two floors of the building only. Moving building

elements closer to Sepulveda Boulevard compared to existing conditions would improve the overall pedestrian experience.

The project would change the character of the site along the North Sepulveda Boulevard frontage from low-rise commercial to a larger-scale assisted living facility. However, project architecture, design, and landscaping would be compatible with surrounding development and would be consistent with the applicable aesthetic recommendations contained in the Sepulveda Boulevard Design Guidelines. Furthermore, the architecture and proposed landscaping plan would improve the visual quality of the site, and thus to the area, as compared to existing conditions. Therefore, the project would not substantially degrade the existing visual character or quality and impacts to the North Sepulveda Boulevard frontage would be less than significant.

5th Street

Building massing and height along the 5th Street frontage under the proposed project would increase as compared to existing conditions. However, the building design would reduce the impacts of increased height and massing by setting back the upper floors of the proposed building from 5th Street. The project would be designed in contemporary style that would be in keeping with existing residences along 5th Street and would transition in a more unified way from the commercial corridor of North Sepulveda Boulevard to the residential neighborhood east of the project site. The project would improve the visual quality of the site frontage along 5th Street by introducing a unified architectural design and increased, maintained landscaping where existing landscaping is present (see description of project site existing conditions in Section 4.1.1 above). Therefore, the project would not substantially degrade the existing visual character or quality and impacts to the 5th Street frontage would be less than significant.

3rd Street

The existing commercial shopping center is not visible from the 3rd Street cul-de-sac east of the project site. Under the proposed project, the upper floor of the assisted living building would be visible from 3rd Street. However, the project would include a tree-lined landscaping buffer along the rear portion of the property near the 3rd Street cul-de-sac, consistent with the landscaping recommendations in the Sepulveda Boulevard Development Guidelines. When mature, this buffer would soften the effects of the building, where visible from the 3rd Street cul-de-sac. Therefore, the project would not substantially degrade the visual character or quality of this neighborhood. Impacts to the 3rd Street cul-de-sac would be less than significant.

Shade and Shadowing

Although not specifically included in the Appendix G checklist in the CEQA Guidelines, shadows can also change the visual quality of a site's surroundings in urban settings. Therefore, a shadow analysis was performed to determine how the project would affect nearby residences. The City of Manhattan Beach does not have adopted thresholds or regulations addressing shading. Facilities and operations sensitive to the effects of shading include routinely useable outdoor spaces associated with residential, recreational, institutional (e.g., schools, convalescent homes) or public land uses (e.g., parks); commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce.

Replacement of existing on-site buildings with the proposed assisted living facility would introduce new sources of shade and shadows to neighboring residential properties. Shadows cast by

structures vary in length and direction throughout the day and from season to season. Shadow lengths increase during the "low sun" or winter season and are longest on December 21-22, the winter solstice. The winter solstice, therefore, represents the worst-case shadow condition and the potential for loss of access to sunlight that a project could cause is greatest. Shadow lengths are shortest on June 21-22, the summer solstice. Shadow lengths on the spring and fall equinoxes, March 20-21 and September 22-23 respectively, would fall midway between the summer and winter extremes.

Shadow diagrams were prepared for the proposed project to evaluate the extent of shade and shadows during the summer and winter solstice. These diagrams are shown in Figure 4.1-5 and Figure 4.1-6. The red outline shows the extent of new shadows that would be cast by the proposed project.

Residences are located immediately east of the project site and have light-sensitive areas, including back yards and a swimming pool. As shown in the shadow diagrams, for most of the year, the project would not cast shadows on adjacent residential uses. No public, shadow-sensitive uses would be shaded at any time during the year.

The only time shadows would fall over residential uses east of the project site would be for approximately two hours, from 3:00 PM until sunset (approximately 5:00 PM in the winter months). During these two hours, the two adjacent residences (1120 5th Street and 1121 3rd Street) would be shaded by the project and a backyard pool (at 1126 5th Street) would be approximately half-shaded. Due to the location of the existing 30-foot building on the project site, one residence (1120 5th Street) already experiences the same amount and timing of shade. Therefore, the longer shadow in the late afternoon created by the proposed project during the winter months would affect only the one residence (1121 3rd Street) and the backyard pool (at 1126 5th Street). During the rest of the day and in other seasons, shadows would be minimal and/or would fall over non-shade-sensitive uses.

The proposed project would increase shading at one residence and half of an outdoor pool for approximately two hours during the winter months (with late December experiencing the longest duration of shade). The shading would not begin until about 3 PM. Based on the limited number of properties affected and the limited duration of increased shading (after about 3 PM during winter months), the project's shade/shadow impact would be less than significant.

Overall

In conclusion, project architecture, design, landscaping, and building massing would be compatible with surrounding development and would be consistent with applicable aesthetic recommendations contained in the Sepulveda Boulevard Design Guidelines. Furthermore, the architecture and proposed landscaping plan would improve the visual quality of the site as compared to existing conditions. Shade impacts would be minimal as they would be seasonal, occur during a limited duration, and would affect two residential properties.

Therefore, the project would not substantially degrade the existing visual character or quality. Impacts would be less than significant.

Figure 4.1-5 Shadow Diagrams – Winter Solstice

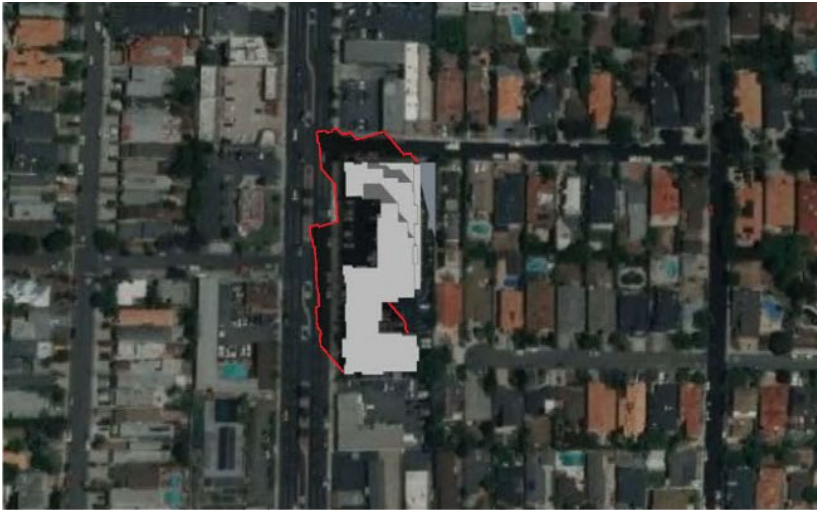


Diagram 1: Winter Solstice December 21, 9:00am (UTC-8)

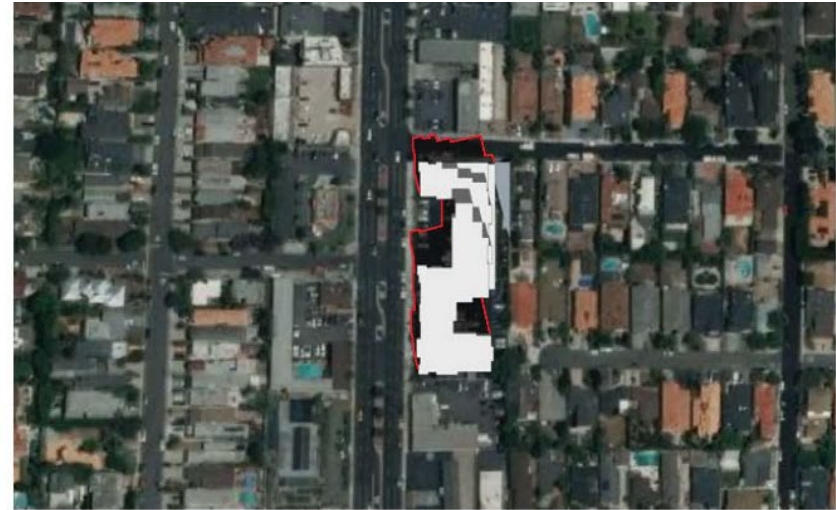


Diagram 2: Winter Solstice December 21, 11:00am (UTC-8)



Diagram 3: Winter Solstice December 21, 1:00pm (UTC-8)

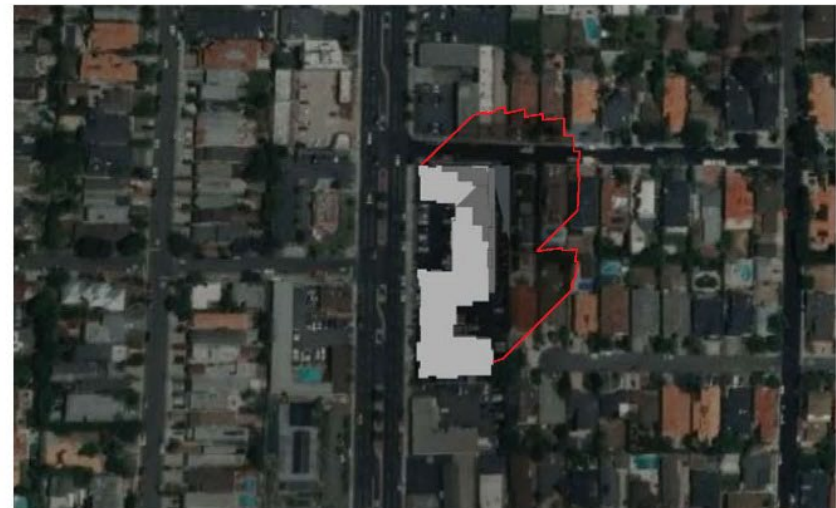


Diagram 4: Winter Solstice December 21, 3:00pm (UTC-8)

Figure 4.1-6 Shadow Diagrams – Summer Solstice

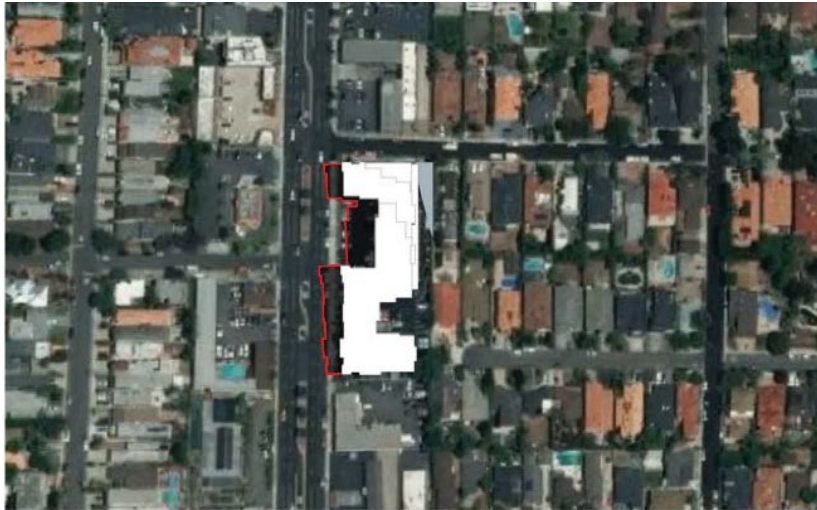


Diagram 1: Summer Solstice June 21, 9:00am (UTC-7)

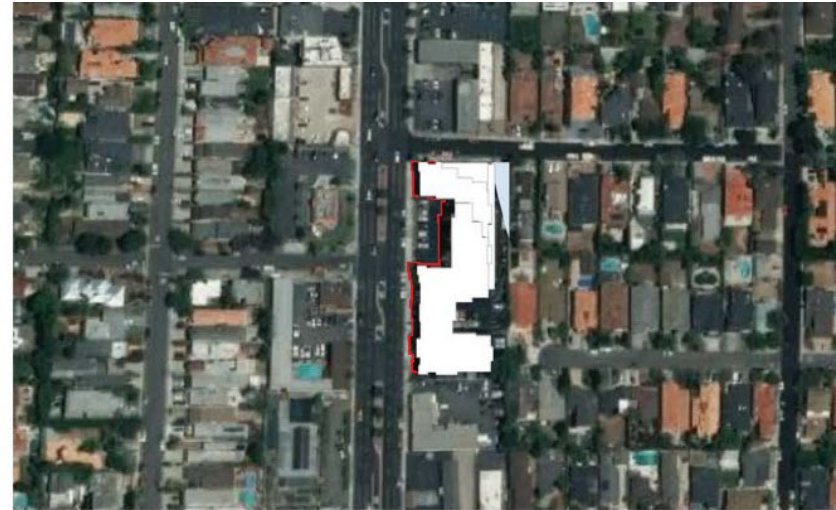


Diagram 2: Summer Solstice June 21, 11:00am (UTC-7)

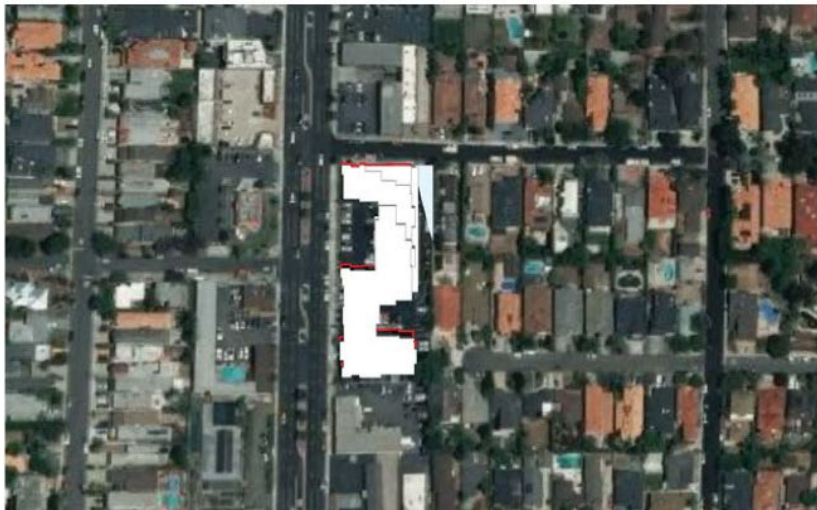


Diagram 3: Summer Solstice June 21, 1:00pm (UTC-7)

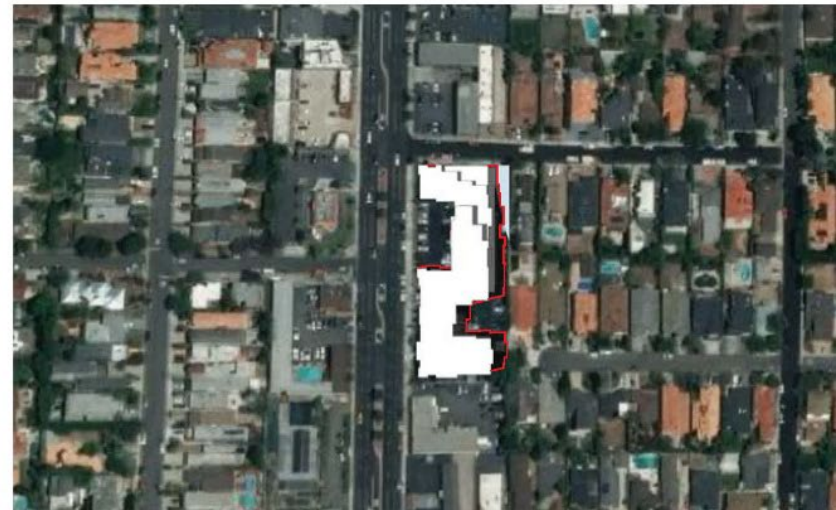


Diagram 4: Summer Solstice June 21, 3:00pm (UTC-7)

Mitigation Measures

Mitigation would not be required because impacts to visual character and quality would be less than significant.

Threshold 4 Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact AES-2 THE PROJECT WOULD INTRODUCE NEW SOURCES OF LIGHT THAT WOULD ADHERE TO CITY MUNICIPAL CODE REQUIREMENTS AND WOULD BE DESIGNED TO AVOID LIGHT SPILLOVER THAT COULD AFFECT VIEWS IN THE AREA. THE PROJECT WOULD NOT CREATE SIGNIFICANT GLARE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Existing buildings located on the project site would be demolished, and new sources of light and glare would be introduced such as windows, lighting at the subterranean garage entrance, illumination of exterior building areas and signage.

Light

Potential new sources of lighting would include vehicle headlights; exterior windows illuminated by interior lighting; exterior accent lighting at landscape features, canopies, and architectural overhangs; and lampposts approximately three to four feet in height along pedestrian pathways for security and wayfinding. As discussed in Section 4.1.1, *Setting*, the light-sensitive receptors closest to the project site are residences located immediately to the east and northeast.

Exterior windows illuminated by interior lighting would not represent a substantial new source of light because light levels would be similar to those of the exterior windows of existing residences located to the east and northeast. Furthermore, window coverings inside the facility and landscaping at the edges would moderate the effects of interior light shining into adjacent properties. The boundary walls along the north, east, and south edges of the project would also intervene with light shining from windows on the lower floors. Substantial amounts of new light would not spillover onto adjacent properties.

Pathway lighting would be required to be shielded and directed away from residential areas to the east and northeast in accordance with MBMC Section 10.60.120(D)(2). In addition, given the low height of the proposed lampposts and the intervening wall between the site and adjacent residences, pathway lighting would not result in substantial light spillover onto nearby residential properties. In addition, the intervening wall would block light spillover from landscape lighting on the rear portion of the site.

Headlights of vehicles entering and exiting the site at night would cast light onto roadways and surrounding properties. Vehicles would enter and exit the main entry to the site from North Sepulveda Boulevard and the loading area would be accessed off 5th Street. Given the high level of existing lighting along North Sepulveda Boulevard, additional light from vehicles would not affect the commercial uses along this roadway. Additional light from vehicles entering and exiting the site on 5th Street may increase light for residential properties east and northeast of the site. However, existing sources of light and glare on the project site are currently on the site and in the vicinity. Given that the project would involve the construction of an assisted living facility, the number of nighttime trips by employees and residents would be minimal. In addition, parking lot lighting at the subterranean garage and the automobile court would not result in a substantial new source of light

because MBMC Section 10.64.170 restricts parking lot lighting to 0.5 foot-candle in residential districts. Therefore, nearby residences would not be affected by parking lot lighting, especially considering the parking area is subterranean.

Wall-mounted exterior lighting on canopies and architectural overhangs facing residential areas to the east and northeast would be visible at nighttime given that the upper floor of the proposed development would extend above the intervening wall to the east. However, the project would comply with all City municipal code requirements, and the exterior wall-mounted lights would be of low intensity and low glare design and hooded to direct light downward onto the project site to prevent light-spillover. Therefore, impacts related to lighting would be less than significant.

Glare

Potential new sources of glare include windows, signage, and building materials. As discussed in Section 4.1.1, *Setting*, the nearest glare-sensitive receptors are motorists along North Sepulveda Boulevard as well as residences located approximately immediately east of the project site. Project design would be required to comply with the glare restrictions in MBMC Section 10.60.120(D)(1), which prohibit mirror or highly reflective glass from covering more than 20 percent of a building surface visible from a street unless it can be demonstrated that use of these materials would not significantly increase glare visible from adjacent streets or pose a hazard for moving vehicles. The project would be constructed of materials similar to those of the adjacent residential neighborhood and therefore would not produce significant glare from windows or building materials. In addition, as shown in Figure 2-13 in Section 2, *Project Description*, proposed landscaping along North Sepulveda Boulevard would be present between the building façade and motorists along North Sepulveda Boulevard and further reduce glare from windows and light-colored building materials. Therefore, impacts related to glare would be less than significant.

Mitigation Measures

Mitigation would not be required because lighting and glare impacts would be less than significant.

c. Cumulative Impacts

Several of the projects listed in Table 3-1, *Cumulative Projects* would be visible in the area and could contribute to a cumulative aesthetic change. However, because these projects are located throughout the City of Manhattan Beach and would not substantially modify the visual character of the surrounding area, they would not cumulatively impact the aesthetics of the area. In addition, the project would not contribute to visual impacts to areas beyond the immediate site and its surroundings since it would comply with applicable standards and shading would be limited to adjacent residential properties.

In addition, similar to the proposed project, all new projects in Manhattan Beach are reviewed for consistency with adopted land use plans and policies by the City. As such, all development in the City would be consistent with applicable General Plan policies, Zoning Ordinance requirements, and other development standards or be subject to an allowable exception. The related projects would be subject to CEQA compliance and standards in the MBMC and Sepulveda Boulevard Design Guidelines. Cumulative aesthetic impacts would be less than significant.

4.2 Air Quality

This section analyzes the project's temporary and long-term impacts to local and regional air quality. Greenhouse gas emissions are discussed in Section 4.4, *Greenhouse Gas Emissions*, of this EIR. This section uses data generated using the California Air Emissions Estimator Model (CalEEMod), and model outputs can be found in Appendix B. The analysis herein is based partially on data from the Traffic Impact Study prepared for the project (Linscott, Law & Greenspan, Engineers [LLG] 2020), which is included in Appendix C.

4.2.1 Setting

a. Climate and Meteorology

The project site is located in Manhattan Beach, which is part of the South Coast Air Basin (the Basin) and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air quality in the Basin is affected by various emission sources (e.g., mobile and industry), as well as atmospheric conditions such as wind speed, wind direction, temperature, and rainfall. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the Basin one of the worst air pollution problems in the nation.

Manhattan Beach is located in the western portion of the Basin. Average daytime high temperatures range from 64 degrees Fahrenheit (°F) in December to 74°F in August. Average overnight low temperatures vary from 50°F in December to 65°F in August (Weatherspark 2020). Annual precipitation in Manhattan Beach averages around 14 inches. Rainfall occurs almost exclusively from October to April (City of Manhattan Beach 2017; Weatherspark 2020).

Manhattan Beach is subject to the Santa Ana winds, which are strong northerly or northeasterly winds that originate from the desert of the Great Basin and predominantly occur from September through March. Sustained winds of 60 miles per hour with higher gusts are common for these conditions. On average, Santa Ana wind conditions occur five to ten times per year, with each event lasting up to a few days.

b. Air Pollutants

The general characteristics of the six criteria pollutants regulated by the federal Clean Air Act and California Clean Air Act are described below.

Ozone

Ozone (O₃) is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and volatile organic compounds (VOCs). NO_x are formed during the combustion of fuels, while VOCs are formed during combustion and evaporation of organic solvents. Because O₃ requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans, including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to O₃ include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

Carbon monoxide (CO) is a localized pollutant that is found in high concentrations only near its source. The major source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Carbon monoxide health effects are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of NO₂ produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ is an acute irritant. A relationship between NO₂ and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. It can also contribute to the formation of small particulate matter (PM₁₀) and acid rain.

Suspended Particulates

Small particulate matter measuring no more than 10 microns in diameter is considered PM₁₀, while PM_{2.5} is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. Both PM₁₀ and PM_{2.5} are by-products of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with small particulates (PM₁₀) and fine particulates (PM_{2.5}) can be very different. Small particulates generally come from windblown dust and dust kicked up from mobile sources. Fine particulates are generally associated with combustion processes, as well as formation in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Sulfur Dioxide

Sulfur dioxide (SO₂) is included in a group of highly reactive gases known as "oxides of sulfur." The largest sources of SO₂ emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO₂ emissions include industrial processes such as extracting metal from ore and the burning of fuels with a high sulfur content by locomotives, large ships, and non-road equipment. Sulfur dioxide is linked with a number of adverse effects on the respiratory system.

Lead

Lead (Pb) is a toxic metal that can be emitted from industrial sources, leaded aviation gasoline, and lead-based paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM; California Air Resources Board [CARB] 2019a). TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

As discussed in Section 8, *Hazards and Hazardous Materials*, of the Initial Study (Appendix A), asbestos and lead-containing materials may be present in on-site buildings that would be demolished as part of the proposed project. Demolition activities involving asbestos and lead-containing materials could release TACs such as airborne lead and asbestos-containing materials (ACM) into the environment, potentially impacting construction workers and nearby sensitive receptors, including single-family residences to the east, northeast, and southeast. However, the removal of any ACM would be required to comply with all applicable existing rules and regulations, including SCAQMD Rule 1403 (Asbestos Demolition and Renovation Activities) and California Division of Occupational Safety and Health (Cal/OSHA) regulations regarding lead-based materials. SCAQMD Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of ACM. California Code of Regulations, Title 8, Section 1532.1, requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed Cal/OSHA standards. Therefore, because the Initial Study identifies impacts related to ACM and lead as less than significant with compliance with these requirements, additional analysis of potential impacts related to ACM and lead exposure is not included in this section.

c. Air Pollution Regulations

Federal and State Standards for Criteria Pollutants

The federal and state Clean Air Acts regulate the emission of airborne pollutants from various mobile and stationary sources. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the state equivalent within the California Environmental Protection Agency (CalEPA). These agencies have established ambient air quality standards for the protection of public health. Local air quality management control and planning is provided through regional Air Pollution Control Districts (APCDs) established by CARB for the 14 statewide air basins. The CARB is responsible for control of mobile emission sources, while local APCDs are responsible for control of

stationary sources and enforcing regulations. As stated previously, the City is located in the South Coast Air Basin, which is under the jurisdiction of the SCAQMD.

The CARB and the USEPA establish ambient air quality standards for major pollutants at thresholds intended to protect public health. Federal and state standards have been established for ozone, CO, NO₂, SO₂, lead, PM₁₀, and PM_{2.5}. Table 4.2-1 summarizes the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS) for each of these pollutants. California standards are more restrictive than federal standards for each of these pollutants, except for lead, the eight-hour average for CO, and the eight-hour average for ozone. Local APCDs are required to monitor air pollutant levels to ensure that air quality standards are met and, in the event that they are not, to develop strategies to meet these standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in “attainment” or “nonattainment.” The Basin is currently in nonattainment for the state ozone, PM_{2.5}, and PM₁₀ standards and the federal ozone, PM_{2.5}, and lead standards (CARB 2018).

Table 4.2-1 Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.070 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.07 ppm (8-hr avg)
Carbon Monoxide	35.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	20.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)
Nitrogen Dioxide	100 ppb (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide	0.075 ppm (1-hr avg) 0.5 ppm (3-hr avg) 0.14 ppm (24-hr avg) 0.030 ppm (annual avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	0.15 µg/m ³ (3-month avg) 1.5 µg/m ³ (calendar quarter)	1.5 µg/m ³ (30-day avg)
Particulate Matter (PM ₁₀)	150 µg/m ³ (24-hr avg)	50 µg/m ³ (24-hr avg) 20 µg/m ³ (annual avg)
Particulate Matter (PM _{2.5})	35 µg/m ³ (24-hr avg) 12 µg/m ³ (annual avg)	12 µg/m ³ (annual avg)
Visibility-Reducing Particles	No Federal Standards	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07 - 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape. (8-hr avg)
Sulfates	No Federal Standards	25 µg/m ³ (24-hr avg)
Hydrogen Sulfide	No Federal Standards	0.03 ppm (1-hr avg)
Vinyl Chloride	No Federal Standards	0.01 ppm (24-hr avg)

ppm= parts per million

µg/m³ = micrograms per cubic meter

Source: CARB 2016

Regional

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in nonattainment. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards. The SCAQMD updates the AQMP periodically. Each iteration of the AQMP is an update of the previous plan and has a 20-year horizon. The 2016 AQMP was adopted on March 3, 2017. The 2016 AQMP incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal eight-hour ozone standard of 0.070 ppm that was finalized in 2015.

The 2016 AQMP addresses several state and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models (SCAQMD 2017). The 2016 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM_{2.5} and ozone standards and highlights the significant amount of reductions to be achieved. The 2016 AQMP emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, particularly with regard to mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. In addition, the 2016 AQMP includes attainment demonstrations of the new federal eight-hour ozone standard and vehicle miles traveled (VMT) emissions offsets, as per recent USEPA requirements.

Local

The Manhattan Beach General Plan establishes policies to achieve desired improvements to air quality in the Basin (City of Manhattan Beach 2003). The following goal and policies related to air quality apply to the project:

Goal CR 6: Improve local air quality.

Policy CR-6.1: Encourage alternative modes of transportation, such as walking, biking, and public transportation, to reduce emissions associated with automobile use.

Policy CR-6.2: Encourage the expansion and retention of local-serving retail businesses (e.g., restaurants, family medical offices, drug stores) to reduce the number and length of automobile trips to comparable services located in other jurisdictions.

Policy CR-6.3: Cooperate with the South Coast Air Quality Management District and Southern California Association of Governments in their efforts to implement the regional Air Quality Management Plan.

Policy CR-6.4: Cooperate and participate in regional air quality management planning, programs, and enforcement measures.

d. Current Air Quality

The South Coast Air Basin includes portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. As previously stated, the Basin is currently in nonattainment for the state ozone, PM_{2.5}, and PM₁₀ standards, and the federal ozone, PM_{2.5}, and lead standards (CARB 2018).

The SCAQMD monitors air pollutant concentrations throughout the Basin at various monitoring stations. Air quality data is typically derived from the nearest SCAQMD monitoring station located in the same Source Receptor Area (SRA) as the project. However, if there is no monitoring station located in the SRA, then information should be drawn from the nearest upwind station (SCAQMD 1993).

The project site is located in SRA 3, Southwest Coastal Los Angeles. The monitoring station closest to the project site within SRA 3 is the Los Angeles-Westchester Parkway station, located approximately 5.1 miles northwest of the project site at 7201 Westchester Parkway, and its air quality trends are representative of the ambient air quality in the project area. The pollutant concentrations monitored at this station are O₃, CO, NO₂, SO₂, and PM₁₀. However, the Los Angeles-Westchester Parkway station does not monitor PM_{2.5} concentrations. In this case, per the *SCAQMD CEQA Air Quality Handbook* (2019), the nearest upwind station that monitors the pollutants should be used to gather data. The most representative, upwind station closest to the project site that monitors PM_{2.5} concentrations is the North Long Beach monitoring station, located approximately 12.5 miles southeast of the project site at 3648 North Long Beach Boulevard in the Long Beach (CARB 2019b).

Table 4.2-2 summarizes the ambient air quality data measured at these stations between 2016 and 2018. Data for CO and SO₂ were not available at any monitoring station in Los Angeles County during this time period. As shown in Table 4.2-2, ambient air quality data indicates that the federal and state eight-hour ozone standards were exceeded two days in 2016, and the PM_{2.5} federal standard was exceeded four days in 2017 and six days in 2018. No other state or federal standards were exceeded at these monitoring stations. SO₂ has not been monitored at any stations within Los Angeles County since 2013. The last recorded 24-hour average SO₂ value was 0.001 ppm at the North Long Beach station in Long Beach, which is below the state 24-hour standard of 0.14 ppm and the federal 24-hour standard of 0.04 ppm. Carbon monoxide has not been monitored at any stations in Los Angeles County since 2012. The last recorded 8-hour average CO value was 1.73 ppm at the Los Angeles-Westchester Parkway monitoring station, which is below the state and federal 8-hour CO standard of 9.0 ppm.

e. Sensitive Receptors in the Project Area

Certain population groups are considered more sensitive to air pollution than others, particularly children, the elderly, and acutely ill and chronically ill persons, especially those with cardio-respiratory diseases. Sensitive land uses include those locations where such individuals are concentrated, such as hospitals, schools, residences, and parks with active recreational uses. Sensitive receptors most likely to be affected by the proposed project are single-family residences located adjacent to the project site's eastern boundary and approximately 50 feet to the northeast and southeast.

Table 4.2-2 Ambient Air Quality Data

Pollutant	2016	2017	2018
Ozone (ppm), Worst Hour ¹	0.087	0.086	0.074
Number of days of state exceedances (>0.09 ppm)	0	0	0
Number of days of federal exceedances (>0.12 ppm)	0	0	0
Ozone (ppm), 8-Hour Average ¹	0.080	0.070	0.065
Number of days of state and federal exceedances (>0.07 ppm)	2	0	0
NO ₂ (ppm), Worst Hour ¹	0.0815	0.0722	0.0596
Number of days of state exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
PM ₁₀ (µg/m ³), Worst 24 Hours ¹	43.0	46.5	45.3
Number of days of state exceedances (>50 µg/m ³)	0	0	0
Number of days of federal exceedances (>150 µg/m ³)	0	0	0
PM _{2.5} (µg/m ³), Worst 24 Hours ²	29.3	55.3	79.6
Number of days of federal exceedances (>35 µg/m ³)	0	4	6

¹ Data from Los Angeles – Westchester Parkway monitoring station.

² Data from North Long Beach monitoring station.

Bold indicates threshold exceedances.

Source: CARB 2020

4.2.2 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

The analysis of air quality impacts conforms to the methodologies recommended in the *SCAQMD CEQA Air Quality Handbook* (SCAQMD 1993), as well as supplemental guidance provided on the SCAQMD's website. Construction and operational emissions associated with development of the project were calculated using CalEEMod version 2016.3.2. Construction and operational emissions generated by the project were compared to the SCAQMD significance thresholds discussed below.

Construction Emissions

Project construction activities would generate diesel emissions and dust. Construction equipment that would generate criteria pollutants includes excavators, graders, haul trucks, and loaders. It is assumed that all construction equipment would be diesel-powered. Construction activities would include demolition, grading, building construction, architectural coating, and paving. The construction schedule and construction equipment for each phase was based on data provided by the project applicant.

As discussed in Section 2, *Project Description*, project construction would occur over a period of approximately 20 months, with buildout expected in 2023. The project would include demolition of approximately 14,562 square feet contained in three existing commercial buildings, three existing driveways on North Sepulveda Boulevard, one existing driveway on 5th Street, and approximately 37,387 square feet of existing paved parking lots and internal driveways. After demolition, a new assisted living community with a total floor area of 79,772 square feet, a one-level subterranean

parking garage with 61 spaces, and a surface parking lot with two spaces would be constructed. Based on data provided by the project applicant, approximately 41,000 cubic yards of soil material would be exported from the project site via haul trucks with a 15-cubic yard capacity.

This analysis assumes that the project would be required to comply with all applicable regulatory standards, including the 2019 CALGreen Code, SCAQMD Rule 403 (Fugitive Dust), SCAQMD Rule 1113 (Architectural Coatings), and all other applicable SCAQMD rules. Emissions modeling assumed the use of low-VOC paint (50 grams per liter [g/L] for flat and non-flat coatings), as required by SCAQMD Rule 1113.

Operational Emissions

Operational emissions would be comprised of mobile source emissions, energy emissions, area source emissions, and stationary source emissions. Mobile source emissions are generated by the motor vehicle trips to and from the project site associated with operation of on-site development. Trip generation rates for the proposed project were based on information provided in the Traffic Impact Study (LLG 2020). Emissions attributed to energy use include natural gas consumption for space and water heating. Area source emissions are generated by use of landscape maintenance equipment, consumer products, and architectural coating. Stationary source emissions from the emergency generator would only occur during routine testing and as needed during emergency power outage situations. As discussed in Section 2, *Project Description*, the project would incorporate several sustainability features, including low-flow plumbing fixtures and water efficient irrigation systems. These features were included in the modeling of operational emissions.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a proposed project would have a significant impact to air quality if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. 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 ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As discussed in the Initial Study (Appendix A), the proposed project would not conflict with the SCAQMD 2016 AQMP (Threshold 1) because direct and indirect population growth generated by the project would be within the Southern California Association of Governments' regional growth projections that form the basis of the AQMP. In addition, as discussed in the Initial Study (Appendix A), the proposed land uses are not identified by CARB as land uses associated with odor complaints. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people, and no odor impacts would occur (Threshold 4). Accordingly, consistency with the AQMP (Threshold 1) and odor impacts (Threshold 4) are not discussed further in this EIR.

The analysis of air quality impacts relies on the thresholds recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993) as well as supplemental guidance provided on the SCAQMD's website.¹

¹ The handbook is currently being updated, and in the interim, SCAQMD maintains air quality emission thresholds online at <https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

The handbook includes thresholds for emissions associated with both construction and operation of land use projects, which are discussed in detail below.

Regional Thresholds

Table 4.2-3 shows the significance thresholds recommended by the SCAQMD for projects in the Basin.

Table 4.2-3 SCAQMD Air Quality Significance Thresholds

Pollutant	Daily Emissions Thresholds (pounds per day)	
	Construction	Operation
NO _x	100	55
VOC	75	55
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550

Source: SCAQMD 2019a

The SCAQMD has also developed specific thresholds for CO hotspots. A CO hotspot is a localized concentration of CO that is above the state and federal one-hour and eight-hour CO ambient air standards. The SCAQMD recommends conducting a local CO hotspot analysis if an intersection meets one of the following criteria:

1. The project decreases the level of service (LOS) at an intersection from LOS A through C to LOS D or worse; or
2. The project increases the volume-to-capacity ratio (V/C) by two percent or more at an intersection currently operating at LOS D or worse.

Localized Significance Thresholds

In addition to the regional thresholds above, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook*. LSTs were developed in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_x, CO, PM₁₀, and PM_{2.5}. 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 at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size. LSTs have been developed for emissions in construction areas up to five acres in size. However, LSTs only apply to emissions within a fixed stationary location and not to mobile sources, such as cars on a roadway (SCAQMD 2019b). Accordingly, LSTs are typically applied only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips.

The project site is located in SRA 3 (Southwest Coastal Los Angeles) and is approximately 1.2 acres in size. The SCAQMD provides LSTs for one-, two-, and five-acre project sites at a variety of distances between 25 and 100 meters (approximately 82 to 1,640 feet). To provide a conservative estimate of impacts, this analysis uses LSTs for a one-acre site. As described above, the nearest existing sensitive receptors are single-family residences located immediately adjacent to the project site's eastern boundary. According to the SCAQMD's *Final Localized Significance Threshold Methodology*, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (SCAQMD 2008). Therefore, for this analysis, it is assumed that the nearest receptor is located at a distance of 25 meters. LSTs for sensitive receptors located at 25 meters from the project boundary on a one-acre site are shown in Table 4.2-4.

Table 4.2-4 SCAQMD LSTs for Construction in SRA 3

Pollutant	Allowable Emissions at 25 Meters from 1-Acre Site in SRA 3 (pounds per day)
Gradual conversion of NO _x to NO ₂	91
CO	664
PM ₁₀	5
PM _{2.5}	3

Source: SCAQMD 2009

b. Project Impacts and Mitigation Measures

Threshold 2: Would the project 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 ambient air quality standard?

Impact AQ-1 PROJECT CONSTRUCTION WOULD GENERATE TEMPORARY INCREASES IN CRITERIA AIR POLLUTANT EMISSIONS OF OZONE PRECURSORS NO_x AND VOC AS WELL AS CO, SO₂, PM₁₀, AND PM_{2.5}. HOWEVER, CONSTRUCTION EMISSIONS WOULD NOT EXCEED SCAQMD REGIONAL CONSTRUCTION THRESHOLDS OR LOCALIZED SIGNIFICANCE THRESHOLDS; THEREFORE, PROJECT CONSTRUCTION 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 AMBIENT AIR QUALITY STANDARD. CONSTRUCTION-RELATED AIR QUALITY IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Project construction would emit ozone precursors NO_x and VOC as well as CO, SO₂, PM₁₀, and PM_{2.5}. The majority of construction-related emissions would result from grading due to the use of heavy-duty construction equipment and haul trucks. Other emissions would result from building construction and the evaporation of VOCs from architectural coatings (paint). Estimated maximum daily construction emissions are shown in Table 4.2-5.

Table 4.2-5 Project Construction Emissions

Construction Year	Maximum Daily Emissions (lbs/day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2021	2.1	33.0	14.7	0.1	2.7	1.1
2022	28.3	21.4	26.1	0.1	3.6	1.6
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Maximum Daily On-site Emissions	25.7	13.2	7.5	<0.1	0.9	0.6
SCAQMD Localized Significance Thresholds (LSTs)	N/A	91	664	N/A	5	3
Threshold Exceeded?	N/A	No	No	N/A	No	No

Notes: All emissions modeling was completed using CalEEMod. See Appendix B for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results, which account for compliance with regulations and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

As shown in Table 4.2-5, temporary air pollutant emissions from project construction would not exceed SCAQMD regional thresholds or LSTs for any criteria pollutant. As a result, project construction 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 ambient air quality standard. Construction-related air quality impacts would be less than significant.

Mitigation Measures

Mitigation would not be required because impacts from construction emissions would be less than significant. Additionally, the project is required to comply with SCAQMD rules and regulations.

Impact AQ-2 PROJECT OPERATION WOULD GENERATE AREA, ENERGY, MOBILE, AND STATIONARY SOURCE EMISSIONS. HOWEVER, BECAUSE OPERATIONAL EMISSIONS WOULD NOT EXCEED SCAQMD THRESHOLDS, PROJECT OPERATION 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 AMBIENT AIR QUALITY STANDARD. OPERATIONAL AIR QUALITY IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Operational emissions are comprised of area, energy, mobile, and stationary source emissions. Estimated peak daily operational emissions are shown in Table 4.2-6. As shown therein, the operational emissions for the proposed project would not exceed the SCAQMD significance thresholds. Therefore, the operational impact of the proposed project on regional emissions would be less than significant.

Table 4.2-6 Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	2.0	0.1	7.8	<0.1	<0.1	<0.1
Energy	<0.1	0.3	0.1	<0.1	<0.1	<0.1
Mobile	0.5	2.2	7.0	<0.1	2.2	0.6
Stationary	2.6	7.1	6.5	<0.1	0.4	0.4
Project Emissions	5.0	9.7	21.5	<0.1	2.7	1.1
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Notes: All emissions modeling was completed using CalEEMod. See Appendix B for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results that include compliance with regulations and project design features that will be included in the project. Emissions from the existing uses on the project site were not subtracted from the values above; therefore, this analysis provides a conservative estimate of air quality emissions. It should be noted that the project would generate fewer vehicle trips than existing uses; therefore, a net decrease in mobile source emissions would occur.

Mitigation Measures

Mitigation would not be required because impacts from operational emissions would be less than significant.

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 THE PROPOSED PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CONCENTRATIONS OF CARBON MONOXIDE OR TACs. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The following discussion describes potential impacts related to carbon monoxide hotspots and TAC emissions. Criteria air pollutants, including ozone, nitrogen dioxide, particulates, and sulfur dioxide, were addressed above, under Impacts AQ-1 and AQ-2. Lead and ACM pollutants were discussed in the Initial Study (Appendix A), as described above in Section 4.2.1(c).

Carbon Monoxide Hotspots

Localized CO “hotspots” can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the NAAQS of 35.0 parts per million (ppm) or the CAAQS of 20.0 ppm.

SCAQMD recommends conducting a local CO hotspot analysis if an intersection meets one of the following criteria: 1) the intersection is at LOS D or worse and where the project increases the V/C ratio by two percent, or 2) the project decreases LOS at an intersection to D or worse. As outlined in the Traffic Impact Study (LLG 2020), the proposed project would generate fewer trips than existing on-site land uses (restaurant, retail, and other uses). Additionally, the modified trip distribution on local roadways as a result of the proposed project would not degrade LOS or increase the V/C ratio by two percent or more at any study area intersection (LLG 2020). CO concentrations in the basin

are low, and have not been recorded since 2012, at which time levels were well below the 8-hour CO standard. Therefore, the proposed project would not expose sensitive receptors to substantial CO concentrations and impacts would be less than significant.

Toxic Air Contaminants

Sensitive receptors near the project site include single-family residences located adjacent to the project site's eastern boundary and approximately 50 feet to the northeast and southeast, and a hotel located across North Sepulveda Boulevard.

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions. Typical sources of acutely and chronically hazardous TACs identified by CARB include distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. CARB recommends siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses.

The project includes the installation of an emergency generator, which is considered a stationary source with the potential to emit TACs, and the project applicant would be required to obtain an Authority to Construct and/or Permit to Operate from SCAQMD. Emergency generators are exempt from Risk Assessment requirements, pursuant to SCAQMD Rules 1401 and 1304; however, they are subject to SCAQMD Rule 1470. Rule 1470 is intended to reduce diesel particulate matter emissions to be protective of public health where a generator is placed within 50 meters of sensitive receptors. The emergency generator would have a horsepower of 389; therefore, it is required to have an emission rate of no more than 0.1 grams per brake horsepower per hour (Rule 1407, Table 1). Prior to issuance of the Authority to Construct and/or Permit to Operate, the applicant would be required to provide proof of compliance with Rule 1470. Additionally, the generator would only be run during emergency situations, or for routine maintenance. The majority of the time, the generator would not be in use, and emissions would not occur.

Other sources of potential toxic air contaminants associated with project operations include DPM from delivery trucks for commercial/retail uses (e.g., truck traffic on local streets and idling on adjacent streets). However, no more than 10 delivery trips would occur each day.² Because the project would not otherwise contain substantial TAC sources, the project would not result in the exposure of sensitive receptors to significant amounts of carcinogenic or toxic air contaminants. Therefore, impacts related to TAC emissions from stationary sources would be less than significant.

Mitigation Measures

Mitigation would not be required because impacts from pollutant emissions would be less than significant.

² Based on data provided in Appendix C, approximately 192 daily trips would occur during project operation (note this does not account for the decrease in trips from the removal of existing uses). Approximately 5 percent of these trips would travel on 5th Street. Assuming all 5 percent of these trips are from delivery trucks or trash collection vehicles, up to 10 trips per day would travel on 5th Street to access the two delivery vehicle spaces on 5th Street.

c. Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines Section 15065[a][3]). The geographic scope for cumulative criteria air pollutant emission impacts is the South Coast Air Basin, which includes portions of Los Angeles, Riverside, and San Bernardino counties. This geographic scope is appropriate for criteria air pollutants because air quality is affected by the climatic conditions, regional topography, and atmospheric conditions of a region.

Because the South Coast Air Basin is classified as a non-attainment area for the federal standards for ozone, PM_{2.5}, and lead and the State standards for ozone, PM_{2.5}, and PM₁₀, there is an existing significant cumulative air quality impact related to ozone, PM_{2.5}, PM₁₀, and lead. Any growth within the Los Angeles metropolitan area would contribute to the existing exceedances of ambient air quality standards in the South Coast Air Basin. SCAQMD's approach to determining cumulative air quality impacts for criteria air pollutants is to first determine whether the proposed project would result in a significant project-level impact to regional air quality based on SCAQMD significance thresholds. If the project would not generate emissions exceeding SCAQMD thresholds, then the lead agency needs to consider the additive effects of related projects only if the proposed project is part of an ongoing regulatory program, such as a market program for reducing air pollution, or is contemplated in a Program EIR, and the related projects are located within approximately one mile of the project site. If there are related projects within the vicinity (i.e., a one-mile radius) of the project site that are part of an ongoing regulatory program or are contemplated in a Program EIR, then the additive effect of the related projects should be considered.

Each related project listed in Section 3, *Environmental Setting*, as well as the proposed project would generate emissions during construction and operation that would contribute to the Basin's existing non-attainment status. However, the proposed project is not part of an ongoing regulatory program and is not contemplated in a Program EIR. Therefore, as discussed in Appendix D of the SCAQMD's *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD 2003), the SCAQMD recommends that project-specific air quality impacts be used to determine if a project's contribution to cumulative air quality impacts would be significant. As discussed under Impact AQ-1, above, the proposed project would be consistent with the SCAQMD 2016 AQMP. In addition, the project's emissions would not exceed SCAQMD regional thresholds or LSTs for construction and operational emissions, as described under Impact AQ-2, above. Because these thresholds were developed to address both project-level impacts and the project's contribution to existing cumulative impacts, the project would not have a cumulatively considerable contribution to the significant cumulative air quality impacts for ozone, PM_{2.5}, and PM₁₀.

4.3 Geology and Soils

This section addresses potential impacts related to geologic and seismic hazards. Specifically, it discusses the potential risk to people and structures on and around the project site resulting from a seismic event. Impacts related to erosion and soil instability are also discussed. This evaluation is based in part on a site-specific preliminary geotechnical report prepared by Group Delta Consultants, Inc. (Group Delta), which is included in Appendix D (Group Delta 2016).

4.3.1 Setting

a. Regional and Site Geology

Manhattan Beach is located in the west coastal portion of the Peninsular Ranges geomorphic province. This province is characterized structurally by the Los Angeles Basin and a series of northwest trending faults that step westward from the San Andreas Fault Zone. The Los Angeles Basin is filled with marine sediments that extend to a depth of more than 29,000 feet in some locations and is bound by the Santa Monica Mountains and the Elysian Park, Repetto, and Puente hills to the north and by the Santa Ana Mountains and San Joaquin Hills to the east and southeast (California Department of Conservation [CDOC] 2016).

Local coastal deposition in Manhattan Beach and Hermosa Beach, which occurred during the late Pleistocene and early Holocene ages, was dominated by northwest trending sand dune deposition (Group Delta 2016). As a result, Manhattan Beach is generally underlain by old, poorly consolidated eolian deposits of the Cenozoic geologic era that consist of very dense, well-sorted, fine- to coarse-grained sand and silty sand (CDOC 2016). The project site is located on the eastern slope of a northwest trending old sand dune approximately 75 feet in height that slopes steeply to the east and less steeply to the west.

b. Site Topography and Subsurface Conditions

The project site is located in the central portion of Manhattan Beach at the southeast corner of the intersection of North Sepulveda Boulevard and 5th Street. It currently contains three commercial buildings and a surface parking lot. The site slopes from south to north with elevations ranging from approximately 193 feet on the southern portion to approximately 158 feet in the northern portion. A retaining wall is located in the northeast corner of the site with the surface elevation dropping from 170 feet to 158 feet at this location (Group Delta 2016).

On-site soils are classified as urban land-Abaft-Marina complex (0 to 15 percent slopes) and are composed of fill materials consisting of dark brown silty sand overlying a northwest trending gold sand dune deposit (United States Department of Agriculture 2019; Group Delta 2016). Fill depths are estimated to range from approximately five feet in the southwest corner to approximately 30 feet on the northern portion of the project site (Group Delta 2016).

Groundwater was not encountered to a maximum depth of 70 feet. Historic high groundwater was measured at 40 feet below ground surface (Group Delta 2016).

c. Seismic Setting

No active surface faults have been mapped in Manhattan Beach; however, the City overlies the buried Compton Blind Thrust Fault and is located in a seismically active region that is prone to

occasional earthquakes (City of Manhattan Beach 2003). Since 1918, approximately 315 earthquakes with a magnitude of 4.0 or greater occurred within a 60-mile radius of the project site. Thirty-eight of these earthquakes were of magnitude 5.0 or greater and five of these earthquakes were of magnitude 6.0 or greater (Group Delta 2016).

The United States Geological Survey (USGS) defines active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are ones that have had surface displacement during the last 130,000 years (Group Delta 2016). Table 4.3-1 lists the faults nearest to the project site along with a summary of their applicable characteristics.

Table 4.3-1 Nearest Regional and Local Faults

Fault Name	Distance Between Site and Fault (miles)	Slip Rate (mm/yr)	Estimated Maximum Earthquake Magnitude	Notes
Palos Verdes Fault	2.7	1.0 – 5.0	7.2	The offshore portion of this fault is identified as active; however, the onshore portion is poorly defined in location and activity.
Compton Blind Thrust Fault	3.0	0.9	6.9	This fault is considered a buried fault because it does not rupture up to the surface.
Redondo Canyon Fault	4.4	0.2 – 1.0	6.2	None
Cabrillo Fault	1.8	0.2 – 1.0	6.5	The offshore portion of this fault is identified as active portion. The onshore portion is considered potentially active.
Newport-Inglewood Fault	5.6	1.0 – 5.0	7.2	None
San Andreas Fault	52	12.8	7.9	None
Note: mm/yr = millimeters per year				
Source: Group Delta 2016, City of Manhattan Beach 2003.				

Although there are no known surface faults in Manhattan Beach, the fault systems shown in Table 4.3-1 or other known or unknown fault systems could cause property damage, possibly resulting in injury and loss of life in the event of a major earthquake due to ground motion. The level of impact resulting from any seismic activity depends on various factors, including, but not limited to, distance from epicenter, earthquake magnitude, characteristics of soils, and subsurface geology.

d. Seismic Hazards

In general terms, an earthquake is caused when strain energy in rocks is suddenly released by movement along a plane of weakness. Earthquakes can result in relatively widespread seismically-induced ground shaking emanating from the fault or more localized surface rupture located at the surface along or near the fault line. Seismicity in southern California is a result of the dominantly reverse-slip regime of the region.

The energy released during an earthquake propagates from its rupture surface in the form of seismic waves. The resulting strong ground motion from the seismic wave propagation can cause substantial damage to structures. At any location, the intensity of the ground motion is a function of the distance to the fault rupture, the local soil/bedrock conditions, and the earthquake magnitude. Intensity is usually greater in areas underlain by unconsolidated material than in areas underlain by more competent rock.

Earthquakes are characterized by moment magnitude, which is a quantitative measure of the strength of the earthquake based on strain energy released during the event. The magnitude is dependent on several factors, including the type of fault, rock-type, and stored energy. Moderate to severe ground shaking will be experienced in the project area if a large magnitude earthquake occurs on one of the faults included in Table 4.3-1. It should be understood that the prediction of future fault rupture is impossible and the list of faults in Table 4.3-1 is based on previously-encountered faults or ground rupture.

The potential hazards or adverse effects of ground shaking depend on several factors, including the severity of ground shaking; the nature, depth, and extent of the seismic event; the type of structures involved; and the local topography.

e. Regulatory Setting

State

California Building Code and Cal/OSHA Regulations

The California Building Code (CBC) with City of Manhattan Beach amendments includes standards to safeguard life, health, property, and public welfare. The CBC is the regulatory tool that includes building code standards to address geologic and seismic hazards. The CBC specifies acceptable design criteria for construction of facilities with respect to seismic design and load-bearing capacity. In addition, construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in the CBC and in California Division of Occupational Safety and Health (Cal/OSHA) regulations (Title 8 of the California Code of Regulations).

Alquist-Priolo Earthquake Fault Zone Act

The Alquist-Priolo Special Studies Zone Act was passed into law in 1972 to help mitigate the potential hazards that surface faulting poses to occupied structures. Now known as the Alquist-Priolo Earthquake Fault Zone Act (APEHA), the act designates “active” and “potentially active” faults utilizing the same age criteria used by the California Geologic Survey. The established policy is to zone active faults and only those potentially active faults that have a relatively high potential for ground rupture. Ground rupture caused by movement along a fault could likely result in catastrophic structural damage to buildings constructed along the fault trace. Consequently, the act requires new development projects located within 500 feet of active or potentially active faults to perform a geologic investigation of the applicable fault trace. The State of California via the APEHA restricts the construction of occupied “habitable” structures within the designated fault zone. Projects involving the construction of habitable structures must demonstrate that the structure does not encroach on a 50-foot setback from the fault trace. Per the Alquist-Priolo legislation, no structure for human occupancy is permitted on the trace of an active fault.

Local

Manhattan Beach General Plan

The Community Safety Element of the Manhattan Beach General Plan includes sections on Natural Hazards and Fire Safety, Hazardous Materials Release, Emergency Preparedness and Response Services, and Law Enforcement Services. The Natural Hazards and Fire Safety section includes seismic and geologic hazards, tsunamis, fires, and localized flooding caused by major storms. Goals and policies in this section that apply to the proposed project are as follows (City of Manhattan Beach 2003):

Goal CS-1: Minimize the risks to public health, safety, and welfare resulting from natural and human caused hazards.

Policy CS-1.4: Minimize the potential damage to structures and loss of life that may result from an earthquake.

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds

The analysis of potential geology-related impacts is based on a review of the site-specific preliminary geotechnical report prepared by Group Delta (2016), included in Appendix D. Additional information was also obtained from the Manhattan Beach General Plan Safety Element. According to the adopted Appendix G of the State *CEQA Guidelines*, impacts related to geology and soils from the proposed project would be significant if the project would:

Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- a. Rupture of a known earthquake fault,
 - b. Strong seismic ground shaking,
 - c. Seismically related ground failure (including liquefaction), or
 - d. Landslides;
2. Result in substantial soil erosion or the loss of topsoil;
 3. Be located on a geologic unit or soil that is unstable as a result of the project, and potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
 4. Be located on expansive soil creating substantial direct or indirect risks to life or property; or
 5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
 6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

All areas of southern California are subject to certain risks associated with seismic and geologic activity. Therefore, impacts are considered significant if the proposed project would be exposed to an unusually high potential for hazards associated with ground shaking, landslides, subsidence, liquefaction, or expansive soils without incorporation of appropriate design techniques to minimize their potential to cause substantial risk of loss, injury, or death.

As identified in the Initial Study (Appendix A), the project would have no impact related to the rupture of a known earthquake fault or landslides because the project site is not located in a fault-rupture hazard zone area or a landslide zone; therefore, Thresholds 1a and 1d are not discussed further in this section. The project would also have no impact related to the use of septic tanks or alternative wastewater disposal systems because the project would connect to an existing sewer system; therefore, Threshold 5 above is not discussed further in this section. Finally, as identified in the Initial Study (Appendix A), the project would have a less than significant impact with regard to paleontological resources or sites; therefore, Threshold 6 above is not discussed further in this section.

b. Project Impacts

Threshold 1b: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Impact GEO-1 SEISMICALLY-INDUCED GROUND SHAKING COULD DAMAGE STRUCTURES AND INFRASTRUCTURE, RESULTING IN LOSS OF PROPERTY OR RISK TO HUMAN SAFETY; THEREFORE, IMPACTS WOULD BE POTENTIALLY SIGNIFICANT. IMPLEMENTATION OF MITIGATION MEASURE GEO-1 WOULD BE REQUIRED TO ENSURE THAT THE DESIGN AND CONSTRUCTION OF THE PROPOSED DEVELOPMENT IMPLEMENTS THE RECOMMENDATIONS CONTAINED IN THE PRELIMINARY GEOTECHNICAL REPORT. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Faults generally produce damage in two ways: ground shaking and surface rupture. Seismically-induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. Surface rupture occurs when fault movement propagates upward through subsurface materials and causes displacement at the ground surface as a result of differential movement. Surface rupture is limited to very near the fault and usually occurs along traces of known or potentially active faults, although many historic events have occurred on faults not previously known to be active.

The project site is not located in a Fault Hazard Zone defined by the APEHA, and no known major active surface faults are located within Manhattan Beach. In addition, no active faults are mapped as projecting towards the project site (Group Delta 2016; City of Manhattan Beach 2003). However, the project site is within the seismically-active area of southern California. As a result, the site is expected to experience moderate to severe ground shaking from both near and distant earthquake sources during the life of the proposed structure. Moderate to severe ground shaking, which may cause structural damage to the proposed development, would be experienced on the project site if a large magnitude earthquake occurs on one of the nearby active or potentially active faults as shown in Table 4.3-1. Based on the observable effects of several more recent seismic events, [including the Northridge Earthquake (1994), San Fernando Earthquake (1971), Loma Prieta Earthquake (1989) and Alaska Earthquake (1964)], under-designed building foundations may fail, potentially resulting in excessive building settlement or collapse; underground tanks or buried utilities may be prone to uplift or failure; and access roadways may become blocked or impassable, preventing emergency vehicles from accessing the sites. In addition, broken utility lines could result in fires, inhibit access to water supplies, or contaminate water supplies, and cut off services to residences and commercial structures.

Construction of the proposed development in conformance with the CBC is intended to prevent the catastrophic collapse of structures during a seismic event. In general, the relatively light building load would be accommodated by traditional foundation designs, and the proposed development

does not present an increased or unacceptable site condition, which is typical of most developments throughout this region. The performance of structures during recent seismic events indicates that newer buildings and structures perform as intended; catastrophic failure is generally associated with antiquated designs and the secondary effects of ground shaking (e.g., liquefaction).

Nevertheless, if building design does not adequately address seismic considerations and on-site geologic and soil conditions, the proposed development would be susceptible to collapse during moderate to severe seismic ground shaking events, which would potentially impact neighboring structures and residents/employees. As a result, impacts related to seismic ground shaking are considered potentially significant. Therefore, implementation of Mitigation Measure GEO-1 would be required to ensure that the proposed development is designed and constructed in accordance with the CBC and MBMC as well as the recommendations contained in the preliminary geotechnical report (Group Delta 2016).

Mitigation Measure

GEO-1 Geotechnical Recommendations

On-site development shall comply with all recommendations contained in Section 5.0, *Discussion and Recommendations*, of the *Preliminary Geotechnical Report for the Proposed Senior Living Center, 350 N. Sepulveda Blvd., Manhattan Beach, California* (Group Delta 2016). At a minimum, any buildings considered essential facilities, as defined in the CBC, shall be designed to withstand upper bound earthquake ground motion. The calculated design base ground motion for the site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All on-site structures shall comply with applicable provisions of the CBC and the MBMC. Compliance with these requirements shall be verified by the City of Manhattan Beach Building and Safety Division prior to issuance of a grading permit.

Significance After Mitigation

Any structure built in California is susceptible to failure as a result of seismically induced ground acceleration. However, the potential for structural failure due to seismic ground shaking would be reduced to a less than significant level with implementation of Mitigation Measure GEO-1, which would ensure that the project meets applicable CBC and MBMC standards.

Threshold 1c: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction?

Impact GEO-2 THE PROJECT SITE IS NOT LOCATED IN A POTENTIAL LIQUEFACTION ZONE AND ON-SITE SOILS ARE NOT SUSCEPTIBLE TO LIQUEFACTION. THEREFORE, IMPACTS RELATED TO LIQUEFACTION WOULD BE LESS THAN SIGNIFICANT.

Soil liquefaction results from the temporary buildup of excess pore pressures, which can result in a condition of near zero effective stress and temporary loss of strength. Several factors influence a soil's potential for liquefaction during an earthquake. These factors include magnitude and proximity of the earthquake; duration of shaking; soil types; grain size distribution; clay fraction content; density; angularity; effective overburden; location of groundwater table; cyclic loading; and soil stress history. Liquefaction is more likely in poorly-graded, saturated, low-density sands. With increasing overburden, density, and clay-content, the likelihood of liquefaction decreases.

The project site is not in a potential liquefaction zone as identified on the State Hazards map (Group Delta 2016). The proposed development would require excavation to a depth of 35 feet in order to construct subterranean parking, which may increase the risk of liquefaction hazards as construction occurs closer to the water table. However, historic high groundwater levels were measured at 40 feet below ground surface, and subsurface borings on the project site, which were advanced to a depth of 70 feet below ground surface, did not encounter groundwater. Furthermore, dense sands, which are less susceptible to liquefaction, were encountered at depths at which historic high groundwater levels were reported. Therefore, the potential for seismically-induced liquefaction to occur on-site is low and impacts associated with liquefaction would be less than significant.

Mitigation Measures

Impacts related to liquefaction would be less than significant; therefore, no mitigation is required.

Threshold 2: Would the project result in substantial soil erosion or the loss of topsoil?
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Impact GEO-3 PROJECT CONSTRUCTION WOULD TEMPORARILY EXPOSE ON-SITE SOILS TO EROSION. IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REQUIREMENTS, THE PROJECT WOULD DEVELOP AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN THAT WOULD REDUCE EROSION DURING CONSTRUCTION. IN ADDITION, THE PROJECT DEVELOPMENT WOULD BE REQUIRED TO PREPARE A STANDARD URBAN STORM WATER MANAGEMENT PLAN TO REDUCE EROSION DURING PROJECT OPERATION. EROSION IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Project-related grading, excavation, and construction, including on-site operation of heavy equipment during grading and construction, would require temporary disturbance of surface soils and removal of impervious surfaces which could potentially result in erosion on-site. Because the project would disturb more than one acre, the project would be required to obtain coverage under a Construction General Permit (CGP) to comply with Clean Water Act National Pollutant Discharge Elimination System (NPDES) requirements. Compliance with the permit would require the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs). The BMPs would include measures that would be implemented to prevent discharge of eroded soils from the construction site and sedimentation of surface waters off-site, thereby reducing erosion during construction. The BMPs could include such measures such as use of straw wattles or hay bales, application of nontoxic soil stabilizers, use of a dry stormwater quality basin to decrease runoff during storm event, covering of stockpiles or exposed dirt, and/or ensuring no earth would wash into waterways. As a result, erosion impacts during project construction would be less than significant.

The project site is almost entirely covered with impervious surfaces. The project would redevelop the site with one building that would include 4,293 square feet (8 percent of the project site) of landscaping with a variety of plant material and natural systems, which would result in more pervious surfaces than current conditions. Irrigation design would include water-efficient features that would minimize off-site runoff. Furthermore, as discussed in the Initial Study (Appendix A), the project developer would be required to prepare a Standard Urban Storm Water Management Plan (SUSMP), which requires the integration of post-construction BMPs into the site's overall drainage system, thereby reducing the potential for erosion during project operation. Post-construction BMPs may include but would not be limited to permeable pavement, infiltration systems, rainwater harvesting, and vegetated swales. The SUSMP would be required to demonstrate that post-

construction BMPs would retain the stormwater quality design volume (defined) on-site.¹ Therefore, erosion impacts during project operation would be less than significant.

Mitigation Measures

Impacts related to soil erosion and loss of topsoil would be less than significant; therefore, no mitigation is required.

- Threshold 3:** Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?
- Threshold 4:** Would the project be located on expansive soil as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact GEO-4 THE PROJECT SITE IS NOT LOCATED IN AN AREA SUSCEPTIBLE TO LIQUEFACTION, SUBSIDENCE, LATERAL SPREADING, OR LANDSLIDES. HOWEVER, THE PROJECT SITE IS UNDERLAIN BY POTENTIALLY EXPANSIVE AND COLLAPSIBLE SOILS AS WELL AS CORROSIVE SOILS. THEREFORE, IMPACTS RELATED TO EXPANSIVE AND COLLAPSIBLE CORROSIVE SOILS WOULD BE POTENTIALLY SIGNIFICANT. IMPLEMENTATION OF MITIGATION MEASURE GEO-4 WOULD BE REQUIRED TO ENSURE THAT THE DESIGN OF THE PROPOSED DEVELOPMENT ADEQUATELY ADDRESSES THESE SOIL HAZARDS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Landslides

As discussed in the Initial Study (Appendix A), the project site is not located in a landslide zone. Therefore, the project would not have the potential to result in an on- or off-site landslide.

Subsidence

Subsidence (settlement) is the sinking of the ground surface caused by the compression of soil layers. This compression is caused by deep-seated settlement of these soil layers, which in turn is caused by human activities or natural effects such as groundwater extraction, oil and gas withdrawal, oxidation of organics, and the placement of additional fill over compressible layers. Seismically-induced subsidence occurs in loose to medium dense unconsolidated soils above groundwater. These soils can compress when subject to seismic shaking, causing subsidence.

Facilities most affected by subsidence are typically long, surface infrastructure facilities such as canals, sewers, and pipelines. Factors that influence the potential occurrence and severity of alluvial soil settlement due to groundwater withdrawal include degrees of groundwater confinement, thickness of aquifer systems, individual and total thickness of fine-grained beds, and compressibility of the fine-grained layers. According to the USGS, Manhattan Beach and the project site are not located in an area of documented land subsidence (USGS 2018). In addition, the project site does not overlie an oil field and is not near any active wells; therefore, the project would not be subject to subsidence related to oil/gas extraction (Group Delta 2016). As a result, impacts related to subsidence would be less than significant.

¹ MBMC Section 5.84.100(C)(4) defines the stormwater quality design volume as either the 0.75-inch, 24-hour rain event or the 8^{5th} percentile, 24-hour event, whichever is greater.

Lateral Spreading

Lateral spreading occurs when potentially liquefiable soils are present and exposed in conjunction with a sloping ground surface. If soils in the slope liquefy, the result may be temporary instability, resulting in movement of sediments on the slope and causing slope failure, which could affect neighboring properties. For this to occur the liquefiable soils need to be continuous and the toe of the slope needs to be unsupported. As described above, the project site is not located in an area considered subject to liquefaction; therefore, the potential for lateral spreading is low. Impacts related to lateral spreading would be less than significant.

Expansive and Collapsible Soils

Expansive soils, which tend to have high clay content, swell, or heave with increases in moisture content and shrink with decreases in moisture content. The Uniform Building Code (UBC) defines “expansive soil” in Table 18-1-B and provides specific standards for design of buildings and structures. Expansive soils consist largely of clays, which greatly increase in volume when saturated with water and shrink when dried, potentially resulting in the rise of building foundations during the rainy season and fall during the dry season. Changes in the volume of expansive soils can result in the consolidation of soft clays after the lowering of the water table or the placement of fill.

Expansive clays or soils exhibiting shrink-swell characteristics have not been identified as underlying the project site. In addition, as discussed in Section 4.3.1, *Setting*, on-site soils consist of silty sand fill materials overlying old sand dune deposits, which are less susceptible to expansion than soils with high clay content (Group Delta 2016). Nevertheless, expansive and/or collapsible soils could be present. If building design does not adequately address the presence of these types of soils, on-site soil instability may result in collapse of the proposed building, which could potentially impact neighboring properties. Therefore, impacts related to expansive and collapsible soils would be potentially significant and implementation of Mitigation Measure GEO-4 would be required to ensure that project design adequately addresses potentially expansive and/or collapsible soils on-site.

Mitigation Measures

GEO-4 Expansive and Collapsible Soils Evaluation and Design

A Registered Civil Engineer shall conduct a final analysis of surficial and near-surface soils at the site to verify whether expansive and/or collapsible soils are present. Depths of analysis would include soil depths subsequent to grading, prior to excavation, and after excavation. This analysis will be completed prior to on-site construction to determine whether expansive and/or collapsible soils are present. In the event that expansive and/or collapsible soils are present, foundations shall be designed to accommodate expansive and/or collapsible soils, and project foundations and structures may be placed on a blanket of non-expansive and/or non-collapsible fill soils to prevent structural damage and/or failure. Foundation design shall be reviewed and approved by the City.

Significance After Mitigation

Implementation of Mitigation Measure GEO-4 would ensure that project design incorporates measures to address the potential presence of expansive and/or collapsible soils as well as corrosion protection measures that address corrosive soils on-site. As a result, impacts would be reduced to a less than significant level.

c. Cumulative Impacts

Planned and pending projects (see Table 3-1 in Section 3, *Environmental Setting*) would increase structural development in and around Manhattan Beach. Such development would expose new residents and property to potential risks from seismic hazards in the area. The proposed project would incrementally contribute to these cumulative impacts. However, geologic hazards are site-specific and individual developments would not create additive impacts that would affect geologic conditions on other sites. Moreover, all development projects would be subject to CEQA review on a case-by-case basis and would be required to comply with applicable provisions of the CBC and/or the MBMC.

The City of Manhattan Beach will continue to require that all new structures comply with the latest CBC seismic design standards as well as supplemental design criteria necessary to ensure that buildings are designed to avoid structural collapse. Potential impacts from future development would be addressed on a case-by-case basis, and appropriate mitigation would be designed to mitigate impacts resulting from individual projects. Therefore, cumulative impacts would be less than significant.

4.4 Greenhouse Gas Emissions

This section discusses potential impacts related to greenhouse gas (GHG) emissions and climate change. The analysis herein is based partially on data from the Traffic Impact Study prepared for the project (Linscott, Law & Greenspan, Engineers [LLG] 2020), which is included in Appendix C.

4.4.1 Environmental Setting

a. Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously as evidenced in the geologic record, which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) has expressed a high degree of confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2014).

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (United States Environmental Protection Agency [USEPA] 2020). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than CO₂ on a molecule per molecule basis (IPCC 2007).

b. Greenhouse Gas Emissions Inventory

Based on the California Air Resource Board's (CARB) California Greenhouse Gas Inventory for 2000-2017, California produced 424 metric tons (MT) of CO₂e in 2017 (CARB 2019a). The major source of GHGs in California is associated with transportation, contributing 40 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 21 percent of the state's GHG emissions. Electric power accounts for approximately 15 percent of the total emissions (CARB 2018a). California emissions are due in part to its large size and large population as compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, in comparison to other states, is its relatively mild climate.

In 2015, the City of Manhattan Beach published the 2015 Energy Efficiency Climate Action Plan (EECAP). The EECAP included 2005 and 2012 GHG emissions inventories, which are summarized in Table 4.4-1. As shown therein, citywide GHG emissions have decreased by approximately 25 percent between 1990 and 2016 but are projected to increase by approximately 28 percent between 2016 and 2020 under business-as-usual conditions.

Table 4.4-1 Manhattan Beach Community GHG Emissions Inventory

Year	MT of CO ₂ e	% Change from 1990
1990	326,826	—
2005	341,262	+4.42
2007	344,366	+5.37
2010	317,730	-2.78
2012	311,601	-4.66
2016	245,367	-24.92
2020 (BAU Forecast)	313,741	-4.00

Source: City of Manhattan Beach 2019

c. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) from 2015 to 2017 was approximately 1.0°C (1.8°F) higher than the average GMST over the period from 1880 to 1900 (National Oceanic and Atmospheric Administration 2019). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT as well as sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014 and 2018).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 1°F to 2°F higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include loss in water supply from snow pack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). While there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state as well as regionally-specific climate change case studies (State of California 2018). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. As temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have been occurring at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality would worsen. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. However, the average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 5.9 inches along the central and southern California coast (State of California 2018). The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. A warmer climate is predicted to reduce the fraction of precipitation falling as snow and result in less snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). The State of California projects that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

As discussed above, climate change could potentially affect the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Climate change has the potential to induce substantial sea level rise in the coming century (State of California 2018). The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2014-2019 period was approximately 5 mm per year, which is substantially faster than the average rate since 1993 of 3.2 mm per year (World Meteorological Organization [WMO] 2019). Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea-level rise of 10 to 37 inches by 2100 (IPCC 2018). A rise in sea levels could completely erode 31 to 67 percent of southern California beaches, result in flooding of approximately 370 miles of coastal highways during 100-year storm events, jeopardize California's water supply due to salt water intrusion, and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). In addition, increased CO₂ emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a \$50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2019). Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent; water demand could increase as hotter conditions lead to the loss of soil moisture; crop-yield could be threatened by water-induced stress and extreme heat waves; and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the annual average maximum daily temperatures in California could rise by 4.4 to 5.8°F in the next 50 years and by 5.6 to 8.8°F in the next century (State of California 2018). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals related to (1) timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of nonnative species within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

d. Regulatory Setting

State Regulations

CARB is responsible for the coordination and oversight of State and local GHG reduction programs in California. California has several regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT of CO₂e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defines CARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 statewide goals. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as water, waste, natural resources, clean energy and transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted programs and policies. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. The 2017 Scoping Plan recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017b).

Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option

for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements. SCAG adopted the *2020-2045 Regional Transportation Plan /Sustainable Communities Strategy: Connect SoCal* (SCAG RTP/SCS) in September 2020, which meets the requirements of SB 375.

Senate Bill 1383

Adopted in September 2016, SB 1383 requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program, which was last updated by SB X 1-2 in 2011. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *CEQA Guidelines* provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a number of air districts have adopted quantitative significance thresholds for GHGs; however, SCAQMD has only adopted thresholds for industrial sources.

For more information on the Senate and Assembly Bills, Executive Orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

Local Regulations

Energy Efficiency Climate Action Plan

The City of Manhattan Beach and the South Bay Cities Council of Governments published the City of Manhattan Beach EECAP in 2015, which established goals and policies that incorporate GHG reduction measures into community and municipal operations. The EECAP included 2005 and 2012 inventories of community and municipal GHG emissions and set GHG reduction targets of 15 percent below 2005 levels by 2020 and 49 percent below 2005 levels by 2035. Six goals and 13 measures were identified that would reduce communitywide GHG emissions (City of Manhattan Beach 2015). However, the goals and measures contained in the EECAP are only suggestions for future City actions. Furthermore, the EECAP did not undergo CEQA review and was not adopted in a public process. Therefore, the EECAP is not a qualified GHG reduction plan as defined in CEQA Guidelines Section 15183.5. Additionally, the City is in the process of creating a Climate Action and Adaptation Plan, highlighting climate action and resiliency strategies.

General Plan

Although the Manhattan Beach General Plan does not directly address GHG emissions or climate change, the General Plan establishes several goals and policies that indirectly promote GHG emission reduction activities (City of Manhattan Beach 2003). The following goals and policies related to GHG emission reductions are applicable to the project:

Goal LU-2: Encourage the provision and retention of private landscaped open space.

Policy LU-2.3: Protect existing mature trees throughout the City, and encourage their replacement with specimen trees whenever they are lost or removed.

Goal CR-5: Conserve and protect the remaining natural resources in Manhattan Beach.

Policy CR-5.1: Employ principles of a sustainable environment in the development, operation, and maintenance of the community, emphasizing the importance of respecting and conserving the natural resources.

Policy CR-5.3: Encourage water conservation, including landscaping with drought-tolerant plants, use of reclaimed water, and recycling and cooling system water, in all development.

Policy CR-5.7: Encourage the use of energy-saving designs and devices in all new construction and reconstruction.

Policy CR-5.8: Encourage utilization of “green” approaches to building design and construction, including use of environmentally friendly interior improvements.

Policy CR-5.10: Encourage and support the use of alternative fuel vehicles, including support of charging or “fueling” facilities.

Policy CR-5.11: Support sustainable building practices.

Goal CR-6: Improve air quality.

Policy CR-6.1: Encourage alternative modes of transportation, such as walking, biking, and public transportation, to reduce emissions associated with automobile use.

Policy CR-6.2: Encourage the expansion and retention of local-serving retail businesses (e.g., restaurants, family medical offices, drug stores) to reduce the number and length of automobile trips to comparable services located in other jurisdictions.

Goal I-6: Create well-marked pedestrian and bicycle networks that facilitate these modes of circulation.

Policy I-6.6: Incorporate bikeways and pedestrian ways as part of the City's circulation system where safe and appropriate to do so.

Policy I-6.7: Encourage features that accommodate the use of bicycles in the design of new development, as appropriate.

4.4.2 Impact Analysis

a. Methodology and Significance Thresholds.

Methodology

Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO₂, CH₄, and N₂O because these make up 98 percent of all GHG emissions by volume and are the GHG emissions that the project would emit in the largest quantities (IPCC 2014). Fluorinated gases, such as HFCs, PFCs, and SF₆, were also considered for the analysis. However, because the project would construct a senior living community, emissions of fluorinated gases would not be significant since emissions of fluorinated gases are primarily associated with industrial processes. Emissions of all GHGs are converted into their equivalent global warming potential (GWP) in terms of CO₂ (CO₂e). Minimal amounts of other GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the total calculated CO₂e amounts. Calculations are based on the methodologies discussed in the California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change white paper (CAPCOA 2008). GHG emissions associated with the proposed project were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (see Appendix B for calculations). Emissions modeling was completed in accordance with the assumptions detailed in Section 4.1, *Air Quality*, and the methodology described below.

Construction Emissions

Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches (as discussed below under *Significance Thresholds*) adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, "more study is needed to make this assessment or to develop separate thresholds for construction activity" (CAPCOA 2008). Nevertheless, air districts such as the SCAQMD have recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions (SCAQMD 2008).

Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. CalEEMod was used to estimate emissions associated with the construction period, based on parameters such as the duration of construction activity, area of disturbance, and anticipated equipment use during construction. The construction

schedule and construction equipment for each phase was based on information provided by the applicant. Complete results from CalEEMod and assumptions can be viewed in Appendix B.

Operational Emissions

Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on EPA's AP-42 (*Compilation of Air Pollutant Emissions Factors*) and CCAR General Reporting Protocol. The default electricity consumption values in CalEEMod include the California Energy Commission [CEC]-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2017). The project would be served by Sothern California Edison (SCE). Therefore, SCE's specific energy intensity factors (i.e., the amount of CO₂, CH₄, and N₂O per kilowatt-hour) are used in the calculations of GHG emissions. The energy intensity factors included in CalEEMod are based on 2012 data by default at which time SCE had only achieved a 20.6 percent procurement of renewable energy. Per SB 100, the statewide Renewable Portfolio Standard (RPS) Program requires electricity providers to increase procurement from eligible renewable energy sources to 60 percent by 2030. To account for the continuing effects of the RPS, the energy intensity factors included in CalEEMod were reduced based on the percentage of renewables reported by SCE. SCE energy intensity factors that include this reduction are shown in Table 4.4-2.

Table 4.4-2 SCE Energy Intensity Factors

	2012 (lbs/MWh)	2030 (lbs/MWh) ²
Percent procurement	20.6% ¹	60%
Carbon dioxide (CO ₂)	702.44	353.87
Methane (CH ₄)	0.029	0.015
Nitrous oxide (N ₂ O)	0.006	0.003

¹ Source: SCE 2012

² RPS goal established by SB 100

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from CARB, U.S. EPA, and emission factor values provided by the local air district (CAPCOA 2017).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2017). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for northern and southern California. CalEEMod does not incorporate water use reductions achieved by 2016 CALGreen (Part 11 of Title 24). New development would be subject to CalGreen, which requires a 20 percent increase in indoor water use efficiency. Thus, in order to account for compliance with CalGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for new development.

For mobile sources, CO₂ and CH₄ emissions were quantified in CalEEMod. Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using guidance from CARB and the EMFAC2017 Emissions Inventory for the Los Angeles County region for the year 2030 (the next State milestone target year for GHG emission reductions) using the EMFAC2011 categories (CARB 2018, 2019b; see Appendix B for calculations).

Service Population

Service population is calculated by summing the number of residents and employees accommodated by a proposed project. For the project, there would be up to 115 residents, and a maximum of 77 employees, which would be a service population of 192 people.

Significance Thresholds

According to the *CEQA Guidelines*, impacts related to GHG emissions from the proposed project would be significant if the project would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

The California Supreme Court's Newhall Ranch decision (Center for Biological Diversity v. Department of Fish and Wildlife [2015] 62 Cal.4th 204) confirmed that there are multiple potential ways to evaluate GHG emissions consistent with CEQA, depending on the circumstances of a given project. According to the CEQA Guidelines, projects can tier off a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan.¹ According to the CEQA Guidelines, in order for a comprehensive plan to qualify as a GHG reduction plan, the plan must accomplish the following (CEQA Guidelines Section 15183.5):

1. Quantify existing and projected GHG emissions within the plan area;
2. Establish a reduction target based on substantial evidence, where GHG emissions are not cumulatively considerable;
3. Identify and analyze sector-specific GHG emissions from plan activities;
4. Specify policies and actions (measures) that local jurisdictions will enact and implement over time to achieve the specified reduction target;

¹ This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions impact on the environment (AEP 2016).

5. Establish a tool to monitor progress and amend if necessary; and
6. Be adopted in a public process following environmental review.

A key aspect of a qualified GHG reduction plan is its ability to provide substantial evidence that the identified reduction target establishes a threshold where GHG emissions are not cumulatively considerable. The AEP *Beyond Newhall* White Paper identifies this criterion as being a local target that aligns with the statewide legislative targets. As discussed under *Local Regulations*, the City of Manhattan Beach EECAP does not have a qualified GHG emission reduction plan because it did not undergo CEQA review and was not adopted in a public process. Therefore, there is no qualified GHG emission reduction plan to be used for CEQA tiering.

To evaluate whether the proposed project may generate a quantity of GHG emissions that would contribute to a significant impact on the environment, the project's calculated construction and operational emissions are evaluated against an efficiency threshold derived from the 2017 Scoping Plan target for 2030 (AEP 2016).

Efficiency thresholds are quantitative thresholds based on a measurement of GHG efficiency for a given project, regardless of the amount of mass emissions. These thresholds identify the emission level below which new development would not interfere with attainment of statewide GHG reduction targets. Projects that attain the efficiency target, with or without mitigation, would result in GHG emissions that are considered less than significant.

A simple efficiency threshold can be calculated by dividing the City's communitywide GHG emissions target for year 2030 by the sum of the City's jobs and residents. To develop this threshold, the 1990 total emissions inventory (shown in Table 4.4-3) was used to determine the City's 2030 emissions target. SB 32 establishes a goal of a 40 percent reduction in GHG emissions below 1990 levels. Therefore, the City's 1990 emissions levels of approximately 326,826 MT of CO₂e were reduced by 40 percent to estimate the City's 2030 target of 196,096 MT of CO₂e per year, as shown in Table 4.4-3.

Table 4.4-3 Manhattan Beach Communitywide 1990 Emissions Inventory and 2030 Target

GHG Emissions Sector	1990 Emissions Inventory (metric tons of CO ₂ e)
Transportation and Mobile Sources	181,653
Solid Waste	12,016
Commercial Energy	72,134
Residential Energy	59,516
Process & Fugitive Emissions	1,507
1990 Emissions Total	326,826
2030 Target (SB 32)¹	196,096

¹ SB 32 sets a target of reducing GHG emissions by 40 percent below 1990 levels by 2030.

Source: City of Manhattan Beach 2019, Table 5

The 2030 project-specific efficiency threshold can be calculated by dividing the 2030 communitywide GHG emission target by the citywide service population (residents + employees) for 2030. Based on SCAG population and employment data, the City's service population was 57,400

persons in 2016 and will be 59,200 persons in 2045.² Therefore, using linear interpolation between 2016 and 2045, the City's 2030 service population would be approximately 58,269 persons. The locally-appropriate emissions total shown in Table 4.4-3 was divided by the citywide 2030 service population to determine a locally-appropriate, project-level efficiency threshold of 3.3 MT of CO₂e per service person, as shown in Table 4.4-4.

Table 4.4-4 SB 32 Locally Applicable 2030 Project-Level Threshold

Target Year	Value
1990 Baseline Levels ¹	326,826 MT of CO ₂ e/year
2030 Target (SB 32) ²	196,096 MT of CO ₂ e/year
2030 Service Population ³	58,269 persons
2030 Project-Specific Efficiency Threshold	3.3 MT of CO₂e/SP/year

¹ Source: City of Manhattan Beach 2019, Table 5

² SB 32 sets a target of reducing GHG emissions by 40 percent below 1990 levels by 2030.

³ The service population was calculated based on the SCAG 2020 RTP/SCS population and employment data for 2016 and projections for 2045.

b. Project Impacts and Mitigation Measures

Threshold 1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact GHG-1 THE PROJECT WOULD GENERATE TEMPORARY AND LONG-TERM GHG EMISSIONS. HOWEVER, THE PROJECT'S EMISSIONS WOULD NOT EXCEED THE EFFICIENCY THRESHOLD OF 3.3 MT OF CO₂E PER SERVICE PERSON PER YEAR. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction Emissions

Construction of the proposed project would emit GHG emissions through the combustion of fossil fuels by heavy-duty construction equipment and by vehicle trips associated with construction workers and vendors traveling to and from the project site. As shown in Table 4.4-5, project construction activity would generate an estimated 930.3 MT of CO₂e. Amortized over a 30-year period, project construction activities would generate approximately 31.0 MT of CO₂e per year.

Table 4.4-5 Estimated GHG Emissions during Construction

Year	Emissions (MT of CO ₂ e)
2021	476.7
2022	453.6
Total	930.3
Amortized over 30 years	31.0

MT = metric tons

See Appendix B for CalEEMod results.

² 2016 service population = 35,400 population + 22,000 employment; and 2045 service population = 35,600 population + 23,600 employment (SCAG 2020, Demographics and Growth Forecast Appendix).

Combined Annual Emissions

Operational GHG emissions would result primarily from vehicle trips; other sources include electricity and water consumption; natural gas for space and water heating; solid waste disposal; and gasoline-powered landscaping and maintenance equipment. Table 4.4-6 summarizes and combines the amortized construction and operational emissions associated with the proposed project. As shown therein, the proposed project would generate approximately 2.7 MT of CO₂e per service person per year, which would not exceed the locally-applicable, project-specific threshold of 3.3 MT of CO₂e per service person per year. Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The impact would be less than significant, and no mitigation is required.

Table 4.4-6 Combined Annual GHG Emissions

Emission Source	Project Emissions (MT of CO ₂ e per year)
Construction	31.0
Operational	
Area	1.6
Energy	142.2
Stationary	1.5
Solid Waste	43.6
Water	20.3
Mobile	
CO ₂ and CH ₄	270.1
N ₂ O	6.8
Total Emissions	517.1
Service Population (Residents + Employees)	192
Total Emissions per SP	2.7
Locally Applicable Project-Level 2030 Threshold	3.3
Threshold Exceeded?	No
See Appendix B for CalEEMod results and N ₂ O mobile emissions calculations. MT = metric tons; CO ₂ e = carbon dioxide equivalent; SP = service population (residents + employees)	

Mitigation Measures

Mitigation would not be required because project GHG emissions would be below significance thresholds and therefore less than significant.

Impact GHG-2 MITIGATION WOULD NOT BE REQUIRED BECAUSE IMPACTS FROM GHG EMISSIONS WOULD BE LESS THAN SIGNIFICANT. THE PROPOSED PROJECT WOULD BE CONSISTENT WITH THE MANHATTAN BEACH GENERAL PLAN, THE MANHATTAN BEACH ENERGY EFFICIENCY CLIMATE ACTION PLAN, THE SCAG RTP/SCS, AND THE 2017 SCOPING PLAN. THEREFORE, IMPACTS RELATED TO CONSISTENCY WITH GHG PLANS AND POLICIES WOULD BE LESS THAN SIGNIFICANT.

As discussed under in Section 4.4.1(d), *Regulatory Setting*, a number of plans and policies have been adopted to reduce GHG emissions in the Southern California region and the City of Manhattan Beach. Project consistency with the Manhattan Beach EECAP and General Plan, SCAG 2020-2045 RTP/SCS, and 2017 Scoping Plan is detailed in the following subsections. As discussed therein, the project would be consistent with these plans and policies. Therefore, impacts related to consistency with GHG reduction plans would be less than significant.

Manhattan Beach EECAP and General Plan

Table 4.4-7 summarizes the project’s consistency with applicable goals, policies, and measures of the Manhattan Beach Energy Efficiency Climate Action Plan and General Plan. As shown therein, the project would be consistent with all of the goals, policies, and measures aimed at reducing emissions.

Table 4.4-7 Project Consistency with Manhattan Beach Energy Efficiency Climate Action Plan and General Plan

Strategy	Project Consistency
City of Manhattan Beach: Energy Efficiency Climate Action Plan	
Goal 4: Increase Energy Efficiency in New Commercial Development Measure 4.1: Encourage or Require EE Standards Exceeding Title 24	Consistent. The proposed project would meet the 2019 Title 24 energy efficiency standards. When the EECAP was published, the Title 24 standards in effect were less stringent than the current 2019 standards; therefore, the project would exceed the standards in effect at the time of the EECAP and be consistent with Measure 4.1 requirements.
Goal 5: Increase Energy Efficiency through Water Efficiency (WE) Measure 5.1: Promote or Require WE through SB X7-7 Measure 5.2: Promote WE Standards Exceeding SB X7-7	Consistent. The proposed project would include low-flow plumbing fixtures and water-efficient landscape irrigation systems. Therefore, the project would be consistent with Goal 5 and Measures 5.1 and 5.2.
Goal 6: Decrease Energy Demand through Reducing Urban Heat Island Effect Measure 6.1: Promote Tree Planting for Shading and EE	Consistent. The project would include 21 trees along project site boundaries, which would increase the number of trees on-site by 18 as compared to existing conditions. Therefore, the project would be consistent with Goal 6 and Measure 6.1.
City of Manhattan Beach General Plan	
Goal LU-2: Encourage the provision and retention of private landscaped open space. Policy LU-2.3: Protect existing mature trees throughout the City, and encourage their replacement with specimen trees whenever they are lost or removed.	Consistent. The project would include 21 trees along project site boundaries, which would increase the number of trees on-site by 18 as compared to existing conditions. The project would also include approximately 10,313 square feet of landscaping, including streetscape landscaping along North Sepulveda Boulevard and the outdoor courtyard that would be located on the eastern portion of the project site.

Strategy	Project Consistency
	Therefore, the project would be consistent with Goal LU-2 and Policy LU-2.3.
Goal CR-5: Conserve and protect the remaining natural resources in Manhattan Beach. Policy CR-5.1: Employ principles of a sustainable environment in the development, operation, and maintenance of the community, emphasizing the importance of respecting and conserving the natural resources. Policy CR-5.3: Encourage water conservation, including landscaping with drought-tolerant plants, use of reclaimed water, and recycling and cooling system water, in all development. Policy CR-5.7: Encourage the use of energy-saving designs and devices in all new construction and reconstruction. Policy CR-5.8: Encourage utilization of “green” approaches to building design and construction, including use of environmentally friendly interior improvements. Policy CR-5.10: Encourage and support the use of alternative fuel vehicles, including support of charging or “fueling” facilities. Policy CR-5.11: Support sustainable building practices.	Consistent. The proposed project would be constructed in accordance with 2019 CALGreen requirements and would include low-flow plumbing fixtures and water-efficient landscape irrigation systems. In addition, the project would include infrastructure for future photovoltaic (PV) panels, four future electric vehicle charging stations, and one clear air vehicle parking space. As a result, the project would be consistent with Goal CR-5 and related policies.
Goal CR 6: Improve air quality. Policy CR-6.1: Encourage alternative modes of transportation, such as walking, biking, and public transportation, to reduce emissions associated with automobile use. Policy CR-6.2: Encourage the expansion and retention of local-serving retail businesses (e.g., restaurants, family medical offices, drug stores) to reduce the number and length of automobile trips to comparable services located in other jurisdictions.	Consistent. The project would include eight bicycle parking spaces on-site for use by residents, guests, and employees. In addition, the project site is located approximately 315 feet north of the Sepulveda Boulevard/2nd Street bus stop for LA Metro Line 232. Therefore, the project would be consistent with Policy CR-6.1. Although the project would replace several local-serving retail businesses (including three restaurants, a coffee shop, a hair salon, a dance/fitness club, a furniture store, a nail/skin care salon, and a chiropractor’s office) with a senior living facility, these local-serving retail uses are anticipated to be relocated within the City. Additionally, there are similar retail uses in the vicinity of the project site. Because these businesses would be retained within the community, the project would be consistent with Policy CR-6.2.
Goal I-6: Create well-marked pedestrian and bicycle networks that facilitate these modes of circulation. Policy I-6.6: Incorporate bikeways and pedestrian ways as part of the City’s circulation system where safe and appropriate to do so. Policy I-6.7: Encourage features that accommodate the use of bicycles in the design of new development, as appropriate.	Consistent. No bicycle lanes exist along the project site frontages on North Sepulveda Boulevard and 5th Street; however, sidewalks are present on both frontages. The project would demolish the four existing access driveways along these frontages and construct two new access driveways, replacing the sidewalk as necessary. In addition, the project would include a pedestrian path along the project site boundaries and eight bicycle parking spaces for use by residents, guests, and employees. Accordingly, the project would be consistent with Goal I-6 and Policies I-6.6 and I-6.7.

Source: City of Manhattan Beach 2003 and 2015

SCAG 2020 RTP/SCS

SCAG's 2020 RTP/SCS provides land use and transportation strategies to reduce regional GHG emissions. Specific land use objectives identified in SCAG's 2020 RTP/SCS include (SCAG 2020):

- **Focus Growth Near Destinations & Mobility Options**
 - Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations
 - Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets
 - Plan for growth near transit investments and support implementation of first/last mile strategies
 - Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses
 - Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods
 - Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations)
 - Identify ways to “right size” parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)
- **Promote Diverse Housing Choices**
 - Preserve and rehabilitate affordable housing and prevent displacement
 - Identify funding opportunities for new workforce and affordable housing development
 - Create incentives and reduce regulatory barriers for building context-sensitive accessory dwelling units to increase housing supply
 - Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions
- **Leverage Technology Innovations**
 - Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space
 - Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments
 - Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation
- **Support Implementation of Sustainability Policies**
 - Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions
 - Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations
 - Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax

increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space

- Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies
- Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region
- Continue to support long range planning efforts by local jurisdictions
- Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy

▪ **Promote a Green Region**

- Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards
- Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration
- Integrate local food production into the regional landscape
- Promote more resource efficient development focused on conservation, recycling and reclamation
- Preserve, enhance and restore regional wildlife connectivity
- Reduce consumption of resource areas, including agricultural land
- Identify ways to improve access to public park space

The proposed project is an infill redevelopment project that would involve construction of a senior assisted living facility on North Sepulveda Boulevard. The project site is located within 315 feet of the Sepulveda Boulevard/5th Street bus stop for LA Metro Line 232; therefore, future guests and employees would be able to access the project site via public transit. The project would include eight bicycle parking spaces for use by future residents, guests, and employees, and the project site is connected to the existing pedestrian network by sidewalks along North Sepulveda Boulevard and 5th Street. The project would also include infrastructure for four future electric vehicle charging stations. Additionally, the project would have a shuttle to transport residents to services. In these ways, the project fulfills several land use and transportation objectives of SCAG's 2020-2045 RTP/SCS, including focusing new growth near destinations and alternative transportation options, and promoting low emission and electric vehicle technologies. It would also help meet the housing needs of the City's aging population. Therefore, the project would be consistent with SCAG's 2020-2045 RTP/SCS.

2017 Scoping Plan

The 2017 Scoping Plan outlines a pathway to achieving the reduction targets set under SB 32, which is considered an interim target toward meeting the State's long-term 2045 goal established by EO B-55-18. As discussed in Section 4.4.2(a), *Methodology and Significance Thresholds*, the locally-applicable, project-specific efficiency threshold was developed based on the GHG emissions reduction target of SB 32, which the 2017 Scoping Plan is designed to achieve. Additionally, the project would develop residential uses near transit stops, provide bicycle parking spaces, and improve the pedestrian pathways within the site, all of which would be consistent with the 2017 Scoping Plan goal to reduce VMT. The Scoping Plan also includes goals to reduce water

consumption; the project would implement various water-saving features, including low-flow fixtures, drip-tubing landscaping irrigation, and irrigation valve areas for varied soil types, exposures, and hydrozones, consistent with the Scoping Plan goals. Therefore, because the project's GHG emissions would not exceed the 2030 efficiency threshold (as discussed under Impact GHG-1), the project would be consistent with the 2017 Scoping Plan.

Mitigation Measures

Mitigation would not be required because impacts related to consistency with GHG plans and policies would be less than significant.

c. Cumulative Impacts

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. As discussed under Section 4.4.1(c), *Potential Effects of Climate Change*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. Refer to Impacts GHG-1 and GHG-2 for detailed discussions of the impacts of the proposed project related to climate change and GHG emissions. As discussed therein, project impacts would be less than significant and the project would be consistent with applicable plans and policies aimed at GHG emissions reduction. Therefore, the project would not make a cumulatively considerable contribution to this cumulative impact.

4.5 Land Use and Planning

This section analyzes the proposed project's consistency with applicable land use plans, policies, and regulations, and identifies potential environmental effects that could arise from any inconsistencies. Potential impacts related to the proposed project and its neighboring land uses are discussed in greater detail in other sections of the EIR (Aesthetics, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Noise, and Transportation and Traffic).

4.5.1 Local Land Use and Zoning Setting

Citywide Land Use Patterns

Manhattan Beach is located in southwest Los Angeles County and encompasses 3.5 square miles with approximately 2 miles of coastline. The project site is located on California State Highway 1/ SR 1 (North Sepulveda Boulevard).

Manhattan Beach's land use is nearly 70 percent residential, with 10 percent commercial and the remaining land consisting of industrial, parks, public facilities, and other uses (Manhattan Beach General Plan 2003).

Project Site and Surrounding Land Uses

The project site consists of five parcels that are currently developed with a mix of retail and restaurant uses. Table 4.5-1 lists and describes the surrounding land uses and Figure 2-2 in Section 2, *Project Description*, shows the location and surrounding land uses of the site. Figures 2-4 and 2-5 in Section 2, *Project Description*, show the zoning and general plan designations of the site and surroundings.

Table 4.5-1 Surrounding Land Uses and Zoning

Direction	General Plan	Zoning	Existing Use
North	General Commercial	General Commercial (CG)	The project site is bound by 5 th St. to the north. An automotive repair shop is located across 5 th St. in the General Commercial Zone.
South	General Commercial	General Commercial (CG)	The adjacent property to the south is developed with automotive repair and auto detailing facilities in the General Commercial Zone.
East	Low Density Residential	Single-Family Residential (RS)	The project site is bound by single family residences in the Residential Single Family Zone to the east.
West	General Commercial, Low Density Residential	General Commercial (CG)	The project site is bound by N. Sepulveda Blvd. to the west. Commercial uses, including a fast food restaurant, motel, office, and retail are located across N. Sepulveda Blvd. in the General Commercial zone. Single family residential exists further west beyond the commercial uses, in the Residential Single Family zone.

Source: Manhattan Beach General Plan, 2003 and Municipal Code.

The site includes five parcels: APNs 4167-024-033 (403 N. Sepulveda Blvd.), 4167-024-034 (350 N. Sepulveda Blvd.), 4167-024-032 and 4167-023-031 (250 N. Sepulveda Blvd.), and a vacated street parcel. The site is zoned CG-D8 (General Commercial, Sepulveda Boulevard Corridor Overlay) and is currently developed with a small shopping center and parking lot. The CG zone is intended to allow a full range of retail and service businesses deemed suitable for location in Manhattan Beach. The existing tenants on the site include a pizza restaurant and chiropractic office at 400 North Sepulveda Boulevard, restaurants, a coffee shop, an exercise/fitness dance studio and nail and hair salons at 350 North Sepulveda Boulevard, and an electric golf cart sales facility at 250 North Sepulveda Boulevard.

Properties immediately east of the site are zoned RS (Single-Family Residential) and contain two and three-story single and multi-family housing. Properties on the west side of North Sepulveda Boulevard across from the site are zoned CG and developed with a two-story motel and single-story restaurants. The property on the north side of 5th Street across from the site contains one-story automotive services and office buildings. The property to the south contains one-story automotive services buildings.

4.5.2 Regulatory Setting

a. Local

General Plan

The Manhattan Beach General Plan describes how the City will work to retain the small-town atmosphere that makes the City unique while responding to the dynamics of regional traffic issues and meeting changing community needs. The General Plan serves as a policy guide, balancing these interrelated factors to Manhattan Beach's community vision. The 2003 General Plan was updated in 2004 to implement a design overlay district in a residential neighborhood. A summary of General Plan policy topics is provided below.

Land Use

The Land Use Element describes the history of Manhattan Beach development, the distinct neighborhoods found in the City, and the Land Use Plan for the City. The City developed the Land Use Plan to guide the development, maintenance, and improvement of land and properties for 20 years. It provides goals and policies for the density and intensity of development and General Plan Land Use Designations. It also contains goals and policies to maintain the City's small-town character and goals pertaining to open space, community aesthetics, neighborhood character, protecting residential neighborhoods, and developing vibrant and diverse commercial areas.

The Land Use Element includes a General Commercial designation to provide opportunities for a broad range of retail, service commercial, and professional office uses. These uses are intended to meet the needs of local residents and businesses, as well as provide goods and services for the regional market. The General Commercial category accommodates uses that typically generate heavy traffic. Therefore, this designation applies primarily along North Sepulveda Boulevard and targeted areas along Manhattan Beach Boulevard, Artesia Boulevard, and Aviation Boulevard. The maximum Floor Area Factor (FAF) is 1.5:1. The General Commercial use applies to the project site.

Mobility Plan

In 2018, the City relabeled the General Plan “Circulation Element” as the “Mobility Plan” for the City. The Mobility Plan seeks to provide for a balanced, multi-modal transportation system for movement of people and goods within, to, and from the City and aims to meet the needs of all users.

Housing

The Housing Element describes the City’s needs, goals, policies, objectives, and programs regarding the preservation, improvement, and development of housing in Manhattan Beach. The Housing Element analyzes community housing needs in terms of affordability, availability, adequacy, and accessibility, and describes the City’s strategy and programs to address those needs.

Community Resources

The Community Resources Element focuses on the long-term enhancement of resources that distinguish Manhattan Beach and create a high-quality community. This element addresses Parks and Recreation, Cultural Arts, Educational Institutions, Landscape Resources, Conservation, and Air Quality.

Community Safety

The Community Safety Element’s goals and policies reflect the City’s emphasis on addressing public safety proactively. This element includes sections on Natural Hazards and Fire Safety, Hazardous Materials Release, Emergency Preparedness and Response Services, and Law Enforcement Services.

Noise

The Noise Element encourages the substantial reduction of noise and its impacts in the urban environment, with a focus on protecting residential neighborhoods, schools, and similar noise-sensitive uses.

Zoning Ordinance

The City of Manhattan Beach Planning and Zoning Ordinance is contained in Title 10 of the Manhattan Beach Municipal Code (MBMC). It is the primary tool for implementing the General Plan. The Planning and Zoning Ordinance provides Development Standards (e.g., site coverage, parking and sign requirements, setbacks, and building height) which implement the land use policies in the General Plan.

The project site is zoned CG-D8 (General Commercial, Sepulveda Boulevard Corridor Overlay). Figure 2-5 in Section 2, *Project Description*, shows the zoning for the site and surrounding uses. The CG Zone provides opportunities for the full range of retail and service businesses deemed suitable for location in Manhattan Beach, including businesses not permitted in other commercial districts because they attract heavy vehicular traffic or have certain adverse impacts. This zone is also intended to provide opportunities for offices and certain limited industrial uses that have impacts comparable to those of permitted retail and service uses to occupy space not in demand for retailing or services. The D8 overlay is used where more flexible development standards are needed to promote desirable development, uses, and economic vitality within the General Commercial (CG) zone. Table 4.5-2 describes in greater detail the project site zoning and land use and their associated requirements.

Table 4.5-2 Zoning and General Plan Requirements

	General Plan Land Use –General Commercial (CG)	Zoning District – General Commercial (CG)	D8 Sepulveda Boulevard Corridor Overlay
Purpose	Provides opportunities for a broad range of retail and service commercial and professional office uses intended to meet the needs of local residents and businesses and to provide goods and services for the regional market	To provide opportunities for the full range of retail and service businesses deemed suitable for location in Manhattan Beach, including businesses not permitted in other commercial districts because they attract heavy vehicular traffic or have certain adverse impacts, and to provide opportunities for offices and certain limited industrial uses that have impacts comparable to those of permitted retail and service uses to occupy space not in demand for retailing or services.	Used where more flexible development standards are needed in order to continue to promote desirable development, uses and economic vitality within the General Commercial (GC) zone.
Height	Policy LU-1.1: Limit the height of new development to three stories where the height limit is 30 feet to protect the privacy of adjacent properties, reduce shading, protect vistas of the ocean, and preserve the low-profile image of the community.	Maximum height is 30 feet (maximum building height elevation of 204.65 feet minus the average grade across the site of 175 feet)	N/A ¹
Setbacks	N/A	0 feet, except along residential adjacency ²	None
Floor Area Factor (FAF)	FAF Allowed: 1.5:1	FAF Allowed: 1.5:1	None
Minimum Site Landscaping	N/A	8%	None

Source: Manhattan Beach General Plan, 2003 and Municipal Code.

Notes: 1 – maximum height of 40 feet applies only to hotel uses in D8.

2 - MBMC § 10.16.030 (E) Along a rear property line abutting a residential district, structures shall not intercept a 1:1 or 45 degree daylight plane inclined inward from a height of 15 feet above existing grade at the property line.

Sepulveda Boulevard Development Guide

The City of Manhattan Beach adopted the Sepulveda Boulevard Development Guidelines in 1997, which are intended to encourage the inclusion of certain desirable elements in development projects on Sepulveda Boulevard (SR 1). These desirable elements include regulated signage, reciprocal access between sites to reduce curb cuts, right-turn pockets and driveway throats,

sidewalk dedication, landscaping, and utility undergrounding among other elements. They are to be used as a supplement to the City Zoning Code requirements during Use Permit and other discretionary project reviews. The Planning Commission may decide if any of the guidelines are unnecessary or inappropriate for incorporation in a certain project.

Sepulveda Boulevard Corridor Overlay

Additionally, in late 2017, the City launched the Sepulveda Initiatives Work Plan, which is an effort to address opportunities for improvements along Sepulveda Boulevard, including economic vitality, planning, parking, traffic and overall beautification in order to promote walkability and diverse uses in the commercial corridor. This process led to the Sepulveda Boulevard Corridor Overlay (D8), which was added to Section 10.44.010 of the City code in 2019. This overlay is used where more flexible development standards are needed to promote desirable development, uses, and economic vitality within the General Commercial (CG) zone.

4.5.3 Impact Analysis

a. Methodology and Significance Thresholds

Based on Appendix G of the CEQA Guidelines, the effects of the impacts related to land use are considered significant if the proposed project would:

1. Physically divide an established community.
2. 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.

The information provided in this section is based on review of materials submitted by the applicant, aerial photographs, and planning documents that have been mentioned in this section. The analysis includes evaluation of project consistency with the jurisdictional land use policies and regulations of the City of Manhattan Beach.

b. Project Impacts and Mitigation Measures.

Threshold 1: Would the project physically divide an established community?

Impact LU-1 THE PROJECT WOULD INCLUDE RECONSTRUCTION OF PUBLIC SIDEWALKS ALONG 5TH STREET AND NORTH SEPULVEDA BOULEVARD. THE RECONSTRUCTION WOULD TEMPORARILY CLOSE THE SIDEWALKS. HOWEVER, THE PROJECT WOULD NOT CREATE ANY NEW PERMANENT BARRIERS BETWEEN EXISTING RESIDENTIAL AND COMMERCIAL NEIGHBORHOODS AND WOULD IMPROVE THE CONDITION OF SIDEWALKS IN THE LONG TERM. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would add 95 assisted living rooms (115 total beds) and the project site is located in an established urban area surrounded by commercial and residential uses. However, because the southern portion of the project site is at a higher elevation than the northern portion of the site (193 to 158 feet), the first floor of assisted living space would be below grade towards the southern end of the project site. The north, south, and east boundaries of the existing site include buildings, retaining walls, and fencing that do not allow access on or off the site or travel across the site to North Sepulveda Boulevard. The proposed project would maintain and/or replace these existing walls and fences, thereby maintaining the existing conditions.

Even though the elevations of the existing sidewalks would not change along 5th Street and North Sepulveda Boulevard, the proposed project would change the pedestrian experience along those streets. The project would soften the building elevation from the North Sepulveda Boulevard perspective by establishing a buffer of plant material to create shade and visual interest and providing benches to create a pedestrian-friendly scale and presence along the frontage. Three existing driveway entrances along North Sepulveda Boulevard would be removed and one driveway entrance to the proposed auto courtyard/building entrance would be constructed just north of the midpoint of the site's western boundary.

Along the northern boundary of the project site on 5th Street, the elevation slopes downward and the proposed bottom floor/subterranean garage is visible with an entrance/exit driveway and service area where the existing service/parking area provides trash/storage/loading area for the existing office/restaurant building. The sidewalk along 5th Street would be maintained and enhanced with adjacent terraced landscaping along the frontage (see west elevations on Figure 2-14 East/West Elevations in Section 2, *Project Description*). The project would create a larger building presence with a smaller setback along 5th Street and the building bulk would be reduced by stepping back the upper two floors. The project would remove an existing site driveway entrance from the northwest corner of 5th Street and North Sepulveda Boulevard and construct a subterranean garage entrance off North Sepulveda Boulevard.

Although the project would remove restaurants, coffee shops, and businesses that are within walking distance from the surrounding residential community, it would not create new physical barriers that divide the existing community from the adjacent commercial development. The project would not alter existing pedestrian patterns because the two existing public sidewalks would be reconstructed in their existing location with the addition of attractive landscaping and public benches. During construction, a pedestrian detour would ensure that pedestrian access would be unaffected. Also, the reconstruction of driveways would reduce the four potential pedestrian-vehicle conflict areas to one driveway on North Sepulveda Boulevard and one driveway on 5th Street. The impacts of the project would be less than significant.

Mitigation Measures

Mitigation would not be required because impacts relating to physically dividing an established community would be less than significant.

Threshold 2: 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?

Impact LU-2 THE PROPOSED PROJECT WOULD BE CONSISTENT WITH MANHATTAN BEACH ZONING STANDARDS AND WOULD BE PRIMARILY CONSISTENT WITH GENERAL PLAN POLICIES. IMPACTS RELATED TO CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS WOULD BE LESS THAN SIGNIFICANT.

The proposed project involves the construction and operation of an assisted living facility. The site is not located in the Coastal Zone, so the project is not subject to City of Manhattan Beach's Local Coastal Program. As discussed in Section 3, *Air Quality*, of the Initial Study (Appendix A), the project would not conflict with the SCAQMD's 2016 AQMP because population and employment growth associated with the proposed project would be within SCAG regional growth projections, which underlie the air pollutant emission forecasts contained in the 2016 AQMP.

Zoning Consistency Review

The MBMC contains a use category for “Residential Care, General” in §10.08.040, which is defined as:

“Twenty-four (24) hour non-medical care for seven (7) or more persons, including wards of the juvenile court, in need of personal services, supervision, protection, or assistance essential for sustaining the activities of daily living. This classification includes only those services and facilities licensed by the State of California.”

The project meets the definition of “Residential Care, General,” which is included within the list of “Public and Semi-Public Use Classifications” that are permitted in the CG zone with approval of a Use Permit, under §10.16.020. The CG zone is intended to provide for a full range of retail and service businesses, as well as public and semi-public uses, deemed suitable for Manhattan Beach. The proposed project would be allowed if the Manhattan Beach City Council approves a proposed Use Permit with the required Findings that are specified in MBMC §10.84.060.

As shown in Table 4.5-3, the project is generally consistent with the applicable zoning ordinance. The project is designed to conform to applicable setbacks, floor area factor (FAF), and landscaping requirements.

Table 4.5-3 Consistency with Zoning Ordinances

Requirement	Allowed	Proposed
Floor Area Factor (FAF)	1.5:1	1.5:1
Building Height	30 feet above average grade	30 feet above average grade ¹
Setbacks	0 feet, except along residential adjacency ²	Front (Sepulveda): 8'-11" to 68'-10"; Side (Fifth St): 8'-10"; Side (Interior): 11'-9" to 24'-8"; Rear (Interior): 7' to 20'
Minimum Site Landscaping (%)	8%	8%

¹ Maximum building height elevation of 204.65 feet minus the average grade across the site of 175 feet; (MBMC §10.60.050)

² MBMC § 10.16.030 (E) Along a rear property line abutting a residential district, structures shall not intercept a 1:1 or 45 degree daylight plane inclined inward from a height of 15 feet above existing grade at the property line.

General Plan Consistency Review

The proposed project would be subject to policies set forth in the Manhattan Beach General Plan. Consistent with the scope and purpose of this EIR, this discussion focuses on those General Plan goals and policies that relate to avoiding or mitigating environmental impacts, and assesses whether any inconsistency with these goals and policies creates a significant physical impact on the environment. Although the ultimate determination of whether the proposed project is consistent with the General Plan lies with the decision-making bodies for each City (Planning Commission and City Council), this EIR has made a determination as to the project’s consistency/inconsistency with the goals and policies discussed in Table 4.5-4. Only goals and policies relevant and applicable to the proposed project are included. Goals and policies that are redundant between elements are omitted, as are goals and policies that call for City actions that are independent of review and approval or denial of the proposed project. All applicable goals and policies related to noise are discussed in Section 4.6, *Noise*, which directly addresses these goals and policies.

Table 4.5-4 General Plan Policy Consistency

General Plan Goal or Policy	Discussion
Land Use Element	
Goal LU-1: Maintain the low-profile development and small town atmosphere of Manhattan Beach. Policy LU-1.1: Limit the height of new development to three stories where the height limit is thirty feet, or to two stories where the height limit is twenty-six feet. Policy LU-1.2: Require the design of all new construction to utilize notches, balconies, rooflines, open space, setbacks, landscaping, or other architectural details to reduce the bulk of buildings and to add visual interest to the Streetscape.	Generally Consistent. The height limit for the CG district is 30 feet. The site would be excavated to expose three stories above finished grade at the upper elevation (south end) of the site. The garage and first floors would be constructed below the average grade of the site. The project's height complies with the 30 foot height limit (measured from the maximum building height of 204.65 feet minus the average grade across the site of 175 feet) The project includes open space areas such as an auto court/main entry, a pedestrian path, and a main courtyard. The project includes setbacks and landscaping.
Goal LU-2: Encourage the provision and retention of private landscaped open space. Policy LU-2.3: Protect existing mature trees throughout the City, and encourage their replacement with specimen trees whenever they are lost or removed. Policy LU-2.4: Support appropriate stormwater pollution mitigation measures.	Consistent. The project design includes more landscaping coverage than the minimum required for the CG district. A private courtyard area would be provided in the rear (east) for building occupants. Three trees would be removed from the site. However, the project would include 4,293 square feet of landscaping that would include planting of native and adaptive trees, shrubs and groundcover. As discussed in Section 9, <i>Hydrology and Water Quality</i>, of the Initial Study (Appendix A), the project would conform to SWPPP requirements during construction, which include Best Management Practices (BMPs) that prevent construction pollutants from contacting stormwater and reduce erosion impacts on receiving waters. The project developer would also be required to prepare a Standard Urban Storm Water Management Plan (SUSMP), which requires the integration of post-construction BMPs into the site's overall drainage system. This would further reduce the potential for pollutants to enter the storm drain system.
Goal LU-3: Achieve a strong, positive community aesthetic. Policy LU-3.1: Continue to encourage quality design in all new construction. Policy LU-3.2: Promote the use of adopted design guidelines for new construction in Downtown, along Sepulveda Boulevard, and other areas to which guidelines apply. Policy LU-3.5: Ensure that the sign ordinance provides for commercial signage that is attractive, non-intrusive, safe, and consistent with overall city aesthetic goals. Policy LU-3.6: Encourage the beautification of the walkstreets, particularly through the use of landscaping.	Consistent. The building would be constructed in a contemporary beach style, and design elements include warm materials, simulated stone, stained wood siding, lap and shingle siding, stucco and metal roofing. The proposed project design adheres to the adopted Sepulveda Boulevard Design Guidelines regarding setbacks, building height, floor area, and landscaping. Parking and service areas would be screened from views along Sepulveda Blvd. Safe pedestrian and vehicular access would be provided within the site and along Sepulveda Blvd. Pedestrian frontage would include improved landscaping and public benches. Utilities would be undergrounded on the site. Proposed signage (a monument sign for the main entry on Sepulveda Blvd. and directional signage on 5th St.) would be compatible with the project's architectural style and other signage in the area. Signage would fully comply with the sign guidelines set forth in the Sepulveda Boulevard Design Guidelines. The project would add street trees to the public sidewalk along North Sepulveda Blvd. The proposed design would fully comply with the City's established Right-of-Way Permit Standards.

General Plan Goal or Policy	Discussion
Goal LU-4: Preserve the features of each community neighborhood, and develop solutions tailored to each neighborhood’s unique characteristics. Policy LU-4.2: Develop and implement standards for the use of walkstreet encroachment areas and other public right-of-way areas.	Consistent. The proposed addition of street trees in the sidewalk along North Sepulveda Blvd. would fully comply with the City’s established Right-of-Way Permit Standards.
Goal LU-5: Protect residential neighborhoods from the intrusion of inappropriate and incompatible uses. Policy LU-5.1: Require the separation or buffering of residential areas from businesses which produce noise, odors, high traffic volumes, light or glare, and parking through the use of landscaping, setbacks, or other techniques. Policy LU-5.2: Work with all commercial property owners bordering residential areas to mitigate impacts and use appropriate landscaping and buffering of residential neighborhoods. Policy LU-5.3: Consider using discretionary review for any public gathering place or institutional use proposed within or adjacent to a residential neighborhood. Policy LU-5.4: Discourage the outdoor commercial and industrial use of property adjacent to residential use. Policy LU-5.5: Discourage the commercial use of walkstreet encroachment areas.	Consistent. The building design is scaled and articulated to be compatible with adjacent residential uses. Streetscape landscaping and benches along North Sepulveda Blvd. would provide pedestrian friendly scale and presence along the frontage. Proposed project parking and loading activity would be conducted within the enclosed subterranean parking garage to reduce noise and aesthetic concerns. Rooftop equipment would be screened by parapet and/or mansard roof or located in mechanical wells to provide aesthetic screening and noise reduction. Lighting would be low level bollard and wall-mounted with accent lighting to highlight landscape and architectural features. Overall lighting and foot-candles would comply with City lighting requirements. Temporary construction noise may affect adjacent neighborhoods and is addressed in Section 4.6, <i>Noise</i>; however, impacts would be less than significant. The project applicant would seek discretionary review under a Use Permit. Project operations would not include outdoor commercial or industrial uses adjacent to residential use, nor would it include commercial use of walk street encroachment areas¹.
Goal LU-6: Maintain the viability of the commercial areas of Manhattan Beach. Policy LU-6.2: Encourage a diverse mix of businesses that support the local tax base, are beneficial to residents, and support the economic needs of the community. Policy LU-6.3: Recognize the need for a variety of commercial development types and designate areas appropriate for each. Encourage development proposals that meet the intent of these designations.	Consistent. The proposed assisted living facility would provide a care-based facility serving the regional market. The proposed care-based assisted living facility would allow elderly residents of Manhattan Beach to remain in the area close to friends and family when they are no longer physically or mentally able to remain in their own homes. The business service would support the local tax base and support the economic needs of the community, including existing elderly residents and associated project operational service employees. Residential Care, General, is a land use classification that is conditionally permitted in the CG district. The proposed service facility would include 24-hour non-medical care for persons in need of personal services, supervision, protection, or assistance essential for sustaining the activities of daily living, and would employ approximately 77 full-time jobs and 30 part-time jobs. This specific definition would add to the variety of commercial services available in the district and meet the intent of the CG designation.

¹ Walk street encroachment standards are provided in the City’s “Construction and Landscaping on Public Property” document (Manhattan Beach 2004).

General Plan Goal or Policy	Discussion
Goal LU-8: Maintain Sepulveda Boulevard, Rosecrans Avenue, and the commercial areas of Manhattan Village as regional-serving commercial districts. Policy LU-8.1: Ensure that applicable zoning regulations allow for commercial uses that serve a broad market area, including visitor-serving uses.	Consistent. The proposed project would develop an assisted living facility that would provide a regional-service to elderly persons.
Mobility Plan	
Goal I-1: Provide a balanced, safe, and efficient multi-modal transportation system that serves the mobility needs of all community members, including children, seniors, and the disabled. Policy I-1.3: Encourage the development of Transportation Demand Management (TDM) plans for all major developments or facility expansions to encourage ride-sharing and other improvements, thereby reducing vehicle trips. Policy I-2.7: Monitor and minimize traffic, parking and truck loading issues associated with construction activities. Goal I-4: Create well-marked pedestrian and bicycle networks that facilitate these modes of circulation. Policy I-4.5: Incorporate bikeways and pedestrian ways as part of the City's circulation system where safe and appropriate. Policy I-4.6: Encourage features that accommodate the use of bicycles in the design of new development.	Consistent. Eight bicycle parking spaces will be provided on site for guests and employee use. All construction staging of vehicles would occur on-site, and traffic associated with construction is addressed in Section 4.7, <i>Transportation</i>. The project includes pedestrian paths on the site interior and would remove and replace existing sidewalks with improved landscaping and public benches. Additionally, as outlined in the Traffic Impact Study (LLG 2020), the proposed project would generate fewer trips than existing on-site land uses (restaurant, retail, and other uses).
Infrastructure	
Goal I-8: Maintain a sewage system adequate to protect the health and safety of all Manhattan Beach residents and businesses. Policy I-8.2: Ensure that all new development or expansion of existing facilities bears the cost of expanding the sewage disposal system to handle the increased load, which they are expected to handle.	Consistent. The project would conform with City requirements and costs for connecting to the City sewage disposal system.
Goal I-9: Maintain a storm drainage system that adequately protects the health and safety and property of Manhattan Beach residents. Policy I-9.2: Evaluate the impact of all new development and expansion of existing facilities on storm runoff, and ensure that the cost of upgrading existing drainage facilities to handle the additional runoff is paid for by the development which generates it. Policy I-9.4: Encourage the use of site and landscape designs that minimize surface runoff by minimizing the use of concrete and maximizing the use of permeable surface materials.	Consistent. The project would conform to City design requirements for onsite drainage and impacts to the existing stormwater drainage system. The project would provide landscape coverage that would exceed the required minimum area. The project would conform to the City design requirements for onsite drainage and impacts to the existing stormwater drainage system. Additionally, all of Manhattan Beach is outside FEMA flood zones. The site design would address drainage associated with subterranean development.

General Plan Goal or Policy	Discussion
Policy I-9.5: Support appropriate storm water pollution mitigation measures. Policy I-9.6: Discourage new development below street level in order to avoid flooding on public and private property in areas subject to flooding.	
Goal I-10: Underground utility lines throughout the community to the extent that it is economically and practically feasible. Policy I-10.1: Continue to underground utilities in commercial streets using Rule 20A and other available funds. Policy I-10.2: Require new commercial and industrial developments to underground utility lines or pay an in-lieu fee, as appropriate.	Consistent. The project would include undergrounding of site utility lines.
Goal I-12: Protect the quality of the environment by managing the solid waste generated in the community. Policy I-12.1: Encourage maximum recycling in all sectors of the community, including residential, commercial, industrial, institutional, and the construction industry. Policy I-12.3: Encourage the maximum diversion of construction and demolition materials.	Consistent. The project would meet Title 24 standards, which require 65 percent diversion of construction and demolition waste. Additionally, the project would be required to comply with Assembly Bill 341, which sets a statewide 75 percent diversion goal and requires mandatory commercial recycling.
Housing	
Goal II: Provide a variety of housing opportunities for all segments of the community commensurate with the City's needs, including various economic segments and special needs groups. Program 7b: Provide for the housing needs of seniors. Program 7c: Provide for the special needs of seniors so that they may remain in the community.	Consistent. The project would provide a facility for assistance with activities of daily living for seniors in the community.
Goal IV: Encourage the conservation of energy in housing. Policy 11: Reduce energy loss due to inferior construction/development techniques. Program 11a. Enforce green building techniques.	Consistent. The project would comply with the California Green Building Standards Code (CalGreen) and would meet Title 24 requirements. Cal-Green requirements include infrastructure for future photovoltaic panels. Landscaping would include in-line drip tubing irrigation to eliminate evaporation or wasted water from overspray onto buildings and hardscape. The project would also include irrigation valve areas that respond to soil types, grading, exposures, and hydrozones.
Community Resources	
Goal CR-4: Preserve the existing landscape resources in the City, and encourage the provision of additional landscaping. Policy CR-4.1: Protect existing mature trees throughout the City and encourage their replacement with specimen trees whenever they are lost or removed.	Consistent. The project would landscape approximately 8% of the site, which would be above the required 8%, and an increase over the minimal existing site landscape development. Although three trees would be removed, the trees are not protected and the project would include of 4,293 square feet of landscaping that would consist of native and adaptive trees, shrubs, and groundcovers.

General Plan Goal or Policy	Discussion
Policy CR-4.3: Recognize that landscaping, and particularly trees, provide valuable protection against air pollution, noise, soil erosion, excessive heat, and water runoff, and that they promote a healthy environment.	
Goal CR-5: Conserve and protect the remaining natural resources in Manhattan Beach. Policy CR-5.3: Encourage water conservation, including landscaping with drought-tolerant plants, use of reclaimed water, and recycling of cooling system water, in all development. Policy CR-5.7: Encourage the use of energy-saving designs and devices in all new construction and reconstruction. Policy CR-5.8: Encourage utilization of “green” approaches to building design and construction, including use of environmentally friendly interior improvements. Policy CR-5.10 Encourage and support the use of alternative fuel vehicles, including support of charging or “fueling” facilities. Policy CR-5.11: Support sustainable building Practices.	Consistent. Landscape planting would include native and adaptive species. Irrigation design will employ the latest methods to conserve water, including: smart irrigation controller with weather tracking technology, in-line drip tubing irrigation to eliminate evaporation or wasted water from overspray onto buildings and hardscape, irrigation valve areas that respond to soil types, grading, exposures and hydrozones, landscape water use calculations prepared in compliance with City and State requirements demonstrating compliance with water conservation requirements. The project would comply with the CalGreen and the project would exceed Title 24 requirements. Low flow plumbing fixtures (i.e., toilets, lavatory faucets, shower heads) would be installed. Infrastructure for photovoltaic panels and 4 future charging stations would be installed. Courtyards would be paved with pre-cast concrete pavers for more permeability of hardscape.
Community Safety	
Goal CS-1: Minimize the risks to public health, safety, and welfare resulting from natural and human-caused hazards. Policy CS-1.5: Require that new developments minimize stormwater and urban runoff into drainage facilities by incorporating design features such as detention basins, on-site water features, or other strategies.	Consistent. As discussed in Section 9, <i>Hydrology and Water Quality</i>, of the Initial Study (Appendix A), the project site is located in an urbanized area and is almost entirely covered with impervious surfaces, which would remain so under the proposed project. The project developer would also be required to prepare an SUSMP, which requires the integration of post-construction BMPs into the site’s overall drainage system. This would further minimize off-site runoff.
Goal CS-2: Protect residents from hazardous materials and the hazards associated with the transport of such materials. Policy CS-2.5: Require all businesses located in the City to maintain required Fire Department permits and file a list of the hazardous chemicals that they use with the Fire Department’s Certified Unified Program Agency (CUPA), and identify the areas where they are used or stored so that, should an emergency arise, emergency personnel will be able to respond appropriately.	Consistent. Project operations are not expected to utilize large quantities of hazardous materials. Nevertheless, both project construction and operations would conform to all City and State requirements for the identification of hazardous chemicals.
¹ Up to a 20% modification of site development standards or zoning code requirements; including height (MBMC §10.94.040.C.1.e.) ² MBMC § 10.16.030 (E) Along a rear property line abutting a residential district, structures shall not intercept a 1:1 or 45 degree daylight plane inclined inward from a height of 15 feet above existing grade at the property line.	

Overall Impact

Based on the above, the proposed project would be generally consistent with the Manhattan Beach General Plan, Planning and Zoning Ordinance, and the Sepulveda Boulevard Development Guide. Although the General Plan Land Use Element narrative about Sepulveda Boulevard does not explicitly mention assisted living facilities, it does identify the area as a major commercial corridor with primarily regional-serving and large-scale businesses. The proposed project would have commercial characteristics that satisfy this intent. The project would create commercial activity in the sense that the senior occupants of the facility would be paying for a service and the facility operations would create employment positions that would be associated with the service. The service is known as “assistance with activities of daily living.” The service would provide current and future residents with the opportunity to receive 24-hour non-medical care within the region of Manhattan Beach. The General Plan narrative also places importance on ensuring quality design that would avoid monotonous and overbearing buildings, safeguarding pedestrian safety and access, and promoting compatibility with residential neighborhoods. The Sepulveda Boulevard Development Guide provides standards to be used in addressing these issues. The proposed project design adheres to the guidance of the Sepulveda Boulevard Development Guide by providing an articulated building façade that incorporates local architecture vernacular and by maintaining the existing sidewalk and providing safe internal pedestrian pathways. Therefore, there would be no significant land use impact as a result of the proposed project.

c. Cumulative Impacts

As listed in Table 3-1 in Section 3, *Environmental Setting*, there are several other planned or pending projects in Manhattan Beach, Hermosa Beach, El Segundo, and Redondo Beach. None of the projects require an amendment to the Manhattan Beach General Plan. Therefore, the projects would be consistent with the goals and policies of the Manhattan Beach General Plan and would have no cumulatively-considerable impacts related to consistency with the Manhattan Beach General Plan. The proposed project does not include changes to the General Plan or the Planning and Zoning Code. All project components have been determined to be consistent with the General Plan and Zoning. The project’s contribution to cumulative land use impacts would not be cumulatively-considerable.

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4.6 Noise

This section evaluates the proposed project's potential impact to local noise conditions. Both temporary construction noise and long-term noise generated by the proposed project are evaluated.

4.6.1 Setting

a. Fundamentals of Noise

Noise is defined in this analysis as unwanted sound that disturbs human activity. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to make evaluation consistent with human hearing response.

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive. Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. In general, a 3 dBA change in the ambient noise level is noticeable, while 1 to 2 dBA changes generally are not perceived.

Noise levels from point sources, such as those from individual pieces of machinery, typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from the noise source. Noise levels from lightly traveled roads typically attenuate at a rate of about 4.5 dBA per doubling of distance. Noise levels from heavily traveled roads typically attenuate at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receiver and the noise source reduces noise levels by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which residences in California are constructed generally provides a reduction of exterior-to-interior noise levels of approximately 20 to 25 dBA with closed windows (Federal Transit Administration [FTA] 2018).

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important because sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest sound pressure level, and L_{min} is the lowest sound pressure level within the measurement period.

The time period in which noise occurs is also important since nighttime noise tends to be more disturbing for people than daytime noise. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a 10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.), or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a 10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. Noise levels described by L_{dn} and CNEL typically do not differ by more than 1 dB.

The relationship between peak hourly L_{eq} values and associated L_{dn} /CNEL values depends on the distribution of traffic over the entire day. There is no precise way to convert a peak hour L_{eq} to L_{dn} or

CNEL. However, in urban areas near heavy traffic, the peak hour L_{eq} is typically 2 to 4 dBA lower than the daily L_{dn} /CNEL. In less heavily developed areas, such as suburban areas, the peak hour L_{eq} is often roughly equal to the daily L_{dn} /CNEL. For rural areas with little nighttime traffic, the peak hour L_{eq} will often be 3 to 4 dBA greater than the daily L_{dn} /CNEL value (California State Water Resources Control Board [SWRCB] 1999). The project site is located in an urban area; therefore, the L_{dn} /CNEL in the area would be roughly 2 to 4 dBA higher than the measured L_{eq} .

b. Fundamentals of Groundborne Vibration

Vibration refers to groundborne noise and perceptible motion. Vibrating objects in contact with the ground radiate energy through that medium. If a vibrating object is large enough and/or close enough to the observer, its vibrations are perceptible. The rumbling sound caused by the vibration of structures is called groundborne noise. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible, but without the effects associated with the shaking of a building, there is less adverse reaction.

Typical outdoor sources of vibration waves that propagate through the ground and create perceptible ground-borne vibration in nearby buildings include construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is fairly smooth, vibration from rubber-tired traffic is rarely perceptible (FTA 2018).

Ground-borne vibration related to human annoyance is generally expressed in vibration decibels (VdB). The background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. A vibration velocity level of 85 VdB would be an acceptable level only if there are an infrequent number of events per day. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in typical buildings (FTA 2018).

c. Sensitive Receivers in the Project Area

The City of Manhattan Beach General Plan Noise Element establishes noise standards for a variety of land use and development types. The Noise Element defines noise-sensitive land uses as activities that are interrupted by noise, including residences, schools, hospitals, recreation areas, and public assembly places (including auditoriums, concert halls, and amphitheaters). Sensitive receivers in the project vicinity include single-family residences located immediately adjacent to the project site's eastern boundary (east and southeast of the site) and approximately 40 feet to the northeast across 5th Street. The nearest commercial uses are located approximately 25 feet south and approximately 40 feet north of the project site.

d. Existing Project Area Noise Levels

The project site is developed with existing commercial uses within three structures. The primary ambient noise source in the project site vicinity and in the surrounding area is vehicular traffic on North Sepulveda Boulevard. Along the eastern boundary of the project site, a wall that blocks line-of-sight between the adjacent residences and the project site serves to attenuate noise from existing land uses as well as traffic noise from North Sepulveda Boulevard at those residences. Motor vehicle noise, primarily from cars and trucks, is of concern because it is characterized by a

high number of individual events, which often create sustained noise levels. Ambient noise levels are generally highest during the daytime and rush hour unless congestion substantially slows speeds. Other sources of noise include rooftop-mounted heating, ventilation, and air conditioning (HVAC) equipment, parking lot activities, conversations among patrons, and trash collection and delivery vehicles.

Three 15-minute sound level measurements were collected on January 11, 2019 during the morning peak hour between 7:58 a.m. and 8:58 a.m. using an ANSI Type 2 integrating sound level meter. These noise measurements provide an estimate of the general noise environment on and around the project site, especially near existing noise-sensitive residences and along roadways. Noise Measurement (NM) 1 was taken on the northern boundary of the project site and is representative of existing ambient noise levels along 5th Street. NM 2 was taken on the western boundary of the project site and is representative of existing ambient noise levels along North Sepulveda Boulevard. NM 3 was taken at the end of the cul-de-sac on 3rd Street approximately 50 feet east of the eastern project boundary.

Figure 4.6-1 shows the noise measurement locations. The noise monitoring results are provided in Appendix E, and the findings are summarized in Table 4.6-1. Average noise levels are provided in L_{eq} for a 15-minute measurement period ($L_{eq[15]}$); L_{min} and L_{max} are also provided.

Table 4.6-1 Project Site Vicinity Sound Level Monitoring Results

Measurement Location	Measurement Location	Sample Times	Primary Noise Source	Approximate Distance to Primary Noise Source	$L_{eq[15]}$ (dBA) ¹	L_{min} (dBA)	L_{max} (dBA)
1	Along the northern frontage of the project site on 5th Street	8:20 – 8:35 a.m.	Traffic on 5th Street	15 feet ²	57.5	40.3	76.4
2	Along the western frontage of the project site on North Sepulveda Boulevard	7:58 – 8:13 a.m.	Traffic on North Sepulveda Boulevard	40 feet ³	73.0	53.5	85.0
3	At the end of the 3rd Street cul-de-sac located 50 feet east of the project site	8:43 – 8:58 a.m.	Traffic on 3rd Street and North Sepulveda Boulevard	25 feet ⁴	46.4 ⁵	40.0	92.7

See Appendix E for noise monitoring data.

¹ L_{eq} was measured over a 15-minute period ($L_{eq[15]}$).

² Distance from centerline of 5th Street.

³ Distance from centerline of North Sepulveda Boulevard.

⁴ Distance to center of 3rd Street cul-de-sac turnaround.

⁵ Between 8:48 and 8:50 a.m., a dump truck drove down the street and made a U-turn in the cul-de-sac. This activity is considered an unusual activity that is not representative of normal noise sources in this neighborhood; therefore, measurements taken during the dump truck pass-by were removed from the average noise level calculations to prevent an overestimate of ambient noise conditions.

Source: Rincon Consultants, Inc. field visit on January 11, 2019 using ANSI Type 2 Integrating sound level meter

Figure 4.6-1 Sound Level Measurement and Sensitive Receiver Locations



Imagery provided by Los Angeles County, 2013.

Fig. 4.6-1 Noise Measurement Locations

e. Regulatory Setting

State

California Government Code Section 65302 requires each local government entity to implement a noise element as part of its general plan. In addition, the Governor's Office of Planning and Research (OPR) has developed guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure, similar to that established by the City of Manhattan Beach.

State noise insulation standards, contained in California Code of Regulations (CCR) Title 24, Part 2, Section 1206.4, require that interior noise not exceed 45 CNEL in any habitable room.

City of Manhattan Beach General Plan

The City of Manhattan Beach General Plan Noise Element incorporates policies and standards for acceptable noise levels and establishes noise/land use compatibility guidelines based on cumulative noise criteria for outdoor noise. These guidelines are used to achieve acceptable noise levels in new developments and to review development proposals and determine whether mitigation measures are necessary to avoid or minimize noise impacts that new projects may have on established land uses. The General Plan Noise Element includes noise standards for various land use categories in the City, as shown in Table 4.6-2.

The Noise Element also contains the following goals and policies related to noise regulation that are applicable to the proposed project:

Goal N-1. Provide for measures to reduce noise impacts from transportation noise sources.

- **Policy N-1.1.** Use proven methods of reducing the transmission of traffic noise onto adjacent noise-sensitive land uses (e.g., residences, schools, medical facilities).

Goal N-2. Incorporate noise considerations into land use planning decisions.

- **Policy N-2.2.** Ensure acceptable noise levels near residences, schools, medical facilities, and other noise-sensitive areas.
- **Policy N-2.4.** Encourage acoustical design in new construction.
- **Policy N-2.5.** Require that the potential for noise be considered when approving new development to reduce the possibility of adverse effects related to noise generated by new development, as well as impacts from surrounding noise generators on the new development.

Goal N-3. Minimize the impact of non-transportation noise sources.

- **Policy N-3.3.** Minimize impacts associated with single-event noise activities.
- **Policy N-3.6.** Monitor and minimize noise impacts associated with construction activities on residential neighborhoods.

Table 4.6-2 Land Use Noise Compatibility Matrix

Land Use Categories	Community Noise Equivalent Levels (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential (Low-Density, Single-Family, Duplex, Mobile Homes)	< 60	60-65	65-75	75+
Residential (Multiple Family)	< 60	60-65	65-75	75+
Transient Lodging (Motels, Hotels)	< 60	60-70	70-80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	< 60	60-70	70-80	80+
Auditoriums, Concert Halls, Amphitheaters	N/A	< 65	N/A	65+
Sports Arenas, Outdoor Spectator Sports	N/A	< 70	N/A	70+
Playgrounds, Neighborhood Parks	< 70	N/A	70-75	75+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	< 70	N/A	70-80	80+
Office Buildings, Business Commercial and Professional	< 65	65-75	75+	N/A
Industrial, Manufacturing, Utilities, Agriculture	< 70	70-80	80+	N/A

Note: N/A = Not Applicable

¹ Normally Acceptable: Specified land use is satisfactory, based on the assumption that any buildings are of normal conventional construction without any special noise insulation requirements.

² Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

³ Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

⁴ Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: City of Manhattan Beach 2003, Figure N-2

City of Manhattan Beach Municipal Code

Chapters 5.48 and 9.44 of the Manhattan Beach Municipal Code (MBMC) contain the following regulations for controlling noise within the city that would apply to the project:

Section 5.48.100(B) Domestic Power Tools

It is prohibited for any person to operate, or permit the operation of any internal combustion-powered lawn mower or other power-operated lawn maintenance tool within the City, except during the hours of 8:00 a.m. to 8:00 p.m., Monday through Friday, and except during the hours of 9:00 a.m. to 8:00 p.m. on Saturday, Sunday, and City-specified holidays.

Section 5.48.110 Refuse Collection Vehicles

It is prohibited for any person to operate any refuse collection vehicle except between the hours of 7:30 a.m. and 6:00 p.m. in a residential area; except that the City's refuse collection contractor shall be permitted to operate during the hours specified in the City-approved contract, provided that noise levels do not exceed the exterior noise standards described in MBMC Section 5.48.160.

Section 5.48.120 Amplified Sounds – Electronic Devices

It is prohibited for any person to permit the transmission of, or cause to be transmitted, any amplified sound on any public street, sidewalk, alley, right-of-way, park, or any other public place or property which sound is audible at 50 feet. This section shall not apply to any noncommercial public speaking, public assembly, or other activity for which a permit has been issued.

Section 5.48.140 Noise Disturbances

Notwithstanding any other provisions of this chapter and in addition thereto, it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness.

Section 5.48.160 Exterior Noise Standards

Exterior noise standards apply to all receiver properties within a designated noise zone. These standards are not applicable to construction noise per MBMC Section 5.48.250 or to roadway noise. No person shall operate or cause to be operated, any source of noise at any location within the City, or 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 other property to exceed the equivalent noise level (LEE¹) standards in Table 4.6-3 or the noise level (LNG²) standards in Table 4.6-4, either of which may be utilized at the option of the investigating City employee or contractor.

Table 4.6-3 Exterior Equivalent Noise Standards (LEE Method)

Designated Land Use or Zoning Classification	Time of Day	Exterior A-Weighted Noise Level (dBA L _{eq}) ¹
Residential	7:00 a.m. – 10:00 p.m.	55
	10:00 p.m. – 7:00 a.m.	50
Commercial	7:00 a.m. – 10:00 p.m.	70
	10:00 p.m. – 7:00 a.m.	65
Industrial	7:00 a.m. – 10:00 p.m.	75
	10:00 p.m. – 7:00 a.m.	75

¹ If the ambient noise level exceeds this level, then the ambient noise level becomes the exterior noise standard.

Source: City of Manhattan Beach Municipal Code Section 5.48.160, Table 6

¹ Per the MBMC, the equivalent noise level, or LEE, is a constant noise level that contains the same acoustic energy as the actual time-varying A-weighted noise level.

² Per the MBMC, the noise level, or LNG, is the noise level expressed in decibels which exceeds the specified value as a percentage of total time measured.

Table 4.6-4 Exterior Equivalent Noise Standards (LNG Method)

Designated Land Use or Zoning Classification	Time of Day	Exterior A-Weighted Noise Level (dBA) ¹				
		L ₅₀ ²	L ₂₅ ³	L ₈ ⁴	L ₂ ⁵	L ₀ ⁶
Residential	7:00 a.m. – 10:00 p.m.	50	55	60	65	70
	10:00 p.m. – 7:00 a.m.	45	50	55	60	65
Commercial	7:00 a.m. – 10:00 p.m.	65	70	75	80	85
	10:00 p.m. – 7:00 a.m.	50	65	70	75	80
Industrial	7:00 a.m. – 10:00 p.m.	70	75	80	85	90
	10:00 p.m. – 7:00 a.m.	70	75	80	85	90

¹If the ambient noise level exceeds these levels, then the ambient noise level becomes the exterior noise standard.

² The noise level that shall not be exceeded for more than 30 minutes in an hour.

³ The noise level that shall not be exceeded for more than 15 minutes in an hour.

⁴ The noise level that shall not be exceeded for more than 5 minutes in an hour.

⁵ The noise level that shall not be exceeded for more than 1 minute in an hour.

⁶ The noise level that shall not be exceeded for any period of time.

Source: MBMC Section 5.48.160, Tables 1 through 5

Section 5.48.170 Interior Noise Standards

Interior noise levels for common residential dwellings may not exceed 45 dB between 7:00 a.m. and 10:00 p.m. or 40 dB between 10:00 p.m. and 7:00 a.m. for a cumulative period of more than 5 minutes per hour.

Section 5.48.180 Emergency Exemptions

The emission of noise for the purpose of alerting persons to the existence of an emergency or the emission of noises in the performance of emergency work is exempted from the provisions of MBMC Chapter 5.48.

Section 5.48.190 Warning Devices

Warning devices necessary for the protection of public safety, as for example fire, police, and ambulance sirens, including the testing of such devices, are exempted from the provisions of MBMC Chapter 5.48.

Section 5.48.250 Construction Activity

Construction activity as defined in Section 9.44.010 is exempt from the provisions of this chapter (MBMC Chapter 5.48) except as provided in Chapter 9.44.

Section 5.48.330 Mechanical Blowers

The use of mechanical blowers for any purpose is prohibited.

Section 9.44.020(F) General Requirements for Construction Activities

No audio devices shall be audible beyond the construction site property line.

Section 9.44.030 Construction Hours and Prohibited Days

Construction activity shall occur only between 7:30 a.m. to 6:00 p.m. on weekdays and between 9:00 a.m. to 6:00 p.m. on Saturdays. No construction is allowed to occur on Sundays or on the 11 City-recognized holidays. The Director of Community Development may modify the hours for interior construction activities on commercial properties under limited circumstances. The City Council may modify the hours for all construction activity under limited circumstances. Both the City Council and the Director of Community Development must consider the noise disturbance criteria in MBMC Section 5.48.140 before modifying construction hours. Conditions may be imposed on the construction activity to mitigate or eliminate any potential adverse impacts. The presence of workers or delivery trucks at the site of construction, even if no actual work or unloading is being done, constitutes construction activity for purposes of this section. The presence of equipment, tools or supplies, vehicles being started, idled or unloaded and loud talking at the site of construction activity constitutes construction activity for purposes of this section.

4.6.2 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with operation of the project. The potential for short-term construction and long-term operational noise impacts was assessed at noise-sensitive receivers closest to the project site (i.e., the residences located to the east and northeast).

Construction Noise

For purposes of construction noise assessment, construction equipment can be considered to operate in two modes, stationary and mobile. As a general rule, stationary equipment operates in one location for one or more days at a time, with either a fixed-power operation, such as, pumps, generators, and compressors, or a variable noise operation, such as rock drills and pavement breakers. Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts for mobile construction equipment are assessed from the center of the equipment activity area (i.e., construction site). Noise generated by mobile construction equipment is estimated from the center of the construction site because this equipment travels throughout the site and the distance to the center represents the average distance construction equipment would be from nearby receivers during any given day.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2006).

The nearest sensitive receivers include residences located to the east, southeast, and northeast. Residences to the east share a property line with the project site, are not separated from the project site by a roadway and would be shielded from construction noise by existing walls. Construction noise levels were modeled at the property line for these residential receivers because noise levels would be similar or lower at all other adjacent properties. The wall was taken into consideration by

applying a noise attenuation of 6 dBA.³ Given the size of the project site and configuration of proposed site improvements, the center of construction activities would occur approximately 75 feet from the nearest adjacent residential property lines.

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels. The maximum hourly L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase (FHWA 2006). In typical construction projects, grading activities generate the highest noise levels since grading involves the largest equipment.

Heavy construction equipment would include bulldozers, excavators, dump trucks, front-end loaders, pavers, and stationary equipment, such as pile drivers. It is assumed that diesel engines would power all construction equipment. For assessment purposes and to be conservative, the loudest hour has been used for this assessment. Noise levels are based on a drill rig, excavator, and loader operating simultaneously.⁴

Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment and 3 dBA per doubling of distance for mobile equipment. The model does not take into consideration topographic variation or specific staging locations⁵ of construction equipment; therefore, this analysis represents a conservative evaluation of anticipated construction noise levels. Construction equipment modeled is based on information provided by the applicant. Construction noise was modeled at a distance of 75 feet (the distance from the center of the project site to the nearest residential receiver).

Vibration

Construction vibration levels were calculated at the receivers nearest to the project site to determine whether project construction would generate vibration levels that would cause human annoyance or physical damage to nearby structures. Vibration levels were estimated for construction equipment expected to be used during project construction and were based on the vibration source levels for construction equipment from the FTA *Transit Noise and Vibration Assessment* (2018). Construction vibration levels were modeled at distances of 25 feet (the distance between the location of on-site vibratory equipment, considering site constraints, and the nearest structure).

Operational vibration impacts were estimated by completing a screening analysis. The proposed project would not include stationary sources of vibration. According to the California Department of Transportation's (Caltrans) guidance manual, perceivable vibration caused by mobile sources is normally limited to heavy truck traffic (Caltrans 2020).

³ As described in *Section 4.6.1 Setting a. Fundamentals of Noise*, a solid wall or berm reduces noise levels by 5 to 10 dBA.

⁴ Machinery informed by applicant-provided construction equipment list.

⁵ Intervening topography (such as hills or berms) or other barriers (such as existing buildings, walls, or vegetation) could result in a higher noise attenuation rate because these elements would block direct line-of-sight between noise-generating construction equipment and the nearest receivers.

On-Site Operational Noise

Operational noise from the project may be periodically audible at adjacent properties. Potential sources of noise associated with the project site include trash hauling and delivery trucks, parking activities, recreational activities associated with the outdoor courtyard and pedestrian path, and ambulance calls. Noise associated with parking activities in the subterranean parking garage would not be audible off-site because the garage would be enclosed underground. HVAC and other mechanical equipment would be located in enclosed rooms in the underground garage and therefore would not be audible off-site. Operational noise levels associated with the project at nearby sensitive noise receivers were calculated using the standard noise attenuation rate of 6 dBA per doubling of distance (line-of-sight method of sound attenuation for point sources of noise), accounting for distance to nearby receivers.

Off-site Traffic Noise

To determine project impacts to roadway noise, the increase in vehicle trips attributable to the project was compared to existing traffic conditions to determine the increase in noise associated with vehicles using project area roadways. Roadway noise was modeled using relative increase calculations under existing, existing plus project, future, and future plus project conditions along North Sepulveda Boulevard and 5th Street based on traffic counts in the Traffic Impact Study prepared by Linscott, Law & Greenspan, Engineers (LLG). These locations were selected for modeling because they would be the most affected by project-generated traffic, capture potential roadway noise impacts to residential uses, and existing and future average daily traffic (ADT) volumes for these locations are provided in the Traffic Impact Study prepared for the project.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, potentially significant impacts would occur if the project would result in any of the following:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Generation of excessive ground-borne vibration or ground-borne noise levels; or
3. 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, exposure of people residing or working in the project area to excessive noise levels.

As discussed in the Initial Study (Appendix A), the project site is not subject to an airport land use plan or within two miles of a public airport or public use airport. The nearest airport is Los Angeles International Airport, located approximately four miles to the north. No impact would occur; therefore, Threshold 3 is not discussed further in this section.

Construction Noise

The City of Manhattan Beach has not adopted specific quantitative standards or limits related to construction noise. MBMC Section 5.48.160 exempts construction activities from the exterior noise standards contained in MBMC Chapter 5.48 provided that such activities occur in accordance with the standards in Chapter 9.44, which restrict construction hours and the use of audio devices. Although construction activity is exempt from the noise standards shown above, for purposes of this

analysis, the FTA Transit Noise and Vibration Impact Assessment (FTA 2018) criteria is used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period. Therefore, construction noise would be significant if it exceeds a daytime threshold of 80 dBA L_{eq} for an 8-hour period.

Vibration

The City of Manhattan Beach has not adopted a significance threshold to assess vibration impacts during construction and operation. Therefore, the FTA guidelines set forth in the FTA Transit Noise and Vibration Assessment (2018), are used to evaluate potential impacts related to construction vibration for both potential building damage and human annoyance. The FTA recommends vibration impact thresholds to determine whether ground-borne vibration would be “excessive.” According to the FTA, ground-borne vibration impact criteria for residential receivers during nighttime hours are 72 VdB for frequent events, 75 VdB for occasional events, and 80 VdB for infrequent events; and during daytime hours is 78 VdB for residential receivers. However, the vibration level threshold at which transient vibration sources (such as construction equipment) are considered to be distinctly perceptible is 94 VdB (Caltrans 2020).⁶ This analysis uses the distinctly perceptible threshold for purposes of assessing construction vibration impacts; if vibration levels are greater than 94 VdB at the nearest sensitive receiver, impacts would be significant. With regard to ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage typical buildings (FTA 2018). The threshold for “frequent events,” which the FTA defines as vibration events occurring more than 70 times per day, are considered appropriate because of the scale and duration of proposed construction activity.

On-Site Operational Noise

Operational noise would result in a significant impact if the project would cause the ambient noise level measured at nearby residential and commercial receivers to exceed the exterior and interior noise level standards specified in MBMC Sections 5.48.160 and 5.48.170, respectively. For the purposes of this analysis, the LEE method for exterior noise standards is utilized. The existing ambient noise level at the residential receiver on 5th Street of 58 dBA L_{eq} (see Table 4.6-1) exceeds the exterior noise standard of 55 dBA L_{eq} for residential land uses as specified in Table 4.6-3. In addition, the existing ambient noise level at the nearest commercial receivers of 73 dBA L_{eq} along North Sepulveda Boulevard (see Table 4.6-1) exceed the exterior noise standard of 70 dBA L_{eq} for commercial land uses as specified in Table 4.6-3. Therefore, in accordance with MBMC Section 5.48.160(B), the exterior noise standards for these receivers were adjusted to match the existing ambient noise level. As a result, operational noise would also result in a significant impact if the project would cause ambient noise levels to exceed:

- 58 dBA L_{eq} at residences along 5th Street;
- 55 dBA L_{eq} at residences along 3rd Street; or
- 73 dBA L_{eq} at adjacent commercial properties.

⁶ 94 VdB is approximately equivalent to the 0.24 inches per second value provided in the Caltrans document for transient vibration (Caltrans 2020: Table 6).

Off-site Traffic Noise

For traffic-related noise, impacts would be potentially significant if project-generated traffic would result in the exposure of sensitive receivers to an unacceptable increase in noise levels during construction or operation of the project. The FTA has recommended noise criteria related to traffic-generated noise. Recommendations contained in the FTA's *Transit Noise and Vibration Impact Assessment* can be used as guidance to determine whether or not a change in traffic would result in a substantial increase in noise (FTA 2018). Under FTA criteria, a substantial increase in noise exposure is determined based on the existing ambient noise exposure, such that higher ambient noise levels have a lower threshold for a substantial noise exposure increase. Table 4.6-5 shows the FTA standards used to evaluate traffic noise generated by the project. Based on these standards, residences along 5th Street and 3rd Street would experience a significant traffic noise impact if an increase of 3 dBA L_{eq} and 7 dBA L_{eq} of noise exposure were to occur, respectively.

Table 4.6-5 Significance Thresholds for Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (dBA L_{dn} or L_{eq})	Noise Exposure Increase Significance Threshold (dBA L_{dn} or L_{eq})
45-50	7
50-55	5
55-60	3
60-65	2
65-75	1
75+	0

Source: FTA 2018

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact N-1 PROJECT CONSTRUCTION WOULD EXPOSE NEARBY RECEIVERS TO A TEMPORARY INCREASE IN NOISE. HOWEVER, NOISE LEVELS DURING CONSTRUCTION WOULD BE LIMITED TO THE DAYTIME PURSUANT TO THE CITY'S MUNICIPAL CODE, AND CONSTRUCTION NOISE LEVELS WOULD BE TEMPORARY AND INTERMITTENT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would generate temporary construction noise during demolition, site preparation, grading, building construction, paving, and architectural coating activities. Construction is anticipated to last approximately 20 months. Pursuant to MBMC Section 9.44.030, construction would only occur between the hours of 7:30 a.m. to 6:00 p.m. on weekdays and between 9:00 a.m. to 6:00 p.m. on Saturdays. No construction would occur on Sundays or City-recognized holidays.

Using the RCNM to estimate noise associated with construction equipment, maximum hourly noise levels are calculated to be 78 dBA L_{eq} at 75 feet, as measured from the center of the construction

site or activity.⁷ RCNM calculations are included in Appendix F. The existing wall along the eastern project site boundary would provide approximately 6 dBA of noise attenuation (calculated via barrier modeling), resulting in construction noise levels of 72 dBA at the nearest residential receiver.⁸ This would not exceed the FTA construction noise threshold of 80 dBA L_{eq} . Therefore, on-site construction-related noise impacts would be less than significant.

Mitigation Measures

The project is required to comply with MBMC requirements, including limitations on construction hours. Mitigation would not be required because impacts from construction noise would be less than significant.

Impact N-2 PROJECT OPERATION WOULD EXPOSE NEARBY RECEIVERS TO A PERMANENT INCREASE IN NOISE. HOWEVER, NOISE LEVELS DURING OPERATION WOULD BE SIMILAR TO THOSE OF THE ADJACENT SINGLE-FAMILY RESIDENCES, AND PARKING LOT AND MECHANICAL EQUIPMENT NOISE WOULD BE SHIELDED BY ITS PLACEMENT IN THE SUBTERRANEAN STRUCTURE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Operation of the proposed project would generate noise from the proposed assisted living facility, including noise associated with mechanical equipment, parking, loading dock areas, and outdoor use areas. Impacts related to these noise-generating uses are discussed below.

Mechanical Equipment

Mechanical equipment on the project site, such as HVAC equipment, would be installed in enclosed rooms in the subterranean garage and would not be audible at adjacent receivers.

Outdoor Use Areas

The proposed project includes an outdoor courtyard in the eastern portion of the project site and a pedestrian path along the east, south, and west sides of the building. These outdoor use areas would be primarily utilized by residents for activities that generate low noise levels, such as conversing and walking. Noise associated with these activities would be similar to that generated by existing single-family residences in the vicinity and would result in a negligible change to existing noise levels. Noise from conversation would be an intermittent and temporary noise source, which would typically be limited to the daytime, outside of noise-sensitive hours of sleep. Moreover, noise generated at the outdoor courtyard would be subject to MBMC Section 5.48.140, which prohibits the creation of nuisance noise, and MBMC Section 5.48.120, which prohibits the transmission of amplified sounds on any public street audible at 50 feet. Maintenance of the outdoor courtyard, pedestrian path, and other landscaped areas would be subject to MBMC Sections 5.48.100 and 5.48.330, which place restrictions on the use of landscaping equipment to prevent adverse noise impacts. Noise from landscaping activities would be similar to that generated by existing single-family residential neighborhoods to the east and northeast. The existing wall along the eastern project site boundary would remain in place throughout construction and operation of the project. Therefore, noise from outdoor use areas and landscaping activities would not be expected to

⁷ As described above in Section 4.6.2(a), *Methodology*, noise generated by mobile construction equipment is estimated from the center of the construction site because this equipment travels throughout the site and the center represents the average distance construction equipment would be from nearby receivers during any given day.

⁸ Even when construction equipment is closer to the nearest residential receivers, such as at a distance of 35 feet, construction noise would be less than 79 dBA, which remains below the FTA threshold of 80 dBA.

exceed the operational noise thresholds of 58 dBA L_{eq} at residences along 5th Street, 55 dBA L_{eq} at residences along 3rd Street, or 73 dBA L_{eq} at adjacent commercial properties.

Parking Areas

Operational noises related to the proposed on-site subterranean parking structure and automobile court would include intermittent noise events such as door slamming and vehicle engine start-ups. Parking noise events are infrequent, instantaneous, and do not substantially increase ambient noise levels. Furthermore, patrons of the existing commercial uses currently generate parking noise at the existing surface parking lot throughout the day and evening. The proposed subterranean parking structure would reduce noise from parking activity at the project site by enclosing the parking lot underground. The automobile court, which would be accessed from a driveway on North Sepulveda Boulevard, would be shielded from sensitive receivers to the east and northeast by the proposed building structure. As a result, parking activity would generate noise that is similar to or less than existing ambient noise levels without the project.

Loading Dock Areas

Noise from the use of the two loading dock spaces at the northeast corner of the site would be shielded by the proposed structure, as these spaces would be located interior to the underground garage. Because these spaces would be located in the subterranean garage, noise from loading activities would not be audible at adjacent receivers. Vehicle noise from traffic on 5th Street is described under Impact N-3, below, and includes delivery vehicle trips to the loading area.

Siren Noise

Senior living facilities typically generate a higher rate of ambulance calls than other residential and commercial land uses. Ambulance sirens are not generally used for these calls; however, this analysis assumes that in a reasonable worst-case scenario, sirens are used for all ambulance calls to the project site. An ambulance siren generates a noise level of 100 dBA L_{eq} at 100 feet (City of Fresno 2014). Sirens are not typically used while the vehicle is not in motion; therefore, the exposure to siren noise is limited in duration. Ambulance sirens would typically be used while the vehicle is driving along North Sepulveda Boulevard and accessing the project site via the auto court along North Sepulveda Boulevard. (Ambulances would not be expected to use the subterranean garage or entrance from 5th Street.)

Ambulance sirens would be intermittent and temporary, and while there may be an increase in total ambulance calls to the project site, these trips would not substantially increase the use of sirens or ambient noise level at properties surrounding the site. Additionally, the proposed building itself, and the existing noise wall on the eastern project site boundary, would reduce any siren noise that might occur along North Sepulveda Boulevard at the nearest residential receivers to the site. Emergency vehicle (siren) noise is exempted by Section 5.48.180 of the MBMC, and impacts would be less than significant.

Conclusion

As described above, operation of the proposed project would not result in a substantial permanent increase in ambient noise levels at existing sensitive receivers due to the attenuating effects of distance between proposed noise-generating uses and off-site sensitive receivers; barriers, including intervening topography and proposed buildings; and standard exterior-to-interior reductions from

modern building construction (20 to 25 dBA reduction; FTA 2018). Impacts would be less than significant.

Mitigation Measures

Mitigation would not be required because impacts from on-site operational noise would be less than significant.

Impact N-3 PROJECT OPERATION WOULD ALTER TRAFFIC PATTERNS IN THE AREA, BUT THE PROJECT WOULD GENERATE FEWER DAILY TRIPS THAN ARE GENERATED BY THE CURRENT USES OF THE SITE. TRAFFIC-RELATED NOISE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Development of the proposed project and removal of the existing restaurant, retail, and commercial uses would reduce daily weekday vehicle trips to and from the site by 273 and reduce daily weekend trips by 217 as compared to existing conditions. Approximately 95 percent of project-generated trips would travel on North Sepulveda Boulevard and the remaining 5 percent of project-generated trips would travel on 5th Street (Appendix C).⁹ The net reduction in trips to the project site would result in a less than 0.01 percent reduction in average daily traffic on North Sepulveda Boulevard and an approximately 3.7 percent reduction in average daily traffic on 5th Street.¹⁰ Therefore, project traffic would result in no increase existing traffic noise levels along North Sepulveda Boulevard or 5th Street. This net reduction in trips along North Sepulveda Boulevard and 5th Street would result in no increase in traffic noise at receptors located along North Sepulveda Boulevard, 5th Street, or along 3rd Street. While traffic patterns would be altered by the project, the decrease in total vehicle trips on local roadways would result in a decrease in traffic noise. Impacts would be less than significant.

Mitigation Measures

Mitigation would not be required because impacts from operational roadway noise would be less than significant.

Threshold 2: Would the project result in the generation of excessive ground-borne vibration or ground-borne noise levels?
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Impact N-4 PROJECT CONSTRUCTION WOULD EXPOSE NEARBY SENSITIVE RECEIVERS TO A TEMPORARY INCREASE IN VIBRATION. VIBRATION LEVELS AT RESIDENCES TO THE EAST WOULD NOT EXCEED 94 VdB, THE FTA THRESHOLD FOR DISTINCTLY PERCEPTIBLE VIBRATION, AND WOULD BE LESS THAN SIGNIFICANT.

Table 4.6-6 shows the anticipated vibration levels from construction equipment, based on FTA's *Transit Noise and Vibration Impact Assessment* (2018). Structures nearest to the project site include residences to the east on 3rd Street. Single family homes in this location would be approximately 25 feet east of the where vibration-generating construction equipment would be used on the project site. At this distance, groundborne vibration from construction equipment would not exceed 94

⁹ The 5 percent of trips on 5th Street are from delivery truck trips and trash collection trips to the service entrance along 5th Street near the northeast corner of the project site. These trips would not travel through the neighborhood, but along North Sepulveda Boulevard to access the site from this driveway. Please refer to Figure 7-1 of Appendix C.

¹⁰ Average daily traffic (ADT) was calculated based on the existing weekday peak hour and existing plus project weekday peak hour data provided in Appendix C, multiplied by a factor of 10 to estimate ADT on both roadways. The difference in existing plus project ADT and existing ADT was then estimated. Weekday ADT on North Sepulveda Boulevard is approximately 40,985 trips under existing conditions, and 40,975 trips under existing plus project conditions. Weekday ADT on 5th Street is approximately 545 trips under existing conditions, and 525 trips under existing plus project conditions.

VdB, the FTA threshold for distinctly perceptible vibration. As discussed in Section 4.6.1, *Setting*, construction activities in Manhattan Beach are limited to the hours of 7:30 a.m. to 6:00 p.m. on weekdays and between 9:00 a.m. to 6:00 p.m. on Saturdays, which would prevent construction vibration impacts from disturbing the sleep of nearby residents during nighttime hours. Other structures would be farther from the project site and would experience lesser vibration impacts as a result. While the vibratory roller would generate vibration levels of 94 VdB at 25 feet, vibration from a vibratory roller would not exceed the 94 VdB threshold. Additionally, due to site constraints, it would not be practicable to use vibratory equipment such as a vibratory roller within 25 feet of the nearest receivers. Therefore, the project's on-site construction-related vibration impacts would be less than significant.

Table 4.6-6 Construction-Related Vibration Levels

Equipment	Estimated Vibration Levels at 25 Feet (VdB) ¹
Loaded Truck ²	79
Vibratory Roller	94
Large Bulldozer	87
Caisson Drilling ³	87
FTA Threshold	Greater than 94
Threshold Exceeded?	No

See Appendix G for vibration analysis worksheets.

¹ Site constraints would not allow the use of a vibratory roller, loaded trucks, or other vibration-generating equipment within 25 feet of the nearest residences.

² Loaded trucks would access the site from North Sepulveda Boulevard, and would not drive along the eastern site boundary. The distance for loaded trucks was modeled at 50 feet, assuming loaded trucks access and unload on the western half of the site only.

³ Caisson drilling was used as a proxy for the drill rig that would be used to install piles. Drill rigs would likely be used at 50 feet from the nearest residence; however, the vibration at 25 feet is used to provide a conservative analysis.

Source: FTA 2018

The project would also generate vibration from some heavy-duty on-road trucks traveling along haul route roadways. Vibration along haul routes would be temporary and would be restricted to segments of North Sepulveda Boulevard and 5th Street¹¹ that are not immediately adjacent to sensitive receivers. Off-site vibration impacts would be less than significant.

As a senior living community, the proposed project would not generate significant stationary sources of vibration, such as heavy equipment operations. Therefore, operational vibration impacts would be less than significant.

Mitigation Measures

The project is required to comply with MBMC requirements, including limitations on construction to daytime hours. Mitigation would not be required because impacts from vibration would be less than significant.

¹¹ While trucks may use 5th Street to access the project site, they would approach from North Sepulveda Boulevard and would not travel in the residential areas located east of the site. Therefore, trucks would only travel on an approximately 150-foot segment of 5th Street immediately east of North Sepulveda Boulevard. Along this segment, the project site is located to the south and commercial uses are located to the north.

c. Cumulative Impacts

The planned and pending projects in the vicinity of the project site are listed in Table 3-1 (see Section 3, *Environmental Setting*). These include apartment or condominium projects; school and church projects; commercial, retail, or commercial/retail projects; and hotel projects. Cumulative construction noise and vibration impacts would consist of the combined noise impacts from the construction and of the proposed project and other planned projects in the cities of Manhattan Beach, Hermosa Beach, Redondo Beach, and El Segundo, which would generate noise in excess of relative existing ambient noise levels. However, only projects in Manhattan Beach located within 500 feet of the project site and/or along the same major arterial as the project site, such as the office project at 516 North Sepulveda Boulevard, have construction schedules that may overlap. Construction activities for these projects would be similar to those of the proposed project and would generate similar noise levels. Other planned projects are located too far from the project site to noticeably contribute to increases in ambient noise levels for receivers in the project area. Since construction noise is localized and rapidly attenuates in an urban environment, construction activity at another project site would not result in a perceptible increase in noise to sensitive receivers adjacent to the proposed project.

As discussed under Impact N-1, construction activities conducted for the proposed project would only occur between the hours of 7:30 a.m. to 6:00 p.m. on weekdays and between 9:00 a.m. to 6:00 p.m. on Saturdays, which would comply with the City's construction noise thresholds and would be a less than significant impact. It can be reasonably assumed that nearby cumulative projects would also comply with the City's construction noise hour limitations, and cumulative construction impacts would be less than significant. Furthermore, because construction noise is limited to the immediate vicinity of a construction site, and no other construction sites are within 150 feet of the project site, the proposed project would not contribute to a cumulatively considerable construction noise impact.

Cumulative operational noise impacts would consist of combined operational noise of the proposed project in conjunction with planned projects in the vicinity of the project site, which would result in potential increases in equipment noise, outdoor use area noise, and parking lot noise. As described under Impact N-2, the project's resulting mechanical equipment noise, outdoor use areas, and parking lot noise would generate noise similar to existing ambient noise levels and would result in a less than significant impact. Moreover, any noise generated by project operation would be limited to the immediate site vicinity. Therefore, the proposed project would not contribute considerably to cumulative operational noise increases.

Cumulative traffic noise was calculated based on cumulative and cumulative plus proposed project traffic volumes. The project would result in a decrease in the traffic volume on North Sepulveda Boulevard of less than 0.1 percent, which would not cause a traffic noise increase; and a reduction in traffic volume on 5th Street of approximately 3.7 percent, which would not cause a traffic noise increase in the cumulative year. Therefore, the project would not contribute to any cumulative traffic noise increases.

4.7 Transportation and Traffic

This section analyzes impacts related to transportation and traffic. The analysis is based largely on the Vehicle Miles Traveled (VMT) Assessment prepared by LLG and dated April 6, 2021 and the Local Circulation and Site Access Study dated April 7, 2021. The studies, contained in Appendix C, provide information relative to existing, existing plus project, future, and future plus project conditions based on project traffic volumes developed by ATE.

4.7.1 Setting

a. Regulatory Framework

This section describes applicable state, regional, and local laws, ordinances, regulations, and standards governing transportation and traffic, which must be adhered to before and during project implementation.

State

State Senate Bill 375

Senate Bill (SB) 375, signed in August 2008, directs each of the state's 18 major Metropolitan Planning Organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, the California Air Resources Board (CARB) adopted final regional targets for reducing greenhouse gas (GHG) emissions from 2005 levels by 2020 and 2035.

The intent of SB 375 is to use the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) to integrate regional land use, regional housing need allocations (RHNA), environmental, and transportation planning to ensure efficient regional planning in the future that leads to reduced greenhouse gas emissions from land and transportation uses. As a result of SB 375, preparation of local RHNA Plans are required to be coordinated and consistent with the RTP/SCS for the length of the housing element cycle. Local governments play a large role in helping to develop the transportation and land use scenarios used in the SCS development process.

State Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013). Among other things, SB 743 created a process to change the methodology to analyze transportation impacts under CEQA (Public Resources Code section 21000 and following). On December 30, 2013, the State of California Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods of transportation analysis, which included analysis based on project vehicle miles traveled (VMT) rather than impacts to intersection Level of Service. OPR issued other draft discussion documents in March 2015 and January 2016, suggesting some new revisions to the state CEQA Guidelines. In November 2017, OPR submitted the proposed amendments to the CEQA Guidelines to the State's Natural Resources Agency (that include a proposed new Guidelines section 15064.3 which governs how VMT-based analyses of potential traffic impacts should be conducted). On January 26, 2018, the Natural Resources Agency published a Notice of Rulemaking, commencing the formal rulemaking process for the amendments to the CEQA Guidelines. On December 28, 2018, the California Office of Administrative Law adopted the proposed amendments,

formally implementing the use of VMT as the metric for transportation analysis under CEQA and providing a grace period allowing local agencies to opt-in to the new metrics, lasting until July 1, 2020, when Statewide compliance with the revised CEQA Guidelines became mandatory.

The City of Manhattan Beach prepared the *City of Manhattan Beach Transportation Impact Analysis Guidelines*, which set forth the screening criteria, analysis methodology, thresholds of significance, and mitigation measures for evaluating the VMT impacts of land use development projects in Manhattan Beach. The City's adopted methodology is consistent with the recommendations provided by OPR in the current *Technical Advisory* released in December 2018.

The California State Department of Transportation (Caltrans) has also formally adopted VMT as the metric for evaluating the transportation impacts of local development projects on the State Highway System, which includes Sepulveda Boulevard throughout the City of Manhattan Beach. Caltrans' *Transportation Impact Study Guide* (TISG, May 2020) references the December 2018 *Technical Advisory* prepared by the OPR as the basis for its guidance on VMT assessment.

California Building Code

California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The CBC is based on the 1997 Uniform Building Code with modifications specific for California conditions. The CBC provides fire and emergency equipment access standards for public roadways, which include specific width, grading, design and other specifications for roads which provide access for fire apparatuses. Street modifications in the City of Manhattan Beach are subject to these and other modified State standards.

Regional Agencies, Plans, and Policies

Los Angeles County Congestion Management Program Status

The Los Angeles County Congestion Management Program (CMP) was previously a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990 that primarily utilized a level of service (LOS) performance metric. Senate Bill 743 contains amendments to current congestion management law that allows counties to opt out of the LOS standards that would otherwise apply in areas where CMPs are utilized. Pursuant to California Government Code §65088.3, local jurisdictions may opt out of the CMP requirement without penalty if a majority of the local jurisdictions representing a majority of the County's population formally adopt resolutions requesting to opt out of the program. As of November 2019, the majority of local agencies representing the majority of the County's population have adopted resolutions to opt out of the program. Therefore, the CMP is no longer applicable in Los Angeles County.

Local Plans and Policies

City of Manhattan Beach Mobility Plan

The City of Manhattan Beach adopted the Mobility Plan on May 15, 2018, replacing the Circulation Element previously adopted in 2003. In recent years there has been a shift in the prioritization of various modes of transportation throughout the region and nation. The Manhattan Beach Mobility Plan focuses on providing a well-balanced, connected, safe, and convenient multi-modal transportation network, as opposed to a mostly vehicle-centric plan that focused on building and widening roads. The updated Mobility Plan was prepared in response to the State of California

Assembly Bill (AB) 1358 which is the California Complete Streets Act. AB 1358 requires cities and counties to integrate multi-modal transportation network policies into their General Plan, and plan for, design and building transportation networks that allow all users to effectively travel by motor vehicle, foot, bicycle, or transit. Thus, the City's General Plan Mobility Plan is focused on Complete Streets and Living Streets to enhance all travel modes.

b. Existing Conditions

The transportation analysis study area is generally comprised of those locations that have the greatest potential to experience significant transportation impacts due to the proposed project. These intersections are generally those that are:

- a) Immediately adjacent or in close proximity to the project site;
- b) In the vicinity of the project site that are documented to have current or projected future adverse operational issues; and
- c) In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements.

c. Existing Street System

Access in Manhattan Beach is provided by a well-developed surface street network. The following sections provide an overview of the transportation infrastructure in the vicinity of the proposed project.

Roadway Classifications

The City of Manhattan Beach utilizes a conventional hierarchy of roadway classifications recognized by regional, state, and federal transportation agencies. There are four categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided local roadways with the lowest capacity.

The roadway classifications defined in the Manhattan Beach Mobility Plan are summarized as follows:

- Regional Arterials are State-designated facilities that are relatively high-speed, high-capacity routes serving intercity and interregional circulation needs. Regional arterials connect major City streets with other regional routes. Local access is intended to be limited to major streets via signal-controlled intersections. Sepulveda Boulevard is the only Regional Arterial in the City, and since it functions as a major business district, access was granted to retail businesses along the corridor, with left-turns prohibited or restricted to signalized intersections where feasible. Curbside parking is either prohibited all day or during the peak hours to facilitate the efficient movement of traffic.
- Arterials provide through movement between areas of the City as well as across the City, and provide access to collector roadways. Access to adjoining land uses is limited or consolidated to minimize interference with the through-traffic function of these routes. Arterials generally provide two or three through travel lanes in each direction within a 60- to 100-foot right-of-way. Arterials provide single or double left-turn lanes, left-turn signal phasing, and other enhancements where necessary to facilitate the efficient movement of large traffic volumes. Curbside parking is either prohibited all day or during the peak hours to facilitate the efficient movement of traffic. The City distinguishes between Major Arterials and Minor Arterials, with Minor Arterials fulfilling many of the same functions as Major Arterials. In contrast, Minor

Arterials allow additional access to adjacent land uses and have lower capacities. Minor Arterials typically provide only two through travel lanes in each direction with left-turn lanes provided at intersections, may have lower speeds, and may accommodate curbside parking.

- Collectors serve an area or neighborhood and function as a collector or distributor of traffic from the local streets to the arterial streets. Collectors are lower speed streets with lower capacity than arterials, but which carry more traffic volumes than local streets. Collector streets serve a variety of residential and commercial land uses, and may provide direct driveway access to adjoining land uses. Collector streets generally provide one or two through travel lanes in each direction and often accommodate curbside parking. The City also identifies Residential Collector streets which, although similar in function to Collector streets, primarily have residential land uses adjacent to them. Residential Collectors typically carry lower traffic volumes than Collectors, providing only one through travel lane in each direction.
- Local streets provide for circulation within and between residential neighborhoods. Local streets are designed to discourage through trips, generally providing one through travel lane in each direction and having speed limits of 25 miles per hour or slower. Curbside parking is accommodated where the street width is sufficient to support both moving traffic and parking lanes. The City distinguishes between Major Local and Local streets, with Local streets intended to provide bicycle and pedestrian circulation within a residential neighborhood and limited through trips between neighborhoods.

d. Regional Highway System

Regional access to the project site is generally provided by the I-405 (San Diego) Freeway. The I-405 (San Diego) Freeway is a major north-south freeway in the Southern California region that extends from the San Fernando Valley to Orange County. In the project vicinity, one high-occupancy vehicle (HOV)/carpool lane and four mainline travel lanes are provided in each direction on the I-405 Freeway. Because the I-405 Freeway is more than two miles east of the project site, multiple on and off-ramps in the vicinity provide options to access to the project study area.

e. Existing Traffic Volumes

Manual counts of vehicular turning movements were conducted at each of the study intersections during the weekday morning (AM) and afternoon (PM) commute periods and the weekend (i.e., Saturday) mid-day period in February 2019 to determine the peak hour traffic volumes. The manual counts were conducted by an independent traffic count subconsultant (Counts Unlimited) at the study intersections from 7:00 to 9:00 AM to determine the weekday AM peak commute hour, from 4:00 to 6:00 PM to determine the weekday PM peak commute hour, and from 11:00 AM to 2:00 PM to determine the weekend mid-day peak hour. In conjunction with the manual turning movement vehicle counts, counts of bicycle and pedestrian volumes were also collected during the peak periods. It is noted that all of the traffic counts were conducted when local schools were in session. Weekday traffic volumes at the study intersections show the typical peak periods between 7:00 to 9:00 AM and 4:00 to 6:00 PM generally associated with peak commute hours.

f. Existing Transit Service

Public bus transit services are provided along major roadways within the project study area. Public bus transit service is currently provided by the Metropolitan Transportation Authority (Metro) along Sepulveda Boulevard, Manhattan Beach Boulevard, and Artesia Boulevard. Metro 126, 130, and 232 run along roadways in the project vicinity.

g. Pedestrian, Bicycle and Transit Facilities

Nearby restaurant and retail opportunities along the Sepulveda Boulevard corridor are accessible to pedestrians in the project vicinity via sidewalk. Pedestrian access to bus transit service in the project vicinity is provided by bus stops located on Sepulveda Boulevard to the north and south of the project site. Los Angeles County Metropolitan Transportation Authority (Metro) bus stops for Metro Route 232 are located on the northbound and southbound approaches at the Sepulveda Boulevard/8th Street and Sepulveda Boulevard/2nd Street intersections. Bicycle access in the vicinity of the project site is facilitated by the existing public roadway network and the City of Manhattan Beach bicycle roadway network.

Existing and proposed bikeways within the City are shown in Figure 3-1 of Appendix C. Numerous “bike friendly” streets striped with “sharrow” pavement markings are provided within a half-mile radius of the project site, including 8th Street, 2nd Street, Valley Drive, Ardmore Avenue, Pacific Avenue, Meadows Avenue, and Peck Avenue. In addition, Class III bike routes are provided along 11th Street and Oak Avenue. The City also proposed to provide a Class II bike lane along Manhattan Beach Boulevard (between Ardmore Avenue and Aviation Boulevard), with 11th Street and Oak Avenue proposed to become “bike friendly” streets.

4.7.2 Impact Analysis

a. Methodology and Significance Thresholds

The City of Manhattan Beach has adopted four (4) screening criteria that may be applied to screen proposed land use development projects out of detailed VMT analysis. These criteria are generally based on a project’s land use type and size, expected number of daily vehicle trips, or proximity to transit. Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes. Projects that are screened out of detailed VMT assessment based on these criteria are presumed to have less than significant transportation impacts. Projects that are not screened out would be required to conduct a formal VMT analysis in order to determine the significance of project impacts. A detailed description of each of the City’s four (4) adopted screening criteria are presented below:

1. **Non-Retail Project Trip Generation Screening Criteria.** As stated in Section 3.1.1.1 of the City’s Guidelines, if the answer is NO to the question below, further analysis is not required, and a less than significant determination can be made.

- “Does the non-retail development project generate a net increase of 110 or more daily vehicle trips?”

The Technical Advisory provides the following evidence for this presumption: “CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.”

The City has adopted the recommended screening threshold of 110 daily trips based on the substantial evidence provided in the Technical Advisory. This screening threshold is applicable only to non-retail projects in Manhattan Beach.

2. **Retail Project Site Plan Screening Criteria.** As stated in Section 3.1.1.2 of the City's Guidelines, a project that contains a local serving retail use is assumed to have less than significant VMT impacts for the retail portion of the project. If the answer to the following question is NO, a less than significant determination can be made for the portion of the project that contains retail uses.

- Does the project contain retail uses that exceed 50,000 square feet of gross floor area?

New local serving retail development typically redistributes shopping trips rather than creating new ones. By adding retail opportunities into the urban fabric and improving retail destination proximity, local serving retail developments tend to shorten trips and reduce VMT and may be presumed to cause less than significant impacts. Based on the recommendations of the Technical Advisory, the City has determined that retail projects (or retail components of mixed-use projects) of less than 50,000 square feet may be considered local serving retail.

3. **Proximity to Transit Based Screening Criteria.** CEQA Guidelines Section 15064.3(b)(1) states in part: "Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact." In keeping with the statutory presumption of less than significant impacts due to nearby high-quality transit, the City's Guidelines include a screening criterion based on proximity to transit.

Pursuant to the definitions of a major transit stop¹ and a high-quality transit corridor², the only major transit stop within a one-half mile radius of the City of Manhattan Beach is the Metro "C" (Green) Line Douglas Station located in the City of El Segundo.

As stated in Section 3.1.1.3 of the City's Guidelines, if a project is located near a major transit stop or high-quality transit corridor, the following question should be considered:

- Is the project located within a one-half mile radius of a major transit stop or an existing stop along a high-quality transit corridor?

If the answer to the above question is YES, then additional questions should be considered to determine if the presumption of less than significant impacts would not be appropriate.

Consistent with the recommendations provided in the Technical Advisory, the City evaluates certain project-specific or location-specific information that might indicate that the presumption is not appropriate. If the answers to all four (4) of the following questions are NO, then the presumption is assumed appropriate, and a less than significant determination can be made.

- Does the project have a Floor Area Ratio (FAR) less than 0.75?
- Does the project provide more parking than required by the City?
- Is the project inconsistent with the SCAG RTP/SCS?
- Does the project replace residential units set aside for lower income households with a smaller number of market-rate residential units?

¹ Public Resources Code Section 21064.3: "Major transit stop" means a site containing any of the following: (a) An existing rail or bus rapid transit station. (b) A ferry terminal served by either a bus or rail transit service. (c) The intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."

² Public Resources Code Section 21155(b): "For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours."

4. **Residential Land Use Based Screening Criteria.** Utilizing the same reasoning as set forth in the “Non-Retail Project Trip Generation” screening criteria set forth previously, Section 3.1.1.4 of the City’s Guidelines indicate that residential projects that generate or attract fewer than 110 net trips per day can generally be assumed to cause a less-than-significant transportation impact. If the answer is NO to the question below, further analysis is not required, and a less than significant determination can be made.

Project Trip Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the proposed project were forecast for the weekday AM and PM as well as Saturday mid-day peak hours, as well as over a 24-hour period for a typical weekday and for a typical Saturday. Trip generation rates provided in the *ITE Trip Generation Manual*, 10th Edition for Land Use Code 253 (Congregate Care Facility) were utilized to forecast project traffic generation for the proposed project. Traffic volumes expected to be generated by the proposed project were based upon rates per number of rooms.

The trip generation rates and forecast of the vehicular trips anticipated to be generated by the proposed project are presented in Table 4.7-1. As shown therein, based on application of the ITE trip rates for Congregate Care Facility land use, the proposed project is expected to generate 7 trips during the weekday AM peak hour, 17 trips during the weekday PM peak hour, and 31 trips during the Saturday mid-day peak hour. Over a 24-hour period, the project is expected to generate 192 trips on a typical weekday, and 307 trips on a typical Saturday.

Existing Trip Generation

Forecasts were also prepared for the existing land uses which currently occupy the project site. ITE Land Use Codes 932 (High-Turnover [Sit-Down] Restaurant) and 820 (Shopping Center) trip generation average rates were used to forecast the expected traffic generation for the existing uses. In addition, a pass-by trip adjustment was applied to the existing use trip generation forecasts. Pass-by trips are intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. Pass-by trip adjustments have been applied to each of the existing site uses, which accounts for the local serving nature of the commercial uses.

As shown in Table 4.7-1, application of the ITE trip rates for High-Turnover (Sit-Down) Restaurant and Shopping Center land uses, along with application of appropriate pass-by trip credits, results in a vehicle trip forecast of 3 existing trips during the weekday AM peak hour, 41 trips during the weekday PM peak hour, and 48 trips during the Saturday mid-day peak hour. Over a 24-hour period, the existing uses are forecast to generate 465 trips on a typical weekday, and 525 trips on a typical Saturday.

Manual traffic counts were also conducted at each of the six existing driveways (i.e., the four driveways along Sepulveda Boulevard and the two driveways along 5th Street) at the project site in order to document the traffic generated by the land uses currently in operation within the site. Traffic counts were conducted during the weekday morning (7:00 to 9:00 AM) and afternoon (4:00 to 6:00 PM) peak periods over two mid-weekdays, and during the Saturday mid-day (1 :00 AM to 2:00 PM) peak period on one day. The counts were conducted by an independent traffic count subconsultant in February 2019. Summary data worksheets of the manual turning movement counts are provided in Appendix B of Appendix C. Based on these traffic counts, the existing uses were

shown to generate trips at a higher rate than the ITE forecasts. It was therefore concluded that the existing trip generation forecast based on application of the ITE trip rates as described above would result in a more conservative existing trip credit (i.e., the lower vehicle trip generation forecast would result in a smaller existing use trip generation credit being applied as a reduction towards the proposed project trip generation forecast). The more conservative trip credit was determined to be appropriate for analysis of the long-term, recurring conditions upon project completion and full occupancy.

Table 4.7-1 Project Trip Generation

Land Use ¹	Size	Daily Trips ²	AM			PM			Saturday Trips	Saturday		
			Peak Hour Trips			Peak Hour Trips				Peak Hour Trips		
			In	Out	Total	In	Out	Total		In	Out	Total
Proposed Use												
Congregate Care Facility ³	95 rooms	192	4	3	7	9	8	17	307	19	12	31
Existing Use												
Restaurant ⁴	2,564 GSF	(288)	–	–	–	(16)	(9)	(25)	(314)	(15)	(14)	(29)
Subtract 50% Pass-by ⁵		144	–	–	–	8	5	13	157	8	7	15
Retail and Other Uses ⁶	8,398 GLSF	(242)	(4)	(2)	(6)	(12)	(12)	(24)	(296)	(15)	(14)	(29)
Subtract 50% Pass-by		122	2	1	3	6	6	12	148	8	7	15
Restaurant ⁷	3,600 GSF	(402)	–	–	–	(22)	(13)	(35)	(438)	(20)	(20)	(40)
Subtract 50% Pass-by		201	–	–	–	11	7	18	219	10	10	20
Subtotal Existing Uses		(465)	(2)	(1)	(3)	(25)	(16)	(41)	(524)	(24)	(24)	(48)
Net Project Trips		(273)	2	2	4	(16)	(8)	(24)	(217)	(5)	(12)	(17)

() denotes subtraction

All rates are from Institute of Transportation Engineers, *Trip Generation Manual*, 10th Edition, 2017. Average rates used.

¹ ITE "Trip Generation Manual", 10th Edition, 2017.

² Trips are one-way traffic movements, entering or leaving.

³ ITE Land Use Code 253 (Congregate Care Facility) trip generation average rates.

⁴ ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates. Note that this existing building is currently occupied by Pizza Hut restaurant and Schwarz Chiropractic. As the split between the two existing uses is unknown, employing the ITE 932 land use code for the entire building with the pass-by trip adjustment is assumed to be a conservative approach for trip generation purposes. Additionally, it is assumed that the existing Pizza Hut restaurant in this existing building is not open for breakfast.

⁵ ITE "Trip Generation", 10th Edition, 2017, and ITE "Trip Generation Handbook", 2004. Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site

⁶ ITE Land Use Code 820 (Shopping Center) trip generation average rates. Please note that this existing building is currently occupied by several different tenants including retail, salon, coffee shop and restaurant deli uses. As the split between the existing uses is unknown, employing the ITE 820 land use code for the entire building with the pass-by trip adjustment is assumed to be a conservative approach for trip generation purposes

⁷ ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates. Note that it is assumed that the existing Big Wok Mongolian BBQ restaurant in this existing building is not open for breakfast.

Source: LLG 2021, Appendix C

Trip Generation Summary

The trip generation associated with the existing uses on-site was subtracted from trips generated by the proposed project. While the proposed project is expected to result in a net increase of 4 trips during the weekday AM peak hour, it would also result in a net reduction of 273 daily vehicle trips and a net decrease of 24 vehicle trips during the weekday PM peak hour. On Saturdays, the proposed project is expected to result in a net reduction of 217 daily vehicle trips and a net reduction of 17 hourly vehicle trips during the mid-day peak hour. This summary can be seen in Table 4.7-1.

Project Trip Distribution and Assignment

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (i.e., Sepulveda Boulevard/Pacific Coast Highway, Manhattan Beach Boulevard, Gould Avenue/Artesia Boulevard, Aviation Boulevard);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress scheme planned for the proposed project;
- Nearby population and employment centers; and
- The proximity of other Sunrise Senior Living facilities and the resulting assumed market area for the proposed project.

Because vehicular access is planned to be provided via a single driveway along Sepulveda Boulevard yet the existing site provides access via Sepulveda and 5th Street, two separate traffic distribution patterns were developed: one for the proposed project traffic and one for the existing site traffic. The existing site distribution pattern was developed based on the turning movement counts conducted at the project driveways in February 2019.

Significance Thresholds

According to the adopted Appendix G of the State *CEQA Guidelines*, impacts related to transportation and circulation from the proposed project would be significant if the project would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
4. Result in inadequate emergency access?

As discussed in the Initial Study (see Appendix A), impacts related to the congestion management plan, design features and incompatible uses, and emergency access would be less than significant because the project would: 1) reduce regional traffic in comparison to the existing traffic generated by the commercial shopping center; 2) design ingress and egress points consistent with City standards; and 3) undergo review by the City's emergency response personnel. Therefore, these checklist items (Thresholds 3 and 4) are not discussed further herein.

Construction Impact to Roadway Facilities

An impact to roadway facilities would be significant if construction of a project would create a temporary, but prolonged impact due to lane closure, need for temporary signals, emergency vehicle access, traffic hazards to bicycles and/or pedestrians, damage to the roadbed, truck traffic on roadways not designated as truck routes, other similar impediments to circulation.

Bicycle and Pedestrian Facilities Impacts

An impact to bicycle and pedestrian facilities would be significant if:

- The project would disrupt existing facilities
- The project would interfere with planned facilities
- The project would conflict or create inconsistencies with adopted guidelines, plans, policies, or standards

b. Project Impacts

Threshold 1 Would the project conflict with program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle, and, pedestrian facilities?

Impact T-1 THE PROJECT WOULD RESULT IN A NET DECREASE OF 28 VEHICLE TRIPS DURING THE WEEKDAY AM PEAK HOUR, A NET INCREASE OF 22 VEHICLE TRIPS WOULD OCCUR DURING THE WEEKDAY PM PEAK HOUR, AND A NET DECREASE OF 95 VEHICLE TRIPS WOULD OCCUR DURING THE SATURDAY MID-DAY PEAK HOUR. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction impacts and pedestrian, bicycle, and transit facility impacts are discussed in this section. Operational impacts are discussed below in Impact T-2.

Construction

Construction activities are described in Section 2.5.4 of Section 2, *Project Description*. Based on this information, LLG calculated construction traffic trips, summarized in Tables 10-1 and 10-2 of Appendix C. Based on this analysis, the overall highest construction-related traffic generation during typical weekday AM and PM peak hours would occur during building construction activities (i.e., during the concurrent phases of building construction, asphalt paving, and architectural coating). During typical Saturday mid-day conditions, the overall highest construction-related traffic generation would occur due to soil export activities occurring during the site preparation and grading phases. Although construction would generate some trips, the existing uses on site would no longer generate trips and traffic levels would generally be lower during construction than under existing conditions. A net decrease of 28 vehicle trips would occur during the weekday AM peak hour, a net increase of 22 vehicle trips would occur during the weekday PM peak hour, and a net decrease of 95 vehicle trips would occur during the Saturday mid-day peak hour, as shown in Table 10-3 of Appendix C. Therefore, project construction activities would not result in significant transportation impacts.

Pedestrian, Transit, and Bicycle Facilities

Pedestrian, transit, and bicycle facilities in the vicinity of the proposed project are described in Section 4.7.1 above. Pedestrian access to the project site will be provided via the existing public

sidewalks along Sepulveda Boulevard and 5th Street. Where existing driveways would be closed, the public sidewalks would be reconstructed to City of Manhattan Beach and/or Caltrans standards. Landscaping and benches would be provided along the Sepulveda Boulevard property frontage in order to provide a friendly walking environment in the vicinity of the project site. Direct pedestrian access to the lobby would be provided via an accessible pedestrian pathway from the Sepulveda Boulevard property frontage. The pedestrian walkways on the site would likewise be appropriately landscaped and adorned to provide secure internal walking paths and residents will view a variety of natural materials, colors, textures, and forms. Enhanced paving, seating, and shade elements will be provided in the project courtyard to provide an area of outdoor respite.

The project would not alter or conflict with the transit facility plans that have identified these facilities. Additionally, the project would provide eight bicycle parking spaces, with is five spaces above the MBMC requirements. Therefore, the project's impact on pedestrian, transit, and bicycle facilities impact would be less than significant.

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Threshold 2	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
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Impact T-2 THE PROJECT MEETS THE VMT SCREENING CRITERIA BECAUSE IT WOULD NOT RESULT IN A NET INCREASE OF 110 OR MORE DAILY TRIPS WOULD RESULT IN FEWER TRIPS AND THEREFORE HAVE A LESS THAN SIGNIFICANT VMT IMPACT.

Based on the *City of Manhattan Beach Transportation Impact Analysis Guidelines*, the project meets the VMT screening criteria for both Non-Retail Project Trip Generation and Residential Land Use, because the project would not result in a net increase of 110 or more daily trips. Operation

As shown above in Table 4.7-1, the project would result in a net reduction of trips compared to existing conditions. Because the project is anticipated to result in fewer vehicle trips than the existing site uses, it is expected to result in a net decrease in VMT generation at the project site, and the project would meet the City's VMT screening criteria. As stated in the City's *Transportation Impact Analysis Guidelines*, projects that satisfy the City's adopted screening criteria do not require further VMT analysis and a determination of less than significant transportation impacts can be made. The proposed project is forecast to result in a net decrease in daily trips on both a typical weekday and typical weekend day (i.e., Saturday), and therefore satisfies the "Residential Land Use" and "Non-Retail Project Trip Generation" screening criteria; therefore, the project would have a less than significant impact on regional VMT.

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

c. Cumulative Impacts

Development projects listed in Table 3-1 may increase residency in the City and thus the number of vehicles that operate in the City. Increased vehicle use could result in increased VMT in the City, depending on the origin and destination of trips. Because reasonably foreseeable future projects would increase VMT and may conflict with policies or plans, cumulative impacts would be potentially significant. As described under Impact T-2, the proposed project would have a less than significant VMT impact and result in a net reduction of vehicle trips to and from the site. Additionally, the project would not conflict with any applicable programs, policies, or plans. Thus, the proposed project would not have a cumulatively considerable contribution to cumulative VMT impacts.

5 Other CEQA Required Discussions

This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the proposed project.

5.1 Growth Inducement

Section 15126(d) of the CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

As discussed in Section 13, *Population and Housing*, of the Initial Study (Appendix A), the proposed project involves the construction of an assisted living facility, which would cause a direct increase in the City's population. The project would provide space for up to 115 seniors and would employ 77 full-time and 30 part-time employees. SCAG forecasts that the population of the City would increase to approximately 37,100 by the year 2040, which is an increase of 1,109 residents, and employment would increase to approximately 20,700 by the year 2040, which is an increase of 2,700 employees from 2012 (SCAG 2016, Department of Finance (DOF) 2018).

Based on the above, the level of population and employment growth associated with the proposed project would be within regional population projections. The operation of the project would not generate any long-term increase in population.

Moreover, as discussed in Section 4.2, *Air Quality*, and Section 4.4, *Greenhouse Gas Emissions*, development and operation of the project would not generate air quality or GHG emissions that would result in a significant impact. Additionally, the project involves redevelopment within a fully urbanized area that lacks significant scenic resources, native biological habitats, known cultural resource remains, surface water, or other environmental resources. Therefore, any population growth associated with the project would not result in significant long-term physical environmental effects.

5.1.2 Removal of Obstacles to Growth

The proposed project is located in a fully urbanized area that is well served by existing infrastructure. As discussed in Section 17, *Utilities*, of the Initial Study (Appendix A) and Section 4.7, *Transportation and Traffic*, of this EIR, existing infrastructure in Manhattan Beach would be adequate to serve the project. Minor improvements to water, sewer, and drainage connection infrastructure could be needed, but would be sized to specifically serve the proposed project. No new roads would be required. Because the project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.2 Irreversible Environmental Effects

The CEQA Guidelines require that EIRs contain a discussion of significant irreversible environmental changes. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

The proposed project involves infill development on a currently developed lot in the City of Manhattan Beach. Construction and operation of the project would involve an irreversible commitment of construction materials and non-renewable energy resources. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the proposed project. Consumption of these resources would occur with any development in the region, and are not unique to the proposed project.

The proposed project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building design would offset this demand to some degree by reducing energy demands of the project. As discussed in Section 2.0, *Project Description*, the proposed project would meet 2019 Title 24 building energy efficiency standards, and includes low flow plumbing fixtures and infrastructure for future photovoltaic panels and electric vehicle charging station. Title 24 provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. Consequently, the project would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Consumption of these resources would occur with any development in the region, and is not unique to the proposed project.

Additional vehicle trips associated with the proposed project would incrementally increase local traffic and regional air pollutant and GHG emissions. However, as discussed in Section 4.2, *Air Quality*, and Section 4.4, *Greenhouse Gas Emissions*, development and operation of the project would not generate air quality or GHG emissions that would result in a significant impact. Additionally, Section 4.7, *Transportation and Traffic*, of this EIR conclude that long-term impacts associated with the proposed project would be less than significant based on City and regional thresholds.

The project would also require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section 14, *Public Services*, and Section 17, *Utilities and Service Systems*, of the Initial Study, impacts to these service systems would not be significant.

CEQA requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this EIR concludes that the proposed project would not result in a significant and unavoidable long-term impacts.

5.3 Energy Effects

5.3.1 Energy Efficiency

Appendix F and Appendix G of the CEQA Guidelines require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy.

The proposed project would involve the use of energy during construction and operation. Energy use during construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary grid power may be provided to construction trailers or electric construction equipment. Table 5-1 illustrates the anticipated energy consumption from construction equipment and vehicles, including construction worker trips to and from the project site. As shown therein, project construction would last approximately 20 months and would require approximately 38,699 gallons of gasoline and 58,842 gallons of diesel fuel. Table 5-1 also provides the anticipated annual operational energy consumption from vehicles.

Table 5-1 Project Construction and Operation Fuel Use

Source	Fuel Consumption (gallons)	
	Gasoline	Diesel
Construction Equipment & Hauling Trips	–	58,842
Construction Worker Vehicle Trips	38,699	–
Operational Vehicle Trips (Annual)	33,622	8,261

Sources: Appendix B for CalEEMod default values for fleet mix and average distance of travel; Appendix H for energy calculation sheets.
N/A: Not applicable

CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. Complete CalEEMod results and assumptions can be viewed in Appendix B. The proposed project's estimated motor vehicle fuel use as calculated from CalEEMod outputs is shown in Table 5-2.

Table 5-2 Estimated Project-Related Annual Motor Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips ¹	Annual Vehicle Miles Traveled ²	Average Fuel Economy (miles/gallon) ³	Total Annual Fuel Consumption (gallons)
Passenger Cars	54.6%	419,196	24.2	17,322
Light/Medium Trucks	36.9%	283,671	17.5	16,210
Heavy Trucks/Other	8.0%	61,134	7.4	8,261
Motorcycles	0.5%	3,981	44.0	90
Total	100.0%	767,960	–	41,884

¹ Percent of vehicle trips found in Table 4.4 “Fleet Mix” in CalEEMod output (Appendix B)

² Mitigated annual VMT found in Table 4.2 “Trip Summary Information” in CalEEMod output (Appendix B)

³ Average fuel economy for passenger cars, light/medium trucks, heavy trucks/other, and motorcycles provided by the United States Department of Transportation, Bureau of Transportation Statistics (2017). National Transportation Statistics. <https://www.bts.gov/topics/national-transportation-statistics> (accessed April 2020).

Note: Totals may not add up due to rounding.

The proposed project would also be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California’s Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including: appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures. In addition, the California Green Building Standards Code sets targets for: energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills; and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. In addition to compliance with Title 24 standards, specific sustainability features to be incorporated into the project are described in subsection 2.5.8 of Section 2, *Project Description*.

Due to the large number of materials and manufacturers involved in the production of construction materials, including manufacturers in other states and countries, upstream energy use cannot be estimated reasonably or accurately. However, it is reasonable to assume that manufacturers of building materials such as concrete, steel, lumber, or other building materials would employ energy conservation practices in the interest of minimizing the cost of doing business.

Overall, project operation would result in consumption of fuels from vehicle trips, and electricity and natural gas from proposed buildings. Project energy consumed would represent an incremental increase in energy usage compared to existing conditions, and the proposed project would implement energy-efficient components to reduce energy demand. Therefore, impacts would be less than significant.

5.3.2 Energy Plan Consistency

Table 5-3 provides City of Manhattan Beach General Plan energy efficiency goals and policies and summarizes the project's compliance with these policies.

Table 5-3 Project Compliance with Energy Efficiency Goals and Policies

Energy Efficiency Goal or Policy	Project Consistency
Policy I-6.7: Encourage features that accommodate the use of bicycles in the design of new development, as appropriate. Policy CR-6.1: Encourage alternative modes of transportation, such as walking, biking, and public transportation, to reduce emissions associated with automobile use.	Consistent. The project includes 4 long-term and 4-short term bicycle parking spaces.
Policy CR-5.3: Encourage water conservation, including landscaping with drought-tolerant plants, use of reclaimed water, and recycling of cooling system water, in all development. Policy CR-5.7: Encourage the use of energy-saving designs and devices in all new construction and reconstruction. Policy CR-5.8: Encourage utilization of "green" approaches to building design and construction, including use of environmentally friendly interior improvements.	Consistent. The proposed building would meet 2019 Title 24 California's building energy efficiency standards. Low flow plumbing fixtures, i.e., toilets, lavatory facets, shower-heads, would be installed. Landscaping would include in-line drip tubing irrigation to eliminate evaporation or wasted water from overspray onto buildings and hardscape. The project would also include irrigation valve areas that respond to soil types, grading, exposures, and hydrozones.
Policy CR-5.10: Encourage and support the use of alternative fuel vehicles, including support of charging or "fueling" facilities.	Consistent. The project includes infrastructure for 16 electric vehicle parking spaces and 4 electric vehicle charging stations.

As shown in Table 5-3, the project would be compliant with applicable energy efficiency goals and policies. Therefore, potential impacts associated with renewable energy and energy efficiency would be less than significant.

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6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives (stated in Section 2.0 of this EIR) but would avoid or substantially lessen the significant adverse impacts.

As discussed in Section 2, *Project Description*, the objectives for the proposed project are as follows:

- Provide rooms and 24-hour non-medical care to seniors in need of assistance by operating a financially viable assisted living facility.
- Provide an assisted living facility that serves the local population and does not create compatibility conflicts with adjacent uses.

The proposed project would not have any significant and unavoidable environmental impacts. Nevertheless, because Section 15126.6 of the CEQA Guidelines states that EIRs “shall” describe and analyze a range of alternatives, a discussion of alternatives has been included.

Included in this analysis are three alternatives, including the CEQA-required “no project” alternative, which involve changes to the project that may reduce the project-related environmental impacts as identified in this EIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project.

The following alternatives are evaluated:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Intensity Project
- Alternative 3: Retail Alternative

Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.4.

6.1 Alternative 1: No Project Alternative

6.1.1 Description

The No Project Alternative, required by CEQA, assumes that no new development would be constructed on the project site and that conditions would not change. Current uses on the project site would continue to consist of a one-story restaurant and chiropractic office building located at 400 North Sepulveda Boulevard; a two-story retail, restaurant and personal services building located at 350 North Sepulveda Boulevard; and a one-story electric golf cart sales facility building at 250 North Sepulveda Boulevard. Analysis of this alternative is required by CEQA, but the No Project Alternative would not fulfill any project objectives since the existing conditions would not provide rooms or medical care to seniors, nor provide an assisted living facility.

6.1.2 Impact Analysis

a. Aesthetics

Under the No Project Alternative, the site would remain in its current condition and neither demolition of the existing on-site uses nor construction of a new building would occur. While the proposed project would generally improve the visual quality of the project site with updated architecture and landscaping, it would increase development intensity/height and shadowing as compared to current conditions. Although aesthetic impacts of the proposed project would not be significant, this alternative's impact would be incrementally lower since no change would occur. No impact would occur and mitigation would not be required.

b. Air Quality

Under this alternative, no construction would take place and all construction-related emissions would be avoided. Although the impacts of project construction would not exceed SCAQMD thresholds, impacts associated with this alternative would be lower than those of the proposed project. Mitigation would not be required.

For long-term operational-related emissions, this alternative would not generate any new emissions. However, the proposed project would have reduced operational emissions compared to existing conditions due to the reduced vehicle trips and reduced energy use associated with the proposed project. See Appendix B for air quality emissions associated with the operation of existing uses. Therefore, this alternative's long-term emissions would be incrementally higher than those of the proposed project.

c. Geology and Soils

This alternative would have no impact with respect to geology and soils. As discussed in Section 4.3, Geology and Soils, seismically-induced ground shaking in the project area could damage structures and infrastructure, resulting in loss of property or risk to human safety. Therefore, the proposed project would require Mitigation Measure GEO-1, which requires compliance with all recommendations in the preliminary geotechnical report and applicable provisions of the CBC and MBMC. Therefore, although proposed mitigation would reduce the proposed project's impacts to a less than significant level, this alternative's impact would be incrementally lower than the impacts of the proposed project and mitigation would not be required. In addition, the proposed project would replace older structures with new structures built to current seismic standards and, therefore, may reduce seismic hazards in the long term.

d. Greenhouse Gas Emissions

This alternative would not generate GHG emissions or conflict with adopted plans or policies related to GHG emissions reduction. As discussed in Section 4.6, *Greenhouse Gas Emissions*, the proposed project would generate construction emissions, but would not conflict with applicable GHG plans or policies. However, the proposed project would result in a decrease in operational GHG emissions compared to existing conditions due to the reduced vehicle trips and reduced energy use associated with the proposed project. See Appendix B for air quality emissions associated with the operation of existing uses. Therefore, although this alternative's impact would not be significant, it would be incrementally higher than that of the proposed project.

e. Land Use and Planning

This alternative would have no impact with respect to land use and planning. As discussed in Section 4.5, *Land Use and Planning*, the proposed project would be generally consistent with applicable Manhattan Beach plans and policies. Therefore, the proposed project's impact would be less than significant overall, and this alternative's impact would be the same as that of the proposed project.

f. Noise

This alternative would have no temporary or long-term noise impact. As discussed in Section 4.6, *Noise*, the proposed project would have less than significant noise impacts during construction and operation. The proposed project would generate temporary noise increases during construction, but would generate fewer vehicle trips and less noise than existing on-site development in the long term. Because the proposed project's construction noise impacts would be temporary and less than significant, this alternative's impact would be greater since existing on-site development would continue to generate greater operational traffic and related noise than would be generated by the proposed project.

g. Transportation/Traffic

Under the No Project/Development Alternative, no transportation or circulation impacts would occur either during construction or operation. As discussed in Section 4.7, the proposed project would have less than significant transportation impacts during construction and operation. During construction and operation of the proposed project, the proposed project would generate fewer daily vehicle trips than the trips associated with the existing no project alternative. Transportation impacts under this alternative would not be significant, but VMT would be higher under this alternative because the proposed project would reduce trips and VMT compared to existing uses.

6.2 Alternative 2: Reduced Intensity Project

6.2.1 Description

Similar to the proposed project, this alternative would also involve demolition of existing on-site development and construction of an assisted living facility and subterranean parking area. However, Alternative 2 would reduce the project height by 10 feet (from a maximum height of 204.65 feet above mean sea level to 194.65 feet above mean sea level) and reduce the room count by 38 (from 95 rooms to 57 rooms). The purpose of this alternative is to consider a project that would be a reduced intensity development compared to the proposed project. This alternative meets the basic objectives of providing an assisted living facility that is compatible with adjacent uses, but it is unlikely to be financially viable as these types of facilities are licensed by the State of California to operate as a residential care facility for the elderly, as such, there are operational requirements and specific regulations regarding construction type that drive costs. Due to costs associated with operational requirements and construction type, a 57-room assisted living facility would not be financially viable. Therefore, this alternative would not meet the project's objective to operate a financially viable facility.

6.2.2 Impact Analysis

a. Aesthetics

This alternative would have impacts similar to those of the proposed project with respect to aesthetics, though the minor reduction in the overall size of the building would incrementally reduce visual and shadow impacts to residential properties neighboring the project site. As with the proposed project, this alternative would generally enhance the visual quality of the site with new architecture and landscaping. Although the proposed project's aesthetic impact would not be significant, the impact of this alternative would be incrementally lower and mitigation would not be required.

b. Air Quality

Under this alternative, maximum daily construction emissions and the overall duration of construction activity would be similar to those of the proposed project, though incrementally reduced. As with the proposed project, this alternative's construction impacts would be less than significant.

This alternative would generate emissions in the long-term, but overall emissions would be incrementally lower than under the proposed project. As with the proposed project, no exceedance of SCAQMD significance thresholds would occur and this alternative would not conflict with the AQMP. Although the proposed project's long-term impact would not be significant, this alternative's impact would be incrementally lower and mitigation would not be required.

c. Geology and Soils

This alternative would have identical impacts related to geology and soil as the proposed project. The alternative would involve demolition and subsequent construction of an assisted living facility on the same site. Therefore, the same geotechnical design considerations as those listed in Mitigation Measure GEO-1 would be required. Geology and soils impacts under this alternative would be the same as those under the proposed project and would be less than significant with mitigation incorporated.

d. Greenhouse Gas Emissions

GHG emissions associated with this alternative would be lower than those of the proposed project due to the minor percent reduction in overall building floor area. Like the proposed project, this alternative would not conflict with applicable plans or policies aimed at GHG emissions reduction. Although the proposed project's impact would not be significant, this alternative's impact would be incrementally lower and mitigation would not be required.

e. Land Use and Planning

The reduction in overall building area under this alternative would incrementally reduce overall building intensity as compared to the proposed project. As with the proposed project, this alternative would be generally consistent with local plans and policies. Land use and planning impacts would be less than significant and mitigation would not be required.

f. Noise

Maximum construction noise levels associated with this alternative would be about the same as those that would occur under the proposed project. The minor reduction in overall building size under this alternative would incrementally reduce overall construction activity, but the overall duration of construction would be similar. Overall construction noise impacts would be about the same as those of the proposed project and would be less than significant.

The minor reduction in operational vehicle trips under this alternative would incrementally reduce traffic-related noise as compared to the proposed project. As with the proposed project, impacts under this alternative would be less than significant and no mitigation would be required.

g. Transportation/Traffic

Temporary construction traffic associated with this alternative would be about the same as that of the proposed project and the impact would be less than significant. In the long-term, this alternative would slightly reduce overall trip generation and VMT compared to the proposed project. As with the proposed project, transportation impacts under this alternative would not be significant and no mitigation would be required.

6.3 Alternative 3: Retail Alternative

6.3.1 Description

Alternative 3 would involve construction of a retail development with an at-grade parking lot. Based on the total acreage of the site (approximately 53,000 square feet), this retail building alternative assumes a two-story building with a footprint of approximately 20,000 square feet and total building area of 40,000 square feet (20,000 square feet footprint doubled for the second story). This size of building would require an average of approximately 80 parking spaces¹. Therefore, the at-grade lot would be approximately 24,000 square feet and the remaining 9,000 square feet is assumed to be landscaping area. Retail facilities are assumed to include retail, restaurant, office and/or medical uses up to a height of 30 feet above existing grade. The purpose of this alternative is to consider a project allowed under the current General Plan land use designations and zoning that would not require excavation for subterranean parking and associated environmental impacts. Like the proposed project, this alternative would involve demolition of existing on-site development. However, Alternative 3 would not fulfill any project objectives because it would not provide services for seniors, nor would it establish an assisted living facility.

6.3.2 Impact Analysis

a. Aesthetics

Under this alternative, aesthetic impacts would be similar to those of the proposed project except buildings would cover less of the project site and a surface parking lot would be provided. Like the proposed project, this alternative would be expected to generally enhance the visual quality of the site with new architecture and landscaping. Aesthetic impacts of this alternative compared to the proposed project would be similar and less than significant; mitigation would not be required.

¹ Because MBMC parking space requirements for commercial uses vary from 1 space per 200 square feet to 1 space per 1,000 square feet, this alternative assumes a parking space requirement of 1 space per 500 square feet.

b. Air Quality

Under this alternative, maximum daily construction emissions and the overall duration of construction activity would be lesser because no excavation would be required for a surface parking lot. As with the proposed project, this alternative's construction impacts would be less than significant.

This alternative would generate emissions in the long-term that would vary with the specific uses proposed. Overall operational emissions would be higher than emissions generated by existing on-site development because this alternative would include retail land uses with higher traffic generation rates, such as restaurants, which generate more emissions. According to the ITE "Trip Generation Manual", 10th Edition, restaurants can generate approximately 112 daily weekday trips per 1,000 square feet and shopping centers can generate approximately 38 weekday daily vehicle trips per week. Therefore, this alternative would generate approximately 1,520 to 4,480 weekday daily vehicle trips², while the proposed project would generate 192 daily vehicle trips. Consequently, this alternative would generate higher operational air quality emissions compared to the proposed project, which would reduce trip generation compared to the existing on-site uses.

c. Geology and Soils

As with the proposed project, Alternative 3 would involve demolition and subsequent construction of a development on the site. Therefore, similar geotechnical design considerations as those listed in Mitigation Measure GEO-1 would be required. However, less grading and excavation would be required; therefore, impacts may be slightly reduced compared to the proposed project. As with the proposed project, geology and soils impacts under Alternative 3 would be less than significant with mitigation incorporated.

d. Greenhouse Gas Emissions

GHG emissions associated with this alternative would be lower than those of the proposed project due to the minor reduction in overall building floor area and lack of substantial excavation for a subterranean parking structure. Like the proposed project, this alternative would not conflict with applicable plans or policies aimed at GHG emissions reduction.

Overall operational emissions would be higher than emissions generated by existing on-site development because this alternative would include retail land uses with higher traffic generation rates, such as restaurants. According to the ITE "Trip Generation Manual", 10th Edition, restaurants can generate approximately 112 daily weekday trips per 1,000 square feet and shopping centers can generate approximately 38 weekday daily vehicle trips per week. Therefore, this alternative would generate approximately 1,520 to 4,480 weekday daily vehicle trips, while the proposed project would generate 192 daily vehicle trips. Consequently, this alternative would generate substantially higher operational air pollutant emissions compared to the proposed project, which would reduce trip generation compared to the existing on-site uses. This alternative would result in significant GHG impacts due to the substantially higher mobile emissions and smaller service population (employees only), and it is unlikely that feasible mitigation would be available to reduce this impact to less than significant.

² 38 weekday daily vehicle trips per 1,000 square feet x 40,000 square feet = 1,520 weekday daily vehicle trips
112 weekday daily vehicle trips per 1,000 square feet x 40,000 square feet = 4,480 weekday daily vehicle trips

e. Land Use and Planning

The retail development under this alternative is an allowed use under the General Plan land use designations and zoning for the site. Like the proposed project, this alternative would generally comply with applicable plans and policies of Manhattan Beach. Overall, this alternative's impact would be similar to that of the proposed project.

f. Noise

Maximum construction noise levels associated with this alternative would be about the same as those that would occur under the proposed project, as the reduction in overall building size under this alternative would involve similar phases (e.g., grading, building construction) and equipment. The overall length of construction activity may be incrementally less, but overall construction noise impacts would be about the same as those of the proposed project and would be less than significant.

Operational vehicle trips would likely be similar to those generated by the existing on-site uses and higher than under the proposed project, leading to a slightly increased traffic noise impact. As with the proposed project, traffic noise impacts under this alternative would be less than significant and no mitigation would be required.

g. Transportation/Traffic

Temporary construction traffic associated with this alternative would be about the same as that of the proposed project, though construction would occur over an incrementally shorter period, given the reduction in excavation. Impacts would be less than significant. In the long-term, this alternative's trip generation would vary with the specific uses proposed but would likely increase overall trip generation and VMT compared to the proposed project and would be more similar to existing conditions. As with the proposed project, assuming per capita VMT would be about the same as under existing conditions, transportation impacts under this alternative would not be significant and no mitigation would be required.

6.4 Alternatives Considered But Rejected

An alternative involving relocating the loading dock of the project to Sepulveda Boulevard from its proposed location on 5th Street was considered. However, this relocation would conflict with the Sepulveda Plan and would not result in a substantial reduction in traffic or noise affecting adjacent residences. Therefore, this alternative was eliminated from further consideration.

6.5 Environmentally Superior Alternative

Table 6-1 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied. Based on the alternatives analysis provided above, Alternative 2 (Reduced Intensity Project) would be the environmentally superior alternative, as it would result in reduced impacts compared to the proposed project in nearly all categories without increasing any impacts, and would generate less traffic, noise, and air pollutant and greenhouse gas emissions than existing conditions (No Project Alternative). However, Alternative 2 may not meet the project's objective to operate a financially viable facility. Neither

the proposed project nor any of the alternatives analyzed above would create any significant or unavoidable impacts.

Table 6-1 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project Alternative	Alternative 2: Reduced Intensity Project	Alternative 3: Retail Alternative
Aesthetics	Less than Significant	-	-	=
Air Quality	Less than Significant	+	-	+
Geology and Soils	Less than Significant with Mitigation Incorporated	-	=	=
Greenhouse Gas Emissions	Less than Significant	+	-	+
Land Use and Planning	Less than Significant	-	-	-
Noise	Less than Significant	+	-	+
Traffic	Less than Significant	+	-	+
+ Inferior to the proposed project (increased level of impact) - Superior to the proposed project (reduced level of impact) = Similar level of impact to the proposed project				

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