BOLSA CHICA SENIOR LIVING COMMUNITY

Draft Environmental Impact Report

SCH No. 2022110040

City of Huntington Beach

April 2023

Prepared by:

LSA

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Draft Environmental Impact Report

Bolsa Chica Senior Living Community Project
Huntington Beach, California

State Clearinghouse No. 2022110040

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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that local government agencies, before taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a public document designed to provide both the public and local and State governmental agency decisionmakers with an analysis of potential environmental consequences to support informed decision making.

This Executive Summary has been prepared according to *State CEQA Guidelines* Section 15123 for the Draft EIR for the proposed Bolsa Chica Senior Living Community (proposed project) at 4952 and 4972 Warner Avenue in Huntington Beach, California. This Draft EIR has been prepared for the City of Huntington Beach (City) to analyze the proposed project's potential impacts on the environment; to propose mitigation measures for identified potentially significant impacts that would minimize, offset, or otherwise reduce or avoid those environmental impacts; and to discuss alternatives that could reduce the potentially significant impacts of the proposed project.

1.2 SUMMARY OF LOCATION AND SETTING

The 3.10-acre project site is located at southwest corner of Bolsa Chica Street and Warner Avenue in the City. The City is located in northwest coastal Orange County. The project site is comprised of two parcels: Assessor's Parcel Numbers (APNs) 163-281-01 and 163-281-02. Regional access is provided by Interstate 405 (I-405) to the north and east; State Route 1 (SR-1) or Pacific Coast Highway to the west; and State Route 39 (SR-39) or Beach Boulevard, which bisects the City running north to south. Local access is provided from Bolsa Chica Street and Warner Avenue. In the existing condition, the project site is accessed by three driveways along Bolsa Chica Street and two driveways along Warner Avenue.

The project site is currently fully developed with commercial (retail and office) uses and an associated surface parking lot. The existing commercial and retail uses total approximately 55,000 square feet and are contained in two buildings comprised of a three-story office building fronting on Bolsa Chica Street and a smaller retail commercial building fronting Warner Avenue. Implementation of the proposed project would involve demolition of the existing on-site structures and removal of the surface parking to allow for construction of the new senior living community.

Surrounding land uses include a mix of older commercial, industrial, and residential uses with some newer retail (large drugstores, tire shops, etc.). Directly north of the project site, across Warner Avenue, is a mix of retail businesses, including Walgreens (formerly Lewis Cleaner) and CVS. Directly east of the project site, across Bolsa Chica Street, are an automotive repair business and four single-family homes. Immediately south of the project site is an industrial property, and immediately west of the project site is a two-story apartment complex. Former service stations were previously located at the northwest corner and southeast corner of Bolsa Chica Street and Warner Avenue. These service stations have not been in operation since 1985 and 1992, respectively. The

Meadowlark Airport, which closed in 1989, was located approximately 0.5 mile northeast of the project site. The Summerlane Community, Ralphs shopping center, and Gibbs Park now occupy the former airport site. Former oil fields are located to the northwest, west, and south of the project site.

1.3 SUMMARY OF PROJECT DESCRIPTION

Implementation of the proposed project would involve demolition of the existing on-site structures and removal of the surface parking to allow for construction of the new senior living community. The proposed community would include 213 total living units, 207 on-site parking spaces, and associated hardscape and landscape improvements. Of the total 213 senior living units, 28 would be Memory Care units, 62 would be Assisted Living units, and 123 would be Independent Living units. The units would range in size from a studio (approximately 540 square feet) to three-bedroom units (approximately 2,580 square feet). Amenities for residents are anticipated to include multiple restaurant-style dining venues, fitness and wellness center, salon and studio spaces, theater, art room, lounge, and multi-purpose rooms. Outdoor spaces are anticipated to include a memory care garden, swimming pool with outdoor exercise area, outdoor seating area with fire pit, outdoor dining areas, meditation spaces, a dog park, and roof decks.

A portion of the new community would be licensed by the California Department of Social Services, Community Care Licensing Division (CCLD) per California Code of Regulations (CCR) Title 22, Division 6, Chapter 8 as a Residential Care Facility for the Elderly (RCFE). The State would enforce laws and regulations governing the resident rooms, including a building inspection prior to opening and thorough periodic inspections during operations. The RCFE designation would allow residents at the community to age in place and receive assistance with the activities of daily living. Care for assisted living and memory impaired residents would be provided 24 hours per day, seven days per week. Once the community reaches full residential occupancy, it is anticipated there would be a total of 110 full-time employees. Vans would be provided to transport residents to off-site activities. The development of the new community would require demolition and removal of the existing two commercial buildings, surface parking (including existing asphalt concrete pavement, curb, and gutter), fence and block wall, landscaping, yard lights, signage, and all above-ground water and gas lines on the project site. All existing utility sewer, water, and gas lines below grade would be disconnected and capped.

Landscaping for the proposed project would include a variety of tree and plant species in accordance with the requirements outlined in Section 211.06, CO, CG, and CV Districts – Development Standards, and Section 232, Landscape Improvements, in the City of Huntington Beach zoning code.

With implementation of the proposed project, vehicle access to the community would be provided via three driveways on Bolsa Chica Street (one entry-only driveway and one exit-only driveway for the porte cochère, and one full-access driveway for the subterranean parking garage). The proposed project would also provide a right-in/right-out only driveway on Warner Avenue (in the northwest corner of the property) for emergency, trash/recycling, and service vehicles. This driveway would feature a gate and a hammerhead turn-around. A passenger drop-off zone for the community would

be located in front of the main entrance along Bolsa Chica Street under the porte cochère. Pedestrian access to the community would be provided via sidewalks along Warner Avenue and Bolsa Chica Street as well as internal walkways.

See Chapter 3.0, Project Description, for a complete description of the project components.

1.4 SIGNIFICANT UNAVOIDABLE IMPACTS

As described in Chapter 4.0, Existing Environmental Setting, the proposed project would not result in significant unavoidable adverse impacts. Also, Chapter 4.0 includes proposed mitigation measures for potentially significant impacts for cultural resources; geology and soils; and tribal cultural resources to ensure that no significant, adverse effects on the environment would occur.

1.5 ALTERNATIVES

Public Resources Code (PRC) Section 21100 and *State CEQA Guidelines* Section 15126 require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts. The following alternative has been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the proposed project but that may avoid or substantially lessen any of the significant impacts of the proposed project. Therefore, the alternative considered in this EIR is described in more detail below.

1.5.1 Alternative 1: No Project Alternative

The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. According to *State CEQA Guidelines* Section 15126.6(e)(3)(C), the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. According to *State CEQA Guidelines* Section 15126.6(e)(3)(C), the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

This alternative would involve no changes to the existing land uses and conditions on the project site. Under this alternative, no new development on the project site is proposed, and therefore, no development would occur, and the project site would remain in its current condition. The No Project Alternative would allow for the project site to remain developed with commercial (retail and office) uses and an associated surface parking lot.

1.5.2 Identification of the Environmentally Superior Alternative

CEQA requires the identification of an environmentally superior alternative. *State CEQA Guidelines* Section 15126.6(e)(2) states that if the No Project/No Development Alternative is the

environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

The No Project Alternative has the least impact to the environment during the short term because it would not result in any construction activities on the project site or the intensification of land uses. However, when compared to the proposed project, the No Project Alternative would result in greater environmental impacts to air quality and transportation-related impacts to the surrounding circulation system due to the greater number of vehicle trips to and from the project site.

While the No Project Alternative would avoid the impacts of the proposed project, the benefits of the proposed project including helping the City to meet its goals of providing senior housing options within the City, revitalizing the project site, and invigorating the local economy would not occur, and none of the Project Objectives would be met.

Both the Maximum CG Buildout Alternative, which was initially considered, but ultimately rejected, and the No Project Alternative would result in potentially significant impacts that would not occur under the proposed project. In addition, potentially significant impacts associated with implementation of the proposed project would be reduced to a less than significant level with implementation of mitigation. Therefore, the proposed project would not result in any significant impacts. None of the alternatives considered would eliminate the potentially significant impacts associated with the project prior to/without implementation of mitigation. Further, potentially significant impacts associated with construction activities, such as impacts to noise and air quality, would occur regardless of the project's location in the City, and similar mitigation measures, standard conditions, and regulatory compliance measures as detailed throughout this EIR would be required to reduce potentially significant impacts to a less than significant level.

The City of Huntington Beach is experiencing an increasing demand for senior living facilities to address the housing needs of its senior population. As such, the City has adopted a policy to support the development of affordable senior housing and supportive services to facilitate maximum independence and the ability of seniors to remain in their homes and/or in the community (Policy 5.2 in the City's 2020 Housing Element). The proposed project meets each of the identified project objectives, including meeting the demand for senior living facilities in Huntington Beach at a scale of development suitable to current industry standards, with the goal of producing as many senior housing units as possible. Any alternative proposed would not meet all of the project objectives and would fall short of addressing the needs of the City's senior population. In addition, as described throughout this EIR, the proposed project would not result in any significant unavoidable impacts as all impacts of the proposed project can be mitigated to below the appropriate level of significance. Therefore, no alternative is identified as the Environmentally Superior Alternative.

1.6 AREAS OF CONTROVERSY

Pursuant to *State CEQA Guidelines* Section 15123, this Draft EIR acknowledges the areas of controversy and issues to be resolved that are known to the City or that were raised during the scoping process. A Notice of Preparation (NOP) for an EIR was circulated and public comments on

the Initial Study were solicited for a period of 30 days, starting on November 2, 2022, and ending on December 1, 2022. A scoping meeting was held on November 10, 2022. Major issues and concerns raised during the NOP process included: (1) suggestions from the Native American Heritage Commission (NAHC) for compliance with Senate Bill 18 and Assembly Bill 52. Please note that this is not an exhaustive list of areas of controversy but rather key issues that were raised during the scoping process and public review period for the Draft EIR.

This Draft EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures designed to reduce or eliminate potentially significant impacts of the proposed project.

1.7 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.A, below, identifies the potential environmental impacts, proposed mitigation measures, standard conditions, regulatory compliance measures, and level of significance after mitigation is incorporated into the proposed project. Table 1.A also identifies cumulative impacts resulting from the proposed project. Environmental topics addressed in this Draft EIR include: aesthetics, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, land use and planning, noise, tribal cultural resources, and utilities and service systems.

Refer to Chapter 2.0, Introduction, of this Draft EIR for a discussion of additional effects found not to be significant through the NOP process.

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
4.1: Aesthetics		
Threshold 4.1.3: In non-urbanized area, substantially degrade the existing visual character of quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If that project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? **Less Than Significant Impact.** The project site is located within an urbanized area of the City. The proposed project would require a General Plan Amendment to change the land use designation from Commercial General (CG) to Mixed Use (MU) and a Zoning Map Amendment to change the zoning of the site from Commercial General (CG) to Specific Plan (SP). The proposed licensed senior living community is considered a RCFE (convalescent community), which is conditionally permitted under the existing zoning designation by the Zoning Administrator and would be a conditionally permitted use under the requested Specific Plan zoning designation. As such, a Conditional Use Permit (CUP) is required for the proposed project. The proposed development as specified in the Specific Plan would achieve consistency with the City's General Plan based upon concurrent approval of the change in land use designation from Commercial General (CG) to Mixed Use (MU). The Mixed-Use designation would accommodate the density of residential living, employment, and amenities that are critical to successful operation of the proposed facility. The proposed development would also achieve a superior level of urban design through development standards and design guidelines that would be tailored to meet the needs of a high-quality residential care facility, while enhancing the visual character of the surrounding neighborhood. Specifically, the Specific Plan would increase the allowable Floor Area Ratio (FAR) to 2.5 and	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
the maximum building height to 65 feet (excluding mechanical equipment). The proposed project would have a FAR and building height within the allowable ranges pursuant to the proposed Specific Plan. The proposed project would be developed consistent with the existing Surf City culture, that includes the informal aesthetic elements of the existing beach community. The proposed project would not conflict with relevant goals and policies in terms of preserving the visual quality in the City such as ensuring new development projects are of compatible proportion, scale, and character to complement adjoining uses and protecting existing Surf City culture and identity. Further, as described in the Bolsa Chica Senior Living Community Shadow Studies, implementation of the proposed project would not result in significant shade or shadow impacts to nearby residential uses. Therefore, the proposed project would not result in significant impacts related to applicable zoning and other regulations governing scenic quality.		
Cumulative Aesthetics Impacts. **Less Than Significant Impact**. As described above, the proposed project would include a General Plan and a Zoning Map Amendment. A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. Approval of the General Plan Amendment and Zoning Amendment would render the proposed project consistent with the City's established development standards, and no mitigation would be required. Therefore, cumulative aesthetics impacts with respect to consistency with applicable zoning regulations would be less than significant. There are no incompatibilities between the proposed project and planned future projects in the City, which primarily include mixed-use and residential developments. Proposed projects in	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
the City would be reviewed for consistency with adopted land use plans and policies by the City. For this reason, current and future projects are anticipated to be consistent with applicable General Plan and zoning requirements or would be subject to allowable exceptions. Further, each discretionary project would be subject to CEQA, mitigation requirements, and design review, as applicable. Therefore, the proposed project would not contribute a significant cumulative aesthetic or visual impact in the City, and no mitigation is required.		
4.2: Air Quality		
Threshold 4.2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan? **Less Than Significant Impact.** Projects are considered consistent with and would not conflict with or obstruct implementation of the Air Quality Management Plan (AQMP) when they do not increase the frequency or severity of an air quality standards violation or cause a new violation and when they are consistent with the growth assumptions in the AQMP. The proposed project would result in short-term construction and long-term operational criteria pollutant emissions that are less than the significance thresholds set forth by the South Coast Air Quality Management District (SCAQMD). The proposed project would not result in any air quality violations and would be consistent with the applicable land use designation and zoning classifications. Therefore, impacts related to the conflict with or obstruction of implementation of the AQMP would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact
Threshold 4.2.2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? **Less Than Significant Impact.** Construction of the proposed project would not result in any exceedances of any criteria	**Regulatory Compliance Measure AQ-1: SCAQMD Rule 403.** During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventative measures by using the following procedures, in compliance with South Coast Air Quality Management	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
pollutant. In addition, construction equipment/vehicle emissions during construction periods would not exceed any of the SCAQMD established daily emissions thresholds for which the project region is nonattainment under the California ambient air quality standards (CAAQS) or national ambient air quality standards (NAAQS). Therefore, the proposed project would not exceed the SCAQMD construction emissions thresholds, and short-term (construction) air quality impacts would be less than significant. Regulatory Compliance Measures AQ-1 through AQ-4 require compliance with SCAQMD standard conditions, including Rule 402 (Nuisance) to control nuisance emissions, Rule 403 (Fugitive Dust) to control fugitive dust, and Rule 1113 (Architectural Coatings) to control volatile organic compound (VOC) emissions from paint. Compliance with SCAQMD standard conditions are regulatory requirements, not mitigation, and were considered in the analysis of construction emissions. With compliance with regulatory requirements, construction impacts related to the cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable NAAQS or CAAQS would be less than significant, and no mitigation is required. The net increased emission results during operation of the proposed project would not exceed the corresponding SCAQMD daily emission thresholds for any criteria pollutants. While the project would result in the increased emissions of criteria pollutants, emissions during operation of the proposed project would not exceed the thresholds of significance for any criteria pollutants for which the project region is nonattainment under the CAAQS or NAAQS. Therefore, operational emissions for the proposed project would have a less than significant impact, and no mitigation is required.	District (SCAQMD) Rule 403 during construction. The applicable Rule 403 measures are as follows: • Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more). • Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving). • Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. • Pave construction access roads at least 100 feet (30 meters) onto the site from the main road. • Reduce traffic speeds on all unpaved roads to 15 miles per hour or less. **Regulatory Compliance Measure AQ-2.** All trucks that are to haul excavated or graded material shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. **Regulatory Compliance Measure AQ-3.** Prior to approval of the project plans and specifications, the City of Huntington Beach shall confirm that the construction bid packages specify: • Contractors shall use high-volume low-pressure	

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	paint applicators with a minimum transfer efficiency of at least 50 percent; • Coatings and solvents that will be utilized have a volatile organic compound content lower than required under SCAQMD Rule 1113; and • To the extent feasible, construction/building materials shall be composed of pre-painted materials. **Regulatory Compliance Measure AQ-4.** The project shall comply with SCAQMD Rule 402. Rule 402 prohibits the discharge of air contaminants or other material from any type of operations, which can cause nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort or repose of any such persons, or the public.	
Threshold 4.2.3: Would the project expose sensitive receptors to substantial pollutant concentrations? **Less Than Significant Impact.** The proposed project would introduce criteria pollutants and fugitive dust into the air during the short-term construction period. The nearest sensitive receptors to the project site are the Monticello Apartments located immediately west of the project site. Based on the SCAQMD Localized Significance Thresholds (LSTs), the proposed project would not result in a significant level of exposure to sensitive receptors during short-term project construction or long-term operation. The proposed project would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact
Cumulative Air Quality Impacts. **Less Than Significant Impact.** The proposed project's construction- and operation-related regional daily emissions are	No mitigation is required. Refer to Threshold 4.2.2 above for Regulatory Compliance Measures AQ-1 through AQ-4.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
less than the SCAQMD significance thresholds for all criteria pollutants. In addition, adherence to SCAQMD rules and regulations on a project-by-project basis would substantially reduce potential impacts associated with the related cumulative projects and basin-wide air pollutant emissions. Therefore, the proposed project would not have a cumulatively considerable increase in emissions, and the proposed project's cumulative air quality impacts would be less than significant.		
4.3: Cultural Resources		
Threshold 4.3.1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? **Less Than Significant with Mitigation Incorporated.** A records search of the California Historical Resources Information System (CHRIS) was conducted by the South Central Coastal Information Center (SCCIC) on October 14, 2022 (Records Search file No. 24034.10260) for the project site and a 1-mile radius of the project site. No previously recorded archaeological resources that would qualify as "historical resources" as defined by CEQA or human remains were identified on or within the previous project site. Twenty-eight resources were documented within 1-mile of the project site including 2 archaeological sites and 2 historic buildings with determinations of eligibility. All project actions would occur exclusively within the limits of the project site; and therefore, none of the historical resources identified within 1-mile of the project site would be impacted by implementation of the proposed project. As described in the Cultural Resources Research and Records Review Report, the whole Bolsa Chica Mesa is considered to be a Sacred Lands Site Complex by Native Americans. No artifacts have been recorded around the immediate project site; however, early historic development covered the area with	**Mitigation Measure CUL-1: Archaeological Site Monitoring.** Prior to the issuance of a grading permit, a City of Huntington Beach (City)-approved archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards for archaeology shall prepare an Archaeological Mitigation and Monitoring Plan (AMMP) for the proposed project. The AMMP shall include protocols for mitigation of any finds through a Research Design and Recovery Plan outlining significance testing of the inadvertent finds, laboratory analyses, curatorial requirements, and reporting requirements. The AMMP shall include language that all work must be stopped within 50 feet of an archaeological find while the find is assessed by the archaeologist and any Native American monitors. The City-approved archaeologist shall oversee archaeological monitoring of construction-related ground disturbance. Monitoring shall continue until the archaeologist determines that there is a low potential for encountering subsurface archaeological, cultural, or tribal cultural resources. In the event that archaeological cultural resources are identified during ground-disturbing project activities, the protocols outlined in the project's	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
structures prohibiting archaeological surface surveys. Therefore, subsurface excavations associated with development of the proposed project have the potential to unearth previously unknown cultural or historical resources. Implementation of Mitigation Measure CUL-1, Archaeological Site Monitoring, would reduce potential impacts associated with previously unknown cultural and/or historical resources to a less than significant level.	AMMP shall be implemented.	
Threshold 4.3.2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? **Less Than Significant with Mitigation Incorporated**. As discussed under Threshold 4.3.1, above, a records search of the CHRIS was conducted by the SCCIC on October 14, 2022, for the project site and a 1-mile radius of the project site. The results of the record search indicated that no archaeological resources have been previously recorded within the project site. All project actions would occur exclusively within the limits of the project site; and therefore, none of the 18 archaeological resources identified within 1 mile of the project site would be impacted by implementation of the proposed project. Soils on the project site have been previously disturbed from development of the existing two commercial buildings on the site, landscaping, parking, and associated infrastructure, and no artifacts have been recorded on or around the immediate project site. However, as discussed previously, the whole Bolsa Chica Mesa is considered to be a Sacred Lands Site complex by Native Americans and the area surrounding the project site was extensively used during prehistoric times. While no archaeological sites or artifacts have been recorded in the immediate vicinity of the project site, development of this area occurred in the historic-period and could have resulted in the undocumented removal of archaeological resources. Given this	Refer to Threshold 4.3.1 above for Mitigation Measure CUL-1.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
information, there is an elevated potential for the project site to contain subsurface archaeological resources. Therefore, subsurface excavations associated with development of the proposed project have the potential to unearth previously unknown archaeological resources. Implementation of Mitigation Measure CUL-1, Archaeological Site Monitoring, would reduce potential impacts associated with previously unknown cultural or archaeological resources to a less than significant level.		
Cumulative Cultural Resources Impacts. **Less Than Significant Impact.** The proposed project would not have an impact on historical resources. Potential impacts of the proposed project to unknown archaeological resources, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Long Beach, could contribute to a cumulatively significant impact due to the overall loss of archaeological resources unique to the region. However, each discretionary development proposal received by the City is required to undergo environmental review pursuant to CEQA. If there were any potential for significant impacts to archaeological resources associated with specific projects in the cumulative impact area, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures. When archaeological resources are assessed and/or protected as they are discovered, impacts to these resources are considered less than significant. The proposed project would have a less than significant impact related to unknown cultural resources with implementation of Mitigation Measure CUL-1. As such, the proposed project, in conjunction with other development in the City, would not result in a significant cumulative impact to unique archaeological resources and previously undiscovered buried human remains.	Refer to Threshold 4.3.1 above for Mitigation Measure CUL-1.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
4.4: Energy		
Threshold 4.4.1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? **Less Than Significant Impact.** The proposed project's on-road trips during construction would temporarily increase the total annual gasoline and diesel fuel consumption in Orange County by less than 0.01 percent. Furthermore, operation of the proposed project would negligibly increase the annual electricity and natural gas consumption in Orange County by less than 0.01 percent and would result in a net decrease in gasoline and diesel fuel consumption. Impacts related to energy use during construction and operation would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, project impacts would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact
Threshold 4.4.2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? **Less Than Significant Impact.** The proposed project would be required to comply with the California Building Code (CBC) and the California Green Building Standards Code (CALGreen Code) pertaining to energy and water conservation standards in effect at the time of construction. Additionally, as described above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project would be consistent with applicable plans related to renewable energy and energy efficiency. Impacts would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
Cumulative Energy Impacts. **Less Than Significant Impact.** Although the proposed project would result in a net increase in demand for electricity, this increase would not require Southern California Edison (SCE) to expand or construct infrastructure that could cause substantial environmental impacts. The proposed project, in combination with cumulative development, is well within SCE's system-wide net annual increase in electricity supplies over the 2018 to 2030 period, and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands. Similarly, additional natural gas infrastructure is not anticipated due to cumulative development. The proposed project's share of cumulative consumption of natural gas in the Southern California Gas Company's (SoCalGas) service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of the related projects without additional facilities. In addition, both SCE and SoCalGas demand forecasts include the growth contemplated by the proposed project and the related projects. Transportation energy use would also increase; however, this transportation energy use would not represent a major amount of energy use when compared to the amount of existing development and to the total number of vehicle trips and vehicle miles traveled (VMT) throughout Orange County and the region. Therefore, the proposed project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
4.5: Geology and Soils		
Threshold 4.5.6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Less Than Significant Impact with Mitigation Incorporated.** The records search, as well as geologic mapping in the area, indicate that there is the potential for Pleistocene sediments to be located at or near the surface on the project site. Nearby Pleistocene sites have produced vertebrate as well as invertebrate fossils. Therefore, this background information suggests there is high potential that near surface excavations on the project site could produce Pleistocene fossils which would be considered significant paleontological resources. Implementation of Mitigation Measures GEO-1 and GEO-2 would ensure that potential impacts to scientifically significant, nonrenewable paleontological resources inadvertently discovered within the project area would remain less than significant during project construction.	**Mitigation Measure GEO-1:** A City of Huntington Beach (City)-approved paleontologist shall be retained to observe grading activities during grading or trenching activities that cut into the Pleistocene wave-cut marine terrace units. Prior to issuance of any permits the paleontologist shall prepare a Paleontological Resource Impact Management Plan (PRIMP) to orient the protocols for monitoring and fossil recovery. **Mitigation Measure GEO-2.** The City-approved paleontologist shall be present at the pre-grade conference and shall establish procedures for paleontological resource surveillance and procedures for temporarily halting and redirecting work to permit sampling and identification and evaluation of fossils. If the resources are deemed to be significant, the paleontologist shall determine appropriate actions, in cooperation with the Applicant, which ensure proper exploration and/or salvage. Full-time monitoring and salvage efforts will be necessary whenever previously undisturbed sediments are being disturbed (8 hours per day during grading or trenching activities). Once the earth moving is 50 percent completed, monitoring may be reduced if no fossils are being recovered. The paleontologist shall be empowered to temporarily divert or direct grading operations to facilitate assessment and salvaging of exposed fossils. Collection and processing of matrix samples through fine screens will be necessary to salvage any micro-vertebrate remains. If a deposit of micro-vertebrates is discovered, matrix material can be moved off to one side of the grading area to allow for further screening without delaying construction activities. Collected fossils shall be prepared to the level of identification, and all fossils shall	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	be identified to the most specific taxonomic level possible. All fossils and their contextual stratigraphic data shall go to an institution with a research interest in the materials. A final report that details methods, fossils recovered, and their significance shall be prepared and submitted to the City and the institution curating the fossils. This document shall also show compliance with any and all requirements.	
Cumulative Geology and Soils Impacts. **Less Than Significant Impact.** Potential impacts of the proposed project to unknown paleontological resources and unique geologic features, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Huntington Beach could contribute to a cumulatively significant impact due to the overall loss of paleontological remains unique to the region. However, each discretionary development proposal received by the City is required to undergo environmental review pursuant to CEQA. If there were any potential for significant impacts to paleontological resources or unique geologic features, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures. When resources are assessed and/or protected as they are discovered, impacts to these resources would be less than significant. As such, adherence to Mitigation Measures GEO-1 and GEO-2 would ensure that the proposed project, together with cumulative projects, would not result in significant cumulative impacts to unique paleontological resources or unique geologic features.	Refer to Threshold 4.5.6 above for Mitigation Measures GEO-1 and GEO-2.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
4.6: Greenhouse Gas Emissions		
Threshold 4.6.1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? **Less Than Significant Impact.** Implementation of the proposed project would generate greenhouse gas (GHG) emissions during construction and operation through the combustion of fossil-based fuels. Since construction would be temporary (approximately 24 months), construction GHG emissions would cease upon project completion. Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. The project's emissions are less than the South Coast Air Quality Management District (SCAQMD) Tier 3 threshold of 3,000 metric tons of carbon dioxide equivalent (MT CO_2e) per year for all land use types. Therefore, impacts related to operational GHG emissions would be less than significant, and no mitigation would be required.	No mitigation is required.	Less Than Significant Impact
Threshold 4.6.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Less Than Significant Impact.** Applicable plans adopted for the purpose of reducing GHG emissions include California Air Resources Board (CARB)'s Scoping Plan, Southern California Association of Governments' (SCAG) Connect SoCal 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the City's Greenhouse Gas Reduction Program (GGRP). The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the Scoping Plan, Executive Order B-30-15, Senate Bill 32, and Assembly Bill 197 and would be consistent with applicable State plans and programs designed to reduce GHG emissions.	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
Based on the nature of the proposed project, it is anticipated that its implementation would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to GHG emission, and impacts are considered less than significant. The proposed project would be consistent with the goal of the City's GGRP of reducing GHG emissions by 2040 and 2050. It should also be noted that the second largest GHG emissions source of the project would be from energy use. SB 100 requires that all retail electricity sold be from a renewable carbon free source by 2045, with at least 60 percent being carbon free by 2030. This would further increase the project's GHG reductions compared to the existing conditions. Furthermore, the project would be designed to meet the requirements of the California Green Building Standards Code (CALGreen Code) and the Title 24 Building Standards Code. In doing so, the project would include features to enhance sustainability, including energy efficiency, water efficiency, material conservation, and resource efficiency. Therefore, the proposed project would be beneficial in helping the City meet its GGRP goals and impacts would be less than significant. No mitigation is required. Therefore, impacts related to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions would be less than significant, and no mitigation is required.		
Cumulative Greenhouse Gas Emissions Impacts. **Less Than Significant Impact.** Cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for GHG emissions. GHG emissions are global pollutants, and therefore, result in cumulative impacts by nature. The project's emissions	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
are less than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e per year for all land use types and are therefore less than cumulatively significant. The proposed project, in conjunction with other cumulative projects, would be subject to all applicable regulatory requirements which would further reduce GHG emissions. Therefore, the project's cumulative contribution of GHG emissions would be less than significant and the project's cumulative GHG impacts would also be less than significant. No mitigation is required.		
4.7: Land Use and Planning		
Threshold 4.7.2: 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? **Less Than Significant Impact.** **Southern California Association of Governments Regional Comprehensive Plan (RCP).** The RCP addresses issues such as housing, traffic, air quality, and water resources as a guide for local agencies to use in preparing plans that deal with regional issues. The RCP outlines a vision of how the Southern California region can balance growth with conservation in order to achieve a higher quality of life. The proposed project would be consistent with applicable goals and policies in the Southern California Association of Governments' (SCAG) 2008 RCP. No mitigation is required. **Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).** The adopted 2020–2045 RTP/SCS seeks to link the goal of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging fair and equitable access to residents impacted by socioeconomic, geographic, and	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
commercial conditions. Implementation of the proposed project would be consistent with the goals and the intent of the 2020-2045 RTP/SCS. **General Plan and Zoning Code Consistency.** The project site is currently designated and zoned CG – Commercial General. The maximum Floor Area Ratio (FAR) is 1.5, and the maximum building height is 50 feet. As currently designated, the proposed project would be inconsistent with the City's established development standards under the project site's current CG zoning. However, the Applicant is requesting a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). The land use designation change to MU would allow development and operation of a RCFE and independent living apartments with approval of a Conditional Use Permit. A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. The Specific Plan would increase the allowable FAR to 2.5 and the maximum building height to 65 feet. Therefore, approval of the General Plan Amendment to change the land use designation to MU and the Zoning Map Amendment to change the zoning to SP would render the proposed project consistent with the City's established development standards, and no mitigation would be required. The proposed project would also be consistent with all applicable policies in the City General Plan Land Use, Circulation, Environmental Resources and Conservation, Natural and Environmental Hazards, Noise, Public Services and Infrastructure, and Housing Elements. Therefore, impacts related to potential conflicts with the City's General Plan are anticipated to be less than significant, and no mitigation is required. Overall, impacts to land use and planning would be less than		

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
significant, and no mitigation is required.		
Cumulative Land Use and Planning Impacts. **Less Than Significant Impact.** The proposed project would include land uses that are consistent with the surrounding development and would not contribute to a pattern of development that adversely impacts adjacent land uses or conflicts with existing development. There are no incompatibilities between the proposed project and planned future projects in the City, which primarily include mixed use and residential development projects. In addition, each of the related projects in the City would be reviewed for consistency with adopted land use plans and policies by the City. For this reason, the related projects are anticipated to be consistent with applicable General Plan and zoning requirements, or would be subject to allowable exceptions; further, they would be subject to CEQA, mitigation requirements, and design review. As described previously, the proposed project would include a General Plan Amendment and a Zoning Map Amendment. A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. Approval of the General Plan Amendment and Zoning Amendment would render the proposed project consistent with the City's established development standards, and no mitigation would be required. Therefore, cumulative land use impacts with respect to consistency with adopted land use plans and policies would be less than significant. Overall, the proposed project would not contribute a significant cumulative land use compatibility impact in the City, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
4.8: Noise		
Threshold 4.8.1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **Less Than Significant Impact.** **Construction Noise**. Compliance with the City's Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the vicinity of the project site, construction noise would cease to occur once project construction is completed. In addition to compliance with appropriate construction times, Standard Condition NOI-1, would implement measures during construction to reduce noise impacts to the greatest extent feasible. The construction activities shall take place only between the hours of 7:00 a.m. and 5:00 p.m., Monday through Saturday. No construction shall be permitted outside of these hours or on Sundays and City-recognized holidays. Therefore, with implementation of Standard Condition NOI-1, construction activity noise impacts would be less than significant, and no mitigation is required. **Operational Noise.** Operational noise sources associated with the proposed project include mobile and stationary (i.e., truck delivery and unloading activities, HVAC equipment, trash pick-up/compactor operations, and parking lot activities) sources. The proposed project would not result in any exceedances in mobile-source or stationary source noise standards. Operational impacts would be less than significant. No mitigation is required.	**Standard Condition NOI-1: Construction Noise and Vibration.** Prior to issuance of building permits, the City of Huntington Beach (City) Director of Community Development Department, or designee, shall verify that grading and construction plans include the following requirements: • Ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved. • Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards. • Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development. • The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site whenever feasible. • The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible. • All residential units located within 500 feet of the construction site shall be sent a notice regarding the construction schedule. A sign, legible at a distance of 50 feet, shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number for the "noise	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	disturbance coordinator." • A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures to reduce noise levels. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.	
Threshold 4.8.2: Generation of excessive groundborne vibration or groundborne noise levels? **Less Than Significant Impact.** The proposed project's ground-borne noise and vibration from construction activity would be mostly low to moderate. The closest building to the proposed construction activities is the existing industrial building to the south of the project site, which is approximately 35 feet from the edge of the proposed construction. Based on the conducted analysis, vibration levels would not exceed any of the established guidelines considered for damage potential; therefore, the project is not expected to result in the generation of excessive ground-borne vibration. This impact would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact
Cumulative Noise Impacts. **Less Than Significant Impact.** A cumulative noise impact would occur if multiple sources of noise from cumulative projects combine to create impacts in close proximity to a sensitive receptor. Because construction noise and vibration are localized	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
and rapidly attenuate within an urban environment, the identified cumulative projects are located too far from the project site to contribute to cumulative impacts related to noise levels due to construction activities. Construction activities at any related project site would not result in a noticeable increase in noise to sensitive receptors adjacent to the project site. Furthermore, all related projects would be required to comply with the City's Noise Ordinance. Therefore, cumulative construction noise impacts are considered less than significant.		
4.9: Tribal Cultural Resources		
Threshold 4.9.1(a): Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? **Less Than Significant Impact.** A cultural resources records search was completed at the South-Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton. It included a review of all prehistoric and historic archaeological sites within a 1-mile radius of the project site, as well as a review of known cultural resource survey and excavation reports in that area. The California State Historic Resources Inventory (HRI), National Register of Historic Places (National Register), California Historical Landmarks (SHL), California Points of Historical Interest (SPHI), and various local historical registers were examined. The SCCIC records search results identified no previously recorded cultural resources in the project site. All	No mitigation is required.	Less Than Significant Impact

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Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
project actions would occur exclusively within the limits of the project site; and therefore, none of the cultural or historical resources identified within 1 mile of the project site would be impacted by implementation of the proposed project. Evaluation of the two commercial buildings on the project site, which were constructed in 1977 and 1979, concluded that the buildings are neither tied to exceptional importance nor do they meet the criteria for historic designation under the California Register's Criteria 1–4. Removal of the buildings would not impact any significant elements of the built environment, and therefore, the buildings do not qualify as "historical resources" as defined by CEQA. As such, there are no tribal cultural resources as defined in PRC Section 21074 or historical resources as defined in Section 15064.5 of the *State CEQA Guidelines* or PRC 5020.1(k) on the project site. Native American consultation was conducted by the City in compliance with SB 18 and AB 52. The City sent letters for the purposes of AB 52 and SB 18 consultation to Native American tribal contacts provided by the NAHC as well as local Native American tribal representatives that previously requested to be notified of future projects proposed by the City. The Gabrieleno Band of Mission Indians - Kizh Nation and Juaneño Band of Mission Indians - Acjachemen Nation responded to the City's invitation for consultation. As part of the consultation process, a review of the SLF by the NAHC, indicated that the results of the file search were positive. The entire Bolsa Chica Mesa is considered to be a *Sacred Lands Site Complex*[1] by Native Americans. However, all of the archaeological sites associated with the complex are located		

[1] Ibid.

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
more than 0.2 mile east of the project site, and no archaeological sites or artifacts have been recorded on the project site. The City conducted research into permit records for the project site at the request of both of the consulting tribes, provided updates, and formally concluded tribal consultation following the discussion of findings. As a result of consultation, the tribal organizations requested that tribal monitors be present on site during ground- disturbing activities associated with the proposed project. As such, appropriate mitigation measures have been incorporated into the proposed project. Therefore, no known tribal cultural resources listed or eligible for listing in the California Register of Historical Resources (California Register) or in a local register exist within the project site, and there are no known tribal cultural resources on the project site. This impact would be less than significant, and no mitigation is required.		
Threshold 4.9.1(b): Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. **Less Than Significant Impact with Mitigation Incorporated.** A cultural resources Record Search, a SLF search through the NAHC, and Native American consultation per AB 52 and SB 18	**Mitigation Measure TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.** A. The Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) and the Juaneño Band of Mission Indians – Acjachemen Nation (Acjachemen Nation). The monitors shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling,	Less Than Significant Impact

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Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
were conducted for the proposed project. The purpose of these efforts was to identify known tribal cultural resources on or near the project site. No tribal cultural resources were identified as part of the records search. Consultation occurred with the Gabrieleno Band of Mission Indians - Kizh Nation (Kizh Nation). Appropriate mitigation measures regarding the potential discovery of Tribal Cultural Resources were developed with input from the Kizh Nation and incorporated into this EIR. City staff also consulted with the Juaneño Band of Mission Indians - Acjachemen Nation (Acjachemen Nation) regarding the proposed project. The Acjachemen Nation requested that a Tribal Monitor be present on site for all project-related ground-disturbing activities. Consultation with the Kizh Nation and Acjachemen Nation resulted in the development and approval of Mitigation Measure TCR-1, TCR-2, and TCR-3. Mitigation Measure TCR-1 requires Native American tribal monitoring of ground-disturbing activities associated with project construction. Tribal monitors from both groups shall only be on site when these ground-disturbing activities occur. Although no human remains are known to be on the project site or are anticipated to be discovered during project construction, there is always a possibility of encountering unanticipated human remains. If human remains are Native American in origin, the remains may be considered a tribal cultural resource. If human remains are encountered, the City is required to adhere to Standard Condition CUL-1, which requires compliance with the State's Health and Safety Code for the treatment of human remains and coordinate with the Native American	and trenching. B. A copy of the executed monitoring agreement shall be submitted to the City prior to the earlier commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitors shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Kizh Nation and the Acjachemen Nation. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCRs"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant and City upon written request to the Kizh Nation and the Acjachemen Nation. D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh Nation and the Acjachemen Nation from a designated point of contact for the Applicant that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh Nation and the Acjachemen Nation to the Applicant and City that	

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
Heritage Commission and a Most Likely Descendant if the remains are determined to be Native American. Implementation of Standard Condition CUL-1, as detailed in the Initial Study, and Mitigation Measures TCR-1, TCR-2, and TCR-3would ensure potential impacts to tribal cultural resources would be less than significant.	no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh Nation and Acjachemen Nation TCRs. E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh Nation and Acjachemen Nation monitor and/or archaeologist. The Kizh Nation and Acjachemen Nation shall recover and retain all discovered TCRs in the form and/or manner the tribal groups deem appropriate and for any purpose the tribes deem appropriate, including for educational, cultural and/or historic purposes. **Mitigation Measure TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects.** A. Native American human remains are defined in Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the Coroner has determined the	

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	nature of the remains. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC), and PRC Section 5097.98 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California PRC Sections 5097.98(d)(1) and (2). D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh Nation and Acjachemen Nation monitors determine that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh Nation and Acjachemen Nation monitors and/or archaeologists deems necessary). (CEQA Guidelines Section 15064.5(f).) E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for	

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	educational purposes. F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance. **Mitigation Measure TCR-3: Procedures for Burials and Funerary Remains.** A. If the Native American Heritage Commission designates the Kizh as the Most Likely Descendant ("MLD") for any human remains discovered or recognized on the project site, the Koo-nas-gna Burial Policy shall be implemented. To the Kizh Nation, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.	

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Kizh Nation will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. E. In the event that preservation in place is not possible despite good faith efforts by the project applicant/ developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/ repatriation shall be on the project site but at a location agreed upon between the Kizh Nation and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. G. The Kizh Nation will work closely with the project's qualified archaeologist to ensure that the	

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
	excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Kizh Nation, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery-related forms of documentation shall be approved in advance by the Kizh Nation. If any data recovery is performed, once complete, a final report shall be submitted to the Kizh Nation and the NAHC. The Kizh Nation does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.	
Cumulative Tribal Cultural Resources Impacts. **Less Than Significant Impact.** Potential impacts of the proposed project to unknown tribal cultural resources, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Huntington Beach, could contribute to a cumulatively significant impact due to the overall loss of tribal cultural resources unique to the region. However, each discretionary development proposal received by the City is required to undergo environmental review pursuant to CEQA. If there were any potential for significant impacts to tribal cultural resources, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures for each project. When resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant. As such, implementation of Mitigation Measure TCR-1 and Standard Condition CUL-1 would ensure that the proposed project, in conjunction with other development in the City, would not result in a significant cumulative impact to unique tribal cultural resources and previously undiscovered buried human remains.	Refer to Threshold 4.9.1(b) above for Mitigation Measures TCR-1, TCR-2, and TCR-3. Refer to Table 7.B in Chapter 7.0, Mitigation Monitoring and Reporting Program, for Standard Condition CUL-1 as detailed in the Initial Study (Appendix A).	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
4.10: Utilities and Service Systems		
Threshold 4.10.1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? **Less Than Significant Impact.** As discussed in Section 4.19 of the Initial Study (provided in Appendix A of this Draft EIR), implementation of the proposed project would result in less than significant impacts related to water, wastewater treatment, stormwater drainage facilities, and telecommunication facilities. Energy use during construction would be short-term and cease following completion of construction. As such, impacts to electric power consumption due to project construction would be less than significant and would not require or result in the relocation or construction of new or expanded electric power facilities. The construction-related equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction of the proposed project. Energy use consumed by operation of the proposed project would be associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. Operation of the proposed project would increase the annual electricity and natural gas consumption in Orange County by less than 0.01 percent. As such, the proposed project would have less than significant impacts associated with electric power and natural gas and would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities. No mitigation is required.	No mitigation is required.	Less Than Significant Impact

Table 1.A: Summary of Potential Environmental Impacts, Mitigation Measures, Standard Conditions, Regulatory Compliance Measures, and Level of Significance

Potential Environmental Impact	Mitigation Measures, Standard Conditions, and Regulatory Compliance Measures	Level of Significance After Mitigation
Cumulative Utilities and Service Systems Impacts. **Less Than Significant Impact.** Electricity consumption and natural gas consumption during project implementation is anticipated to be 1,251,306 kilowatt-hours per year (kWh/year) and 23,753 therms/year, respectively. This usage would increase demand for electricity and natural gas in Orange County by less than 0.01 percent for both electricity and natural gas. As such, cumulative impacts with respect to electricity and natural gas would be less than significant. Further, each discretionary project would be subject to CEQA, mitigation requirements, and design review, as applicable. Therefore, the proposed project would not contribute a significant cumulative impact to utilities and service systems in the City, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact

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2.0 INTRODUCTION

2.1 OVERVIEW

This Draft Environmental Impact Report (EIR) has been prepared to evaluate environmental impacts associated with the proposed Bolsa Chica Senior Living Community Project (proposed project) in the City of Huntington Beach (City). The City is the "public agency which has the principal responsibility for carrying out or approving the project" and, as such, is the "Lead Agency" for this project under the California Environmental Quality Act of 1970 (CEQA) (*State CEQA Guidelines for Implementation of CEQA* Section 15367). CEQA requires the Lead Agency to consider the information contained in the EIR prior to taking any discretionary action. This Draft EIR is intended to serve as an informational document to be considered by the City and the Responsible Agencies during deliberations on the proposed project. The anticipated project approvals associated with the proposed project are described in Chapter 3.0, Project Description.

An Initial Study (IS) (provided in Appendix A of this Draft EIR) was prepared in October 2022 for the proposed project. Following preparation of the IS, the City of Huntington Beach, as the Lead Agency, determined that the proposed project may have a significant effect on the environment and that an EIR would be required to more fully evaluate potential adverse environmental impacts that may result from development of the proposed project. As a result, this Draft EIR has been prepared in accordance with CEQA, as amended (Public Resources Code [PRC] Section 21000, et seq.), and the *State CEQA Guidelines for Implementation of CEQA* (California Code of Regulations [CCR], Title 14, Section 15000, et seq.). This Draft EIR also complies with the procedures established by the City for the implementation of CEQA.

Questions regarding the preparation of this Draft EIR and the City's review of the proposed project should be referred to the following:

Hayden Beckman, Senior Planner
City of Huntington Beach Planning Division, Advance Planning
2000 Main Street
Huntington Beach, CA 92648
Phone: (714) 536-5561
Email: hayden.beckman@surfcity-hb.org

2.2 ENVIRONMENTAL REVIEW PROCESS

CEQA PRC Section 21000, et seq., requires that a public agency prepare an EIR when the public agency finds substantial evidence that the project may have a significant effect on the environment (PRC Section 21080 (d)). The basic purposes of CEQA are to:

1. Inform governmental decision makers and the public about the potential significant environmental effects of proposed activities;

2. Identify the ways that environmental damage can be avoided or significantly reduced;

3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and

4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

In compliance with the *State CEQA Guidelines,* the City has taken steps to maximize opportunities for the public and other public agencies to participate in the environmental review process. The City conducted the scoping process and held a public scoping meeting, prepared an IS, issued a Notice of Preparation (NOP) for the proposed project, and determined that an EIR was required to evaluate the potentially significant environmental effects of the proposed project and related actions. Further, this Draft EIR is subject to public review and comment. These topics related to the environmental review process are described in further detail below.

2.2.1 Initial Study and Notice of Preparation

The City, as the Lead Agency, originally prepared an IS in October 2022 and issued an NOP for the EIR on November 2, 2022, which was distributed via the State Clearinghouse (SCH). The SCH issued a project number for the EIR (SCH No. 2022110040). The primary purpose of preparing the IS was to scope the environmental analysis and evaluate potential environmental impacts that may result from project approval. The IS was also used to scope out environmental issues that were determined to be “less than significant” or “no impact.”

In accordance with the *State CEQA Guidelines,* Section 15082, the IS/NOP was circulated to responsible agencies and individuals for a period of 30 days, during which time written comments were solicited pertaining to environmental issues and topics that the EIR should evaluate.

Responses to the IS/NOP were received from the following agency:

- Native American Heritage Commission (NAHC)

2.2.2 Scoping Meeting Summary

The City held a public scoping meeting to present the original project and to solicit input from interested individuals regarding environmental issues that should be addressed in the Draft EIR. The in-person scoping meeting was held on November 10, 2022, from 12:00 p.m. to 2:00 p.m. No environmental issues or concerns were raised at the scoping meeting. Appendix B includes copies of written comments received in response to the IS/NOP.

2.2.3 Draft EIR

This Draft EIR is being distributed to numerous public agencies and other interested parties for review and comment as required by CEQA. The Draft EIR is available on the City’s website, which is provided below:

[https://www.huntingtonbeachca.gov/government/departments/planning/]

All comments received from agencies and individuals on the Draft EIR will be accepted during the public review period, which will not be less than 45 days, in compliance with CEQA. All comments on the Draft EIR should be sent to the following City contact person:

Hayden Beckman, Senior Planner
City of Huntington Beach Planning Division, Advance Planning
2000 Main Street
Huntington Beach, CA 92648
Phone: (714) 536-5561
Email: hayden.beckman@surfcity-hb.org

Comments will only be accepted in written form via email and/or hardcopy letter delivered to the above-referenced email and/or mailing addresses, respectively. After the public review and comment period, written responses to all comments received pertaining to environmental issues will be prepared as part of the Final EIR. As required by CEQA, responses to comments submitted by responsible public agencies will be distributed to those agencies for review (in accordance with Section 15088 of the *State CEQA Guidelines*) at least 10 days prior to consideration and approval of the Final EIR by City Council. Upon completion of the Final EIR and other required documentation, the City Council may certify the Final EIR, adopt findings relative to the proposed project's environmental effects after implementation of mitigation measures, and approve or deny the project.

2.3 SCOPE OF THIS DRAFT EIR

This Draft EIR has been prepared to evaluate environmental impacts that may result from implementation of the proposed project. As the Lead Agency, the City has the authority for preparation of this Draft EIR and, after the comment/response process, certification of the Final EIR (FEIR) and approval of the proposed project as described in this Draft EIR.

The City has the authority to make decisions on discretionary actions relating to development of the proposed project. As previously stated, this Draft EIR is intended to serve as an informational document to be considered by the City during deliberations on the proposed project. This Draft EIR evaluates and mitigates a reasonable worst-case scenario of potential impacts associated with the proposed project.

As previously stated, the City is the Lead Agency for the proposed project under CEQA (*State CEQA Guidelines* Section 15367). CEQA requires the Lead Agency to consider the information contained in the EIR prior to taking any discretionary actions. This Draft EIR provides information to the Lead Agency and other public agencies, the general public, and decision makers regarding the potential environmental impacts from construction and operation of the proposed project. The purpose of the public review of the Draft EIR is to evaluate the adequacy of the environmental analysis in terms of compliance with CEQA. Section 15151 of the *State CEQA Guidelines* states the following regarding standards from which adequacy is judged:

> "An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which

> intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the 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 experts. The courts have not looked for perfection but for adequacy, completeness, and a good faith effort at full disclosure."

Under CEQA (PRC Section 21002.1[a]):

> "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."

As previously discussed in Chapter 1.0, Executive Summary, an EIR is the most comprehensive form of environmental documentation identified in CEQA and the *State CEQA Guidelines* and provides the information needed to assess the environmental consequences of a proposed project. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

2.4 EFFECTS FOUND NOT TO BE SIGNIFICANT

As discussed above, an IS (provided in Appendix A of this Draft EIR) was prepared in October 2022 for the proposed project. The IS was used, in part, to scope out environmental issues that were determined to be "less than significant" or have "no impact." As required by *State CEQA Guidelines* Section 15128, this Draft EIR identifies the potential effects of the proposed project that were determined not to be significant and adverse, and therefore, not addressed in the Draft EIR. As determined in the IS, the proposed project would not result in adverse impacts related to the following environmental factors including agriculture and forestry resources, biological resources, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, public services, recreation, transportation, and wildfire. Additionally, the proposed project was determined not to result in significant adverse impacts for some thresholds under the following environmental factors: aesthetics, air quality, cultural resources, geology and soils, land use and planning, noise, and utilities and service systems. These factors are briefly discussed below. Please refer to the IS provided in Appendix A for the substantiation for why these issues were determined not to be significant. A complete list of all applicable Standard Conditions can be found in Chapter 7.0, Mitigation Monitoring and Reporting Program, of this Draft EIR. An evaluation of thresholds determined to be potentially significant in the IS are evaluated further in Chapter 4.0 of this Draft EIR.

2.4.1 Aesthetics

As discussed in Section 4.1 of the IS, the proposed project would result in less than significant impacts to scenic vistas (Threshold 4.1.a), scenic resources within a State scenic highway (Threshold 4.1.b) and would not create a new source of substantial light or glare (Threshold 4.1.d). Therefore,

these topics are not evaluated further in this Draft EIR. As a condition of project approval, the proposed project would be required to comply with lighting standards described in the Photometric Plan prepared for the proposed project (Standard Condition AES-1) to ensure that impacts associated with new lighting would be less than significant.

2.4.2 Agricultural and Forestry Resources

As discussed in Section 4.2 of the IS, the project site is fully developed, is not used for agricultural or forestry purposes, and is not zoned for agricultural use (Threshold 4.2.a). Therefore, the proposed project would not conflict with zoning designations for agricultural use or land currently under a Williamson Act contract (Threshold 4.2.b). Additionally, the project site does not contain any forestland or timberland resources (Threshold 4.2.c). The proposed project would not result in environmental changes that could result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use (Thresholds 4.2.d and 4.2.e). Therefore, the proposed project would not result in impacts related to agricultural and forestry resources, and this topic is not evaluated further in this Draft EIR.

2.4.3 Air Quality

As discussed in Section 4.3. of the IS, the proposed project would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people (Threshold 4.3.d), and this impact was determined to be less than significant. Therefore, this topic is not evaluated further in this Draft EIR.

2.4.4 Biological Resources

As discussed in Section 4.4 of the IS, there are no native habitats within the project site with the potential to support sensitive plant and animal species, and no riparian habitats or other sensitive natural communities as identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) (Thresholds 4.4.a and 4.4.b). The project site does not contain any federally protected wetlands as defined by Section 404 of the Clean Water Act (Threshold 4.4.c). Within the vicinity of the project site, there are no large areas of natural habitat that would facilitate migratory fish or wildlife movement or serve as a wildlife corridor (Threshold 4.4.d). There are no adopted Habitat Conservation Plans (HCP), Natural Communities Conservation Plans (NCCP), or other similar plans within the City (Thresholds 4.4.e and 4.4.f). Because the project site contains ornamental landscaping and non-native trees, which could potentially support nests and roosting for bird species, the proposed project would be required to implement Standard Condition BIO-1 (a regulatory compliance measure based on federal law related to nesting birds) to ensure that implementation of the proposed project would not result in impacts to nesting birds. For the reasons stated above, project-related impacts with respect to biological resources are not evaluated further in this Draft EIR.

2.4.5 Cultural Resources

As discussed in Section 4.5 of the IS, the project site is not located near or adjacent to any formal cemeteries, and there are no known human remains interred on the project site. Additionally, due

to the developed nature of the project site, the likelihood of encountering buried cultural resources anywhere within the project site is very low. Therefore, such impacts are considered less than significant (Threshold 4.5.c). In the unlikely event that human remains are encountered during project grading, Standard Condition CUL-1 (a regulatory compliance measure based on State law related to the discovery of human remains) would be implemented to ensure that the proposed project has minimal impacts related to unknown buried human remains. Therefore, this topic is not evaluated further in this Draft EIR.

2.4.6 Geology and Soils

As discussed in Section 4.7 of the IS, with implementation of the recommendations outlined in the project-specific *Geotechnical Site Evaluation, Bolsa Chica Senior Living Community, Huntington Beach, California* (Geotechnical Investigation) (April 2022)[1] as required in Standard Condition GEO-1, and compliance with the most current California Building Standards Code, the Uniform Building Code, the Huntington Beach Building and Construction Code, and HAZ-1 Policy A, the proposed project would result in less than significant impacts related to the rupture of a known earthquake fault, seismic ground shaking, and seismic related ground failure (Thresholds 4.7.a.i through 4.7.a.iii). The proposed project would not result in impacts associated with landslides (Threshold 4.7.a.iv). In addition, the proposed project would have less than significant impacts associated with soil erosion or loss of topsoil (Threshold 4.7.b), ground stability (Threshold 4.7.c), and expansive soils (Threshold 4.7.d), and would not result in impacts related to soil capability to support the use of septic tanks (Threshold 4.7.e). Therefore, these topics are not evaluated further in this Draft EIR.

2.4.7 Hazards and Hazardous Materials

As discussed in Section 4.9 of the IS, the proposed project would result in less than significant impacts related to hazards associated with the routine transport, use, or disposal of hazardous materials (Threshold 4.9.a), hazards involving the release of hazardous materials into the environment (Threshold 4.9.b), and hazards associated with being located on a hazardous materials site compiled pursuant to Government Code Section 65962.5 (Threshold 4.9.d). The proposed project would be required to implement the project-specific Soil Management Plan (Standard Condition HAZ-1), and conduct an asbestos and lead-based paint survey prior to disturbance of suspected asbestos-containing materials (ACM) and lead-based paint (LBP) during building demolition as specified in Standard Condition HAZ-2 and recommended in the *Phase I Environmental Site Assessment, Proposed Senior Living Development – HB, 4952 and 4972 Warner Avenue, Huntington Beach, Orange County, California* (Phase I ESA) (April 2021)[2] prepared for the proposed project. The proposed project would result in less than significant impacts associated with the impairment of implementation of or physical interference with an adopted emergency response or evacuation plan (Threshold 4.9.f). Additionally, the proposed project would not result in impacts related to emitting hazardous emissions or hazardous material within one-quarter mile of an

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1 LANGAN. 2022. *Geotechnical Site Evaluation, Bolsa Chica Senior Living Community, Huntington Beach, California.* April 14, 2022 (Appendix G).

2 Terracon Consultants, Inc. 2021. *Phase I Environmental Site Assessment, Proposed Senior Living Development – HB, 4952 and 4972 Warner Avenue, Huntington Beach, Orange County, California*. April 2, 2021 (Appendix H).

existing or proposed school (Threshold 4.9.c), is not located within an airport land use plan or within 2 miles of a public or private airport (Threshold 4.9.e), and would not expose people or structures to significant risk involving wildfires (Threshold 4.9.g). Therefore, project-related impacts with respect to hazards and hazardous materials are not evaluated further in this Draft EIR.

2.4.8 Hydrology and Water Quality

As discussed in Section 4.10 of the IS, the proposed project would result in less than significant impacts associated with the degradation of surface or groundwater quality (Threshold 4.10.a), a decrease in groundwater supplies or interference with groundwater recharge (Threshold 4.10.b), substantial alteration of existing drainage patterns (Threshold 4.10.c), and obstruction or conflict with implementation of a water quality control plan or sustainable groundwater management plan (Threshold 4.10.e). The proposed project would be required to comply with City and National Pollutant Discharge Elimination System (NPDES) regulations and implementation of construction and post-construction Best Management Practices (BMPs) as specified in Standard Conditions WQ-1, WQ-2, and WQ-3 to ensure that implementation of the proposed project would have minimal impacts to receiving waters. Additionally, as specified in Standard Condition WQ-4, a Final Hydrology Study would be prepared based on final project plans and would be approved by the City to confirm that the project drainage facilities comply with all applicable City code requirements and ensure that there is sufficient capacity in the downstream storm drain systems to accommodate storm runoff from the project site. The proposed project would not result in impacts associated with impeding or redirecting flood flows (Threshold 4.10.c.iv) or release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones (Threshold 4.10.d). Therefore, project-related impacts with respect to hydrology and water quality are not evaluated further in this Draft EIR.

2.4.9 Land Use and Planning

As discussed in Section 4.11 of the IS, construction and implementation of the proposed project would not physically divide an established community (Threshold 4.11.a). This topic is not evaluated further in this Draft EIR.

2.4.10 Mineral Resources

As discussed in Section 4.12 of the IS, the City's General Plan does not identify any locally important mineral resources on the project site. The project site is currently fully developed, and therefore, mineral extraction is already precluded on the project site. Furthermore, the project site and surrounding area are not planned for uses as a mineral extraction area. Therefore, the proposed project is not anticipated to result in impacts related to the loss of availability of a known mineral resource that would be of value to the region and residents of the State (Thresholds 4.12.a and 4.12.b), and project-related impacts with respect to mineral resources are not evaluated further in this Draft EIR.

2.4.11 Noise

As discussed in Section 4.13 of the IS, there are no private airstrips within 2 miles of the project site, and the project site is not within an airport land use plan. Therefore, implementation of the

proposed project would not expose people residing or working in the project area to excessive noise levels (Threshold 4.13.c). This topic is not evaluated further in this Draft EIR.

2.4.12 Population and Housing

As discussed in Section 4.14 of the IS, the proposed project would result in less than significant impacts related to the inducement of unplanned population growth, either directly or indirectly (Threshold 4.14.a). No housing is currently present on the project site, and therefore, there are no people living on the project site that would be displaced by the demolition of the two existing commercial buildings. Conversely, the proposed project would result in the development of 213 new senior living units. Therefore, the project would not result in a loss of housing or displace any persons living on the project site, nor require or necessitate the development of replacement housing elsewhere (Threshold 4.14.b). Therefore, project-related impacts with respect to population and housing are not evaluated further in this Draft EIR.

2.4.13 Public Services

As discussed in Section 4.15 of the IS, the proposed project would be subject to payment of a Fire Facilities Development Impact Fee (Standard Condition PS-1) and a Police Facilities Development Impact Fee (Standard Condition PS-2), as established in the City's Municipal Code Chapters 17.74.040 and 17.75.040, respectively. With implementation of these developer impact fees, the proposed project would result in less than significant impacts related to fire and police protection services (Thresholds 4.15.a.i and 4.15.a.ii). Similarly, pursuant to California Education Code 17620(a)(1), the proposed project would be required to pay the current school facility development fees at the time a building permit is issued (Standard Condition PS-3). With implementation of Standard Condition PS-3, potential impacts to school services and facilities associated with implementation of the proposed project would be less than significant (Threshold 4.15.a.iii). Additionally, in accordance with Chapters 17.76.04 and 17.67 of the City's Municipal Code, the proposed project would be subject to payment of a Parkland Acquisition and Park Facilities Development Impact Fee (Standard Condition PS-4) and a Library Facility Impact Fee (Standard Condition PS-5). With implementation of Standard Conditions PS-4 and PS-5, potential project-related impacts to parks and recreational facilities and library facilities would be less than significant (Thresholds 4.15.a.iv and 4.15.a.v). Therefore, project-related impacts with respect to public services are not evaluated further in this Draft EIR.

2.4.14 Recreation

As discussed in Section 4.16 of the IS, with implementation of Standard Condition PS-4 requiring payment of a Parkland Acquisition and Park Facilities Development Impact Fee, the proposed project's contribution to deterioration of parks and recreational facilities would be less than significant (Threshold 4.16.a). The proposed project does not include recreational facilities nor require the construction or expansion of recreational facilities that would result in a significant adverse physical effect on the environment (Threshold 4.16.b). Therefore, project-related impacts with respect to recreation are not evaluated further in this Draft EIR.

2.4.15 Transportation

As discussed in Section 4.17 of the IS, the proposed project would result in less than significant impacts associated with conflicting with a program, plan, ordinance, or policy addressing the circulation system (Threshold 4.17.a) and conflicting with or being inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b) (Threshold 4.17.b). Furthermore, the proposed project would result in less than significant impacts related to increased hazards due to a geometric design feature (Threshold 4.17.c) and inadequate emergency access (Threshold 4.17.d). Therefore, project-related impacts with respect to transportation are not evaluated further in this Draft EIR.

2.4.16 Utilities and Service Systems

As discussed in Section 4.19 in the IS, the proposed project would have sufficient water supplies available (Threshold 4.19.b), and impacts to this threshold would be less than significant. As part of the Conditional Use Permit approval process, the Applicant must demonstrate that the proposed sewer connection would have sufficient capacity to accommodate the proposed project with preparation of a Sewer Feasibility Study as specified in Standard Condition UTL-1. With implementation of Standard Condition UTL-1, development of the proposed project would not require, nor would it result in, the construction or relocation of new or expanded wastewater treatment or collection facilities other than those facilities required for connections to be constructed on site. Therefore, impacts related to the construction of wastewater treatment or collection facilities would be less than significant (Threshold 4.19.c). Additionally, the proposed project would not generate an excess of solid waste (Threshold 4.19.d), and would comply with all federal, State, and local management and reduction statutes and regulations related to solid waste (Threshold 4.19.e). Project-related impacts to these thresholds would be less than significant. Therefore, these topics are not evaluated further in this Draft EIR.

2.4.17 Wildfire

As discussed in Section 4.20 of the IS, the project site and surrounding area are not located within a Very High Fire Hazard Severity Zone (VHFHSZ), or within a State Responsibility Area (SRA). The proposed project does not include any characteristics (e.g., permanent road closures or long-term blocking of road access) that would substantially impair or otherwise conflict with an emergency response plan or emergency evacuation plan (Threshold 4.20.a). Additionally, the project site is relatively flat, and the surrounding area does not contain significant natural or manufactured slopes. The majority of the project site and the surrounding area are currently developed, and therefore, lack the combustible materials and vegetation necessary for the uncontrolled spread of a wildfire. The proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire (Threshold 4.20.b). The proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk (Threshold 4.20.c) and would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes (Threshold 4.20.d). Therefore, project-related impacts with respect to wildfire are not evaluated further in this Draft EIR.

2.5 FORMAT OF THE EIR

Chapter 1.0: Executive Summary

Chapter 1.0 contains the Executive Summary of the Draft EIR, listing all significant project impacts and the level of significance of each impact. The summary is presented in a tabular format.

Chapter 2.0: Introduction

Chapter 2.0 contains a discussion of the purpose and intended use of the Draft EIR. A summary discussion of effects found not to be significant and, therefore, not included in the Draft EIR analysis is also included in this chapter.

Chapter 3.0: Project Description

Chapter 3.0 includes a discussion of the proposed project's geographical setting, the history of the project site, existing land uses, the proposed project's goals, objectives, characteristics, and components, and the identified discretionary approvals for the proposed project.

Chapter 4.0: Environmental Analysis, Impacts, and Mitigation Measures

Chapter 4.0 includes an analysis of the proposed project's environmental impacts. It is organized into the following topical sections: aesthetics, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, land use and planning, noise, tribal cultural resources, and utilities and service systems. The environmental setting discussions describe the "existing conditions" of the environment at the project site and in the vicinity of the site as they pertain to the environmental issues being analyzed (Section 15125 of the *State CEQA Guidelines*).

The project impact discussions identify and focus on the significant environmental effects of the proposed project. The direct and indirect significant effects of the proposed project on the environment are identified and described, giving due consideration to both the short-term and long-term effects, as necessary (Section 15126.2[a] of the *State CEQA Guidelines*).

Chapter 4.0 also includes a discussion of the cumulative effects of the proposed project within the analysis of each environmental topic when considered in combination with other projects, causing related impacts as required by Section 15130 of the *State CEQA Guidelines*.

Chapter 5.0: Alternatives

In accordance with *State CEQA Guidelines* Section 15126.6, the alternatives discussion in Chapter 5.0 describes a reasonable range of alternatives that could feasibly attain the basic objectives of the project and that are capable of eliminating any significant adverse environmental effects or reducing them to a less than significant level.

Chapter 6.0: Other CEQA Considerations

Chapter 6.0 includes CEQA-mandated discussions required by Section 15126.2 of the *State CEQA Guidelines* regarding: (a) energy impacts; (b) growth-inducing impacts; and (c) significant irreversible environmental changes that would result from implementation of the proposed project.

Chapter 7.0: Mitigation Monitoring and Reporting Program

State CEQA Guidelines Section 15091(d) requires that public agencies adopt a mitigation monitoring and reporting program for any changes that it has either required in a project or made a condition of approval to avoid or substantially lessen significant environmental effects. Chapter 7.0 provides a list of all proposed project mitigation measures and regulatory compliance measures as identified in Chapter 4.0 of this Draft EIR, a list of all standard conditions identified in the IS, defines the parties responsible for implementation and review, and identifies the timing for implementation of each measure.

Chapter 8.0: List of Preparers and Persons Consulted

Chapter 8.0 provides a list of the preparers of the Draft EIR, as well as persons consulted during preparation of the Draft EIR.

Chapter 9.0: References

Chapter 9.0 provides the references cited in this Draft EIR.

2.6 INCORPORATION BY REFERENCE

As permitted in Section 15150 of the *State CEQA Guidelines*, an EIR may reference all or portions of another document that is a matter of public record or is generally available to the public. Information from the documents that have been incorporated by reference has been briefly summarized in the appropriate sections of this Draft EIR, along with a description of how the public may obtain and review these documents. These documents include:

- City of Huntington Beach General Plan Elements (as amended) (website: https://www.huntingtonbeachca.gov/government/departments/planning/gp/index.cfm)
- City of Huntington Beach Municipal Code and other titles referenced herein (website: https://library.qcode.us/lib/huntington_beach_ca/pub/municipal_code/item/municipal_code)

Documents that are incorporated by reference are available for review at the website links noted above and at the City of Huntington Beach, Community Development Department, 2000 Main Street, Huntington Beach, California 92648.

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3.0 PROJECT DESCRIPTION

This Draft Environmental Impact Report (EIR) has been prepared to evaluate the environmental impacts that may result from construction and operation of the proposed Bolsa Chica Senior Living Community Project (proposed project) at 4952 and 4972 Warner Avenue in Huntington Beach, California. As Lead Agency, the City of Huntington Beach (City) has the authority for preparation of this Draft EIR and, after the comment/response process, certification of the Final EIR and approval of the proposed project as described in this Draft EIR. This Draft EIR is intended to serve as an informational document to be considered by the City and the Responsible Agencies during deliberations on the proposed project. This Draft EIR evaluates for a reasonable worst-case scenario of potential environmental impacts associated with the proposed project and provides mitigation where necessary.

Hines is proposing the development of a new senior living community on an approximately 3.10-acre property located at the southwest corner of Warner Avenue and Bolsa Chica Street (4952 and 4972 Warner Avenue) (project site) in Huntington Beach.

3.1 PROJECT OVERVIEW

The proposed project approvals would provide for construction of a five-story, 298,000-square-foot State-licensed senior living community consisting of 213 total living units on an approximately 3.10-acre parcel (project site).

3.2 PROJECT LOCATION AND SETTING

The 3.10-acre project site is located at southwest corner of Bolsa Chica Street and Warner Avenue in the City. The City is located in northwest coastal Orange County. The project site is comprised of two parcels: Assessor's Parcel Number (APN) 163-281-01 and APN 163-281-02. Regional access is provided by Interstate 405 (I-405) to the north and east; State Route 1 (SR-1) or Pacific Coast Highway to the west; and State Route 39 or Beach Boulevard, which bisects the City running north to south. Local access is provided from Bolsa Chica Street and Warner Avenue. Refer to Figure 3-1, Regional Location, for the project site's location within the larger region.

The project site is currently fully developed with commercial (retail and office) uses and an associated surface parking lot. The existing commercial and retail uses total approximately 55,000 square feet and are contained in two buildings comprised of a three-story office building fronting on Bolsa Chica Street and a smaller retail commercial building fronting on Warner Avenue. There are currently two vehicular access points along Warner Avenue and three vehicular access points along Bolsa Chica Street. Figure 3-2, Existing Conditions, shows the project setting, including the locations of existing on-site structures. Implementation of the proposed project would involve demolition of the existing on-site structures and removal of the surface parking to allow for construction of the new senior living community.

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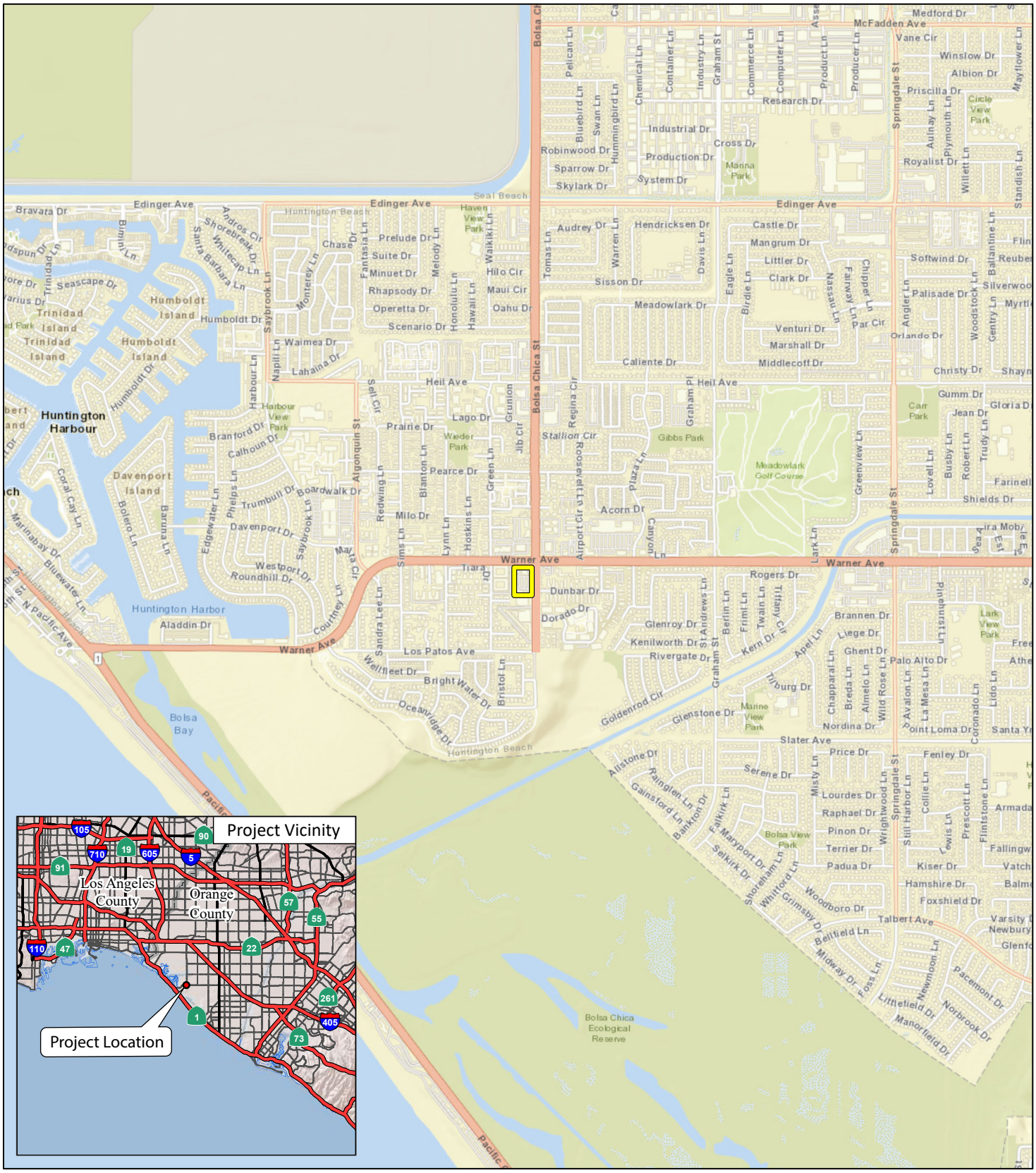

LSA

LEGEND

Project Site

FIGURE 3-1

0 1000 2000

FEET

SOURCE: USGS The National Map (2018)

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Bolsa Chica Senior Living Community

Project Location

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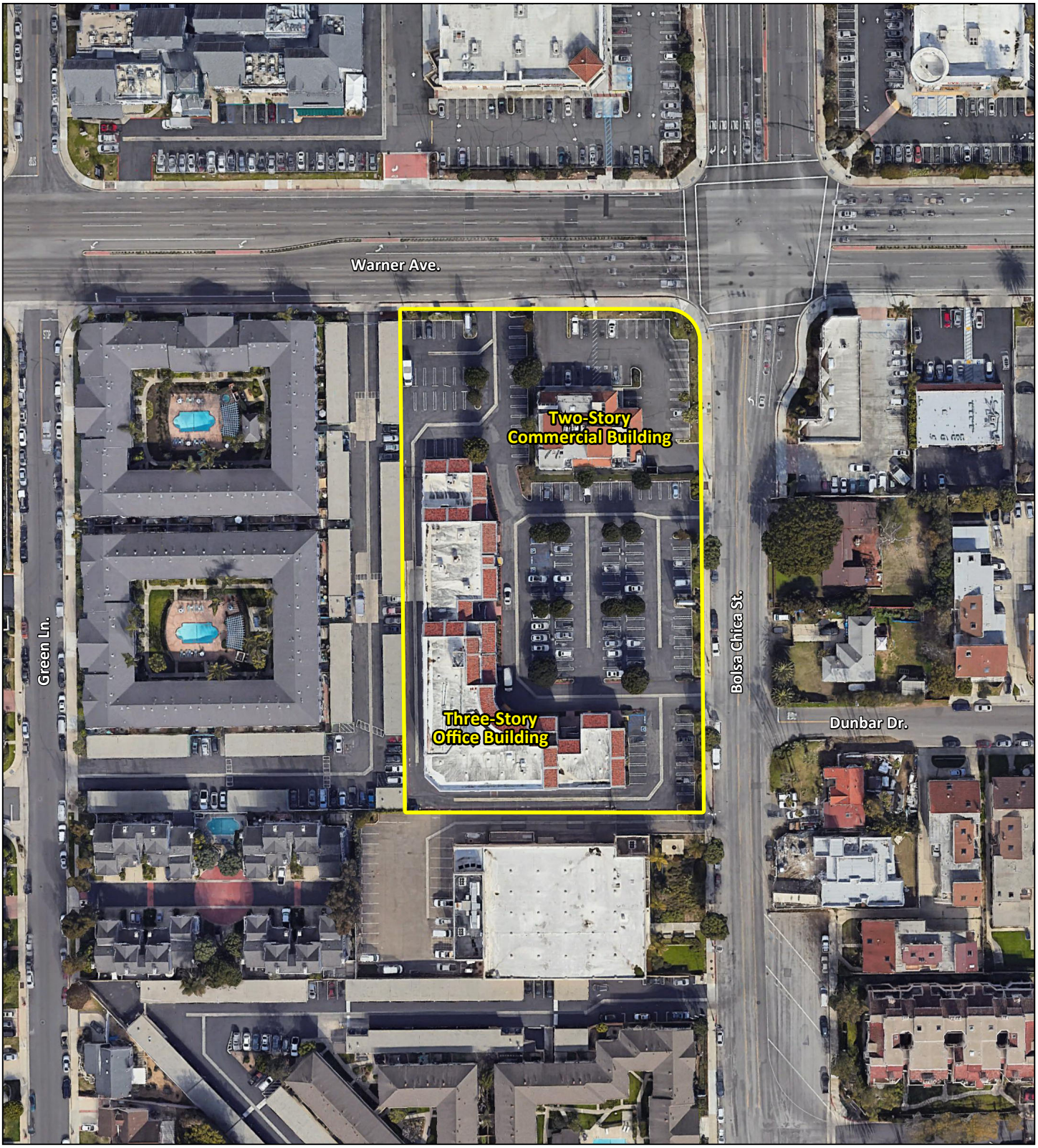

LSA

LEGEND

Project Site

FIGURE 3-2

N

0 75 150

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SOURCE: Google Earth, 2021

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Bolsa Chica Senior Living Community

Existing Conditions

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3.2.1 Surrounding Land Uses

The project site is directly bordered by Warner Avenue to the north and Bolsa Chica Street to the east. Surrounding land uses include a mix of commercial, industrial, and residential uses (refer to Figure 3-3). Directly north of the project site, across Warner Avenue, is a mix of retail businesses, including Walgreens (formerly Lewis Cleaner) and CVS. Directly east of the project site, across Bolsa Chica Street, are an automotive repair business and four single-family homes. Immediately south of the project site is an industrial property, and immediately west of the project site is a two-story apartment complex. Former service stations were previously located at the northwest corner and southeast corner of Bolsa Chica Street and Warner Avenue. These service stations have not been in operation since 1985 and 1992, respectively. The Meadowlark Airport, which closed in 1989, was located approximately 0.5 mile northeast of the project site. The Summerlane Community, Ralphs Shopping Center, and Gibbs Park now occupy the former airport site. Former oil fields are located to the northwest, west and south of the project site. As discussed further in Section 4.12, Mineral Resources, of the Initial Study, oil wells (both former and current) are scattered throughout much of the Huntington Beach planning area, particularly along the coastal areas and mesas, and adjacent to the Bolsa Chica Ecological Reserve and across from the Huntington Cliffs beach.

3.3 CURRENT ZONING AND GENERAL PLAN DESIGNATIONS

The project site is designated and zoned CG – Commercial General. The Commercial General designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/motels, timeshares, cultural facilities, institutional, health care, government offices, and educational uses. The current maximum Floor Area Ratio (FAR) is 1.5, and the current maximum building height is 50 feet.

The Applicant is requesting a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). The Bolsa Chica Senior Living Community Specific Plan ("BCSLC") will provide specific site development standards and project design criteria. The Specific Plan would increase the allowable FAR to 2.5 and the maximum building height to 65 feet, with one architectural style and appearance based on the latest proposed design. A Conditional Use Permit would also be required for the proposed project to allow development and operation of a Residential Care Facility for the Elderly ("RCFE") and independent living apartments.

3.4 PROJECT CHARACTERISTICS

The proposed community would include 213 total living units, 207 on-site parking spaces, and associated hardscape and landscape improvements. Of the total 213 senior living units, 28 would be Memory Care units, 62 would be Assisted Living units, and 123 would be Independent Living units. The units would range in size from a studio (approximately 540 square feet) to three bedroom units (approximately 2,580 square feet). Amenities for residents are anticipated to include multiple restaurant-style dining venues, fitness and wellness center, salon and studio spaces, theater, art room, lounge, and multi-purpose rooms. Outdoor spaces are anticipated to include a memory care garden, swimming pool with outdoor exercise area, outdoor seating area with fire pit, outdoor dining areas, meditation spaces, a dog park, and roof decks. Refer to Figure 3-3, Illustrative Site Plan

and Surrounding Land Uses, and Figure 3-4, Conceptual Site Plan, for the proposed project's illustrative site plan and conceptual site plan, respectively.

A portion of the new community would be licensed by the California Department of Social Services, Community Care Licensing Division (CCLD) per California Code of Regulations (CCR) Title 22, Division 6, Chapter 8 as a Residential Care Facility for the Elderly (RCFE). The State would enforce laws and regulations governing the resident rooms, including a building inspection prior to opening and thorough periodic inspections during operations. The RCFE designation would allow residents at the community to age in place and receive assistance with the activities of daily living. Care for assisted living and memory impaired residents would be provided 24 hours per day, seven days per week. Once the community reaches full residential occupancy, it is anticipated there would be a total of 110 full time employees. Vans would be provided to transport residents to off-site activities.

The development of the new community would require demolition and removal of the existing two commercial buildings, surface parking (including existing asphalt concrete pavement, curb, and gutter), fence and block wall, landscaping, yard lights, signage, and all above-ground water and gas lines on the project site. All existing utility sewer, water, and gas lines below grade would be disconnected and capped.

3.4.1 Project Objectives

The following objectives have been established for the proposed project:

1. Support development of affordable senior housing and supportive services to facilitate maximum independence and the ability of seniors to remain in their homes and/or in the community (Policy 5.2 in the City's 2020 Housing Element).

2. Develop a project that helps meet the increasing demand for senior living facilities in Huntington Beach at a scale of development suitable to current industry standards, with the goal of producing as many senior housing units as possible.

3. Provide opportunity for residents to age in place through provision of multiple unit types accommodating independent living, assisted living, and memory care.

4. Provide a community with around-the-clock staff assistance, as well as a range of amenities that would aid in maintaining a high quality of life and support activities associated with daily living of residents.

5. Deliver benefits to the community by expanding the range of housing opportunities with a particular focus on addressing the needs of the elderly.

6. Implement a project that would be compatible with surrounding land uses and would enhance the character of the surrounding neighborhood through high quality design.

LSA

FIGURE 3-3

NO SCALE

SOURCE: CallisonRTK, Inc.

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Bolsa Chica Senior Living Community

Illustrative Site Plan and Surrounding Land Uses

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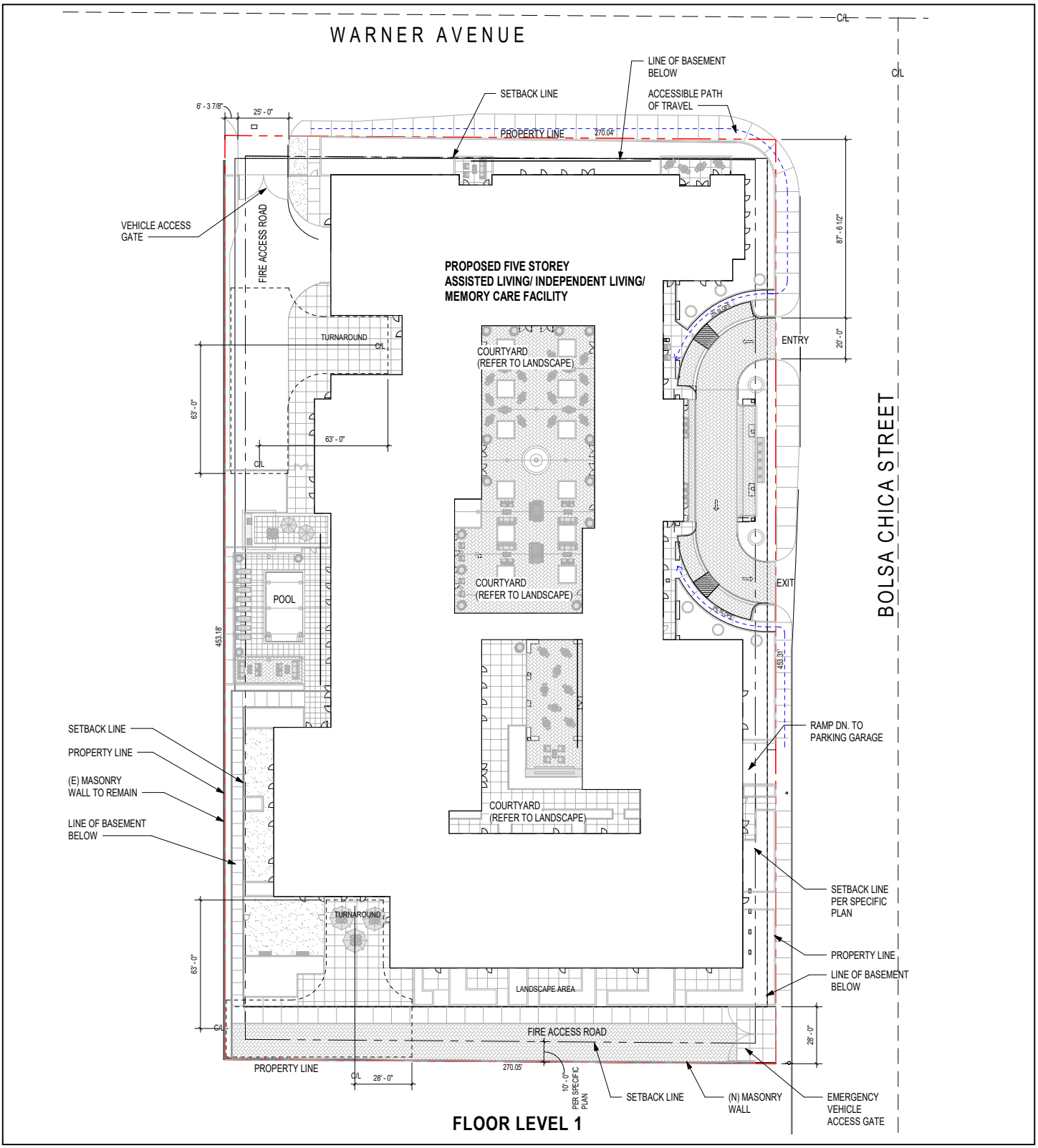

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FIGURE 3-4

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SOURCE: CallisonRTK, Inc.

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Bolsa Chica Senior Living Community

Conceptual Site Plan

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3.4.2 Architectural Design

The new community would be designed to reflect a traditional style of architecture. Complementary light colors reflective of the City's beach lifestyle and a variety of building materials, including glass, metal, stucco, wood, and composite panels, would be incorporated. A roll down security shutter would enclose the entrance to the subterranean parking garage along Bolsa Chica Street. Exterior windows would include high performance glazing. Exterior windows on the first floor would have fabric awnings, and exterior windows on the fifth floor would have metal canopies. Some exterior windows would feature textured metal panels below the window panes. Wall mounted lighting fixtures would flank the building perimeter on the first floor.

The use of multilevel rooflines and varying building setbacks along Warner Avenue and Bolsa Chica Street would break up the scale and massing of the building. Figure 3-5, Conceptual Renderings, provides the conceptual building renderings and the proposed architectural style and elements. The main entrance to the community (leading into the reception area/lobby) would be located along Bolsa Chica Street. The entrance would feature a porte cochère (covered entrance) and a semi-circle driveway with vehicle access (ingress and egress) from Bolsa Chica Street.

Residential balconies would be located on the second through fifth floors. Some balconies would face the interior courtyard while others would face the community's exterior perimeter. One terrace would be located on the second floor, facing the first-floor courtyard. The fifth floor would provide three roof decks, including a roof-top lounge. Four-foot-high enclosures would be provided on the main roof to screen roof-top equipment. The community's proposed maximum building height would be 65 feet to the highest roof surface, not including the allowed appurtenances (accessory objects) per the City's Municipal Code Section 230.72, such as mechanical screens and equipment.

3.4.3 Landscaping and Fencing

Landscaping for the proposed project would include a variety of tree and plant species in accordance with the requirements outlined in Section 211.06, CO, CG, and CV Districts – Development Standards, and Section 232, Landscape Improvements, in the City of Huntington Beach zoning code. Figure 3-6, Conceptual Landscape Plan, provides the proposed landscape plan for the project.

Swan hill olive trees (*Olea europea 'swan hill'*) would be planted at the corner of Warner Avenue and Bolsa Chica Street as well as within the first-floor courtyard. Brisbane box trees (*Lophostemon confertus*) would be planted along the community perimeter and medjool date palms (*Phoenix dactylifera 'medjool'*) would be planted along the entrance to the community surrounding the semi-circle driveway. A combination of shrubs, grasses, and groundcovers would be planted along the building perimeters flanking the community's exterior walkways and within the courtyard. Turf blocks would be planted along the fire access road at the southern end of the project site. A raised planter bed would be installed along the northern edge of the fire access road separating the building's perimeter landscaping from the fire access road. A vertical wall of Indian Laurel trees (*Ficus nitida 'column'*) would be planted along the western side of the swimming pool area to visually screen the existing masonry wall along the project site's western boundary.

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View Southwest from Intersection of Bolsa Chica Street & Warner Avenue

LSA

FIGURE 3-5
Page 1 of 3

Bolsa Chica Senior Living Community

Conceptual Renderings

SOURCE: CallisonRTK, Inc.

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View West from Bolsa Chica Street

View Northwest from Bolsa Chica Street

LSA

FIGURE 3-5

Bolsa Chica Senior Living Community

Conceptual Renderings

SOURCE: CallisonRTK, Inc.

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View Southeast from Warner Avenue

View Southwest of Porte Cochere & Main Entry

LSA

FIGURE 3-5
Page 3 of 3

Bolsa Chica Senior Living Community

Conceptual Renderings

SOURCE: CallisonRTK, Inc.

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1 PRELIMINARY LANDSCAPE PLAN

SCALE: 1" = 30'-0"

LEGEND

1. ENHANCED PAVING AT ARRIVAL
2. FOUNTAIN AT ARRIVAL COURT
3. PATIO AT BLU NOTE
4. FOUNTAIN AT COURTYARD
5. OLIVE TREES WITH ENHANCED PAVING AND OUTDOOR DINING
6. STRING LIGHTS AT COURTYARD
7. COVERED OUTDOOR SEATING
8. GLASS POOL ENCLOSURE FENCE
9. 12' EVERGREEN HEDGE
10. SWIMMING POOL
11. BBQ AND SHADE STRUCTURE
12. CABANA AT POOL
13. ARTIFICIAL TURF AT FITNESS LAWN
14. DOG PARK
15. OUTDOOR SEATING
16. PRIVATE PATIOS
17. TURF BLOCK AT EVA (SEE SHEET L2.1)
18. EMERGENCY ONLY VEHICULAR GATE

MEMORY CARE GARDEN

ASPARAGUS DENSIFLORUS 'MYERS'	FOXTAIL FERN
ASPLENIUM BULBIFERUM	HEN AND CHICKEN FERN
BOUGAINVILLEA 'LA JOLLA'	RED BOUGAINVILLEA
BUXUS MICROPHYLLA JAPONICA	JAPANESE BOXWOOD
CALLIANDRA HAEMATOCEPHALA	RED POWDER PUFF
CAMPANULA PORTENSCHLAGIANA	DALMATION BELLFLOWER
CLIVIA MINIATA	KAFFIR LILY
COPROSMA KIRKII	KIRK'S COPROSMA
DIANELLA CAERULEA 'CASSA BLUE'	CASSA BLUE FLAX LILY
DIANELLA TASMANICA 'VARIEGATA'	VARIEGATED FLAX LILY
GREVILLEA NOELLII	NOEL'S GREVILLEA
MYOPORUM PARVIFOLIUM 'PINK'	PINK GROUNDCOVER MYOPORUM
MYRTUS COMMUNIS	COMMON MYRTLE
PODOCARPUS ELONGATUS 'MONMAL'	ICEE BLUE YELLOWWOOD
ROSA 'ICEBERG'	WHITE ICEBERG SHRUB ROSE
ROSA X 'NOARE'	FLOWER CARPET ROSE 'RED'
ROSA X 'NOASCHNEE'	FLOWER CARPET ROSE 'WHITE'
SANSEVIERIA TRIFASCIATA	SNAKE PLANT
THYMUS PRAECOX	CREEPING THYME

LANDSCAPE CALCULATIONS

8% MINIMUM LANDSCAPE REQUIRED: 122,405 S.F. X .08 = 9,793 S.F.
TOTAL ONSITE LANDSCAPE AREA: 17,300 S.F.

PROPOSED PLANT PALETTE

TREES

SYMBOL	BOTANICAL NAME	COMMON NAME
	PHOENIX DACTYLIFERA 'MEDJOOL'	MEDJOOL DATE PALM
	LOPHOSTEMON CONFERTUS	BRISBANE BOX
	OLEA EUROPEA 'SWAN HILL'	SWAN HILL OLIVE
	SCHEFFLERA T. 'YUAN SHAN'	SCHEFFLERA
	FICUS NITIDA 'COLUMN'	INDIAN LAUREL

FOREGROUND SHRUBS, GRASSES, & GROUNDCOVERS

SYMBOL	BOTANICAL NAME	COMMON NAME
	AGAVE 'BLUE FLAME'	BLUE FLAME AGAVE
	ALOE 'BLUE ELF'	BLUE ELF ALOE
	ASPARAGUS DENSIFLORUS 'MYERS'	MYER'S ASPARAGUS
	CALANDRINIA SPECTABILIS	ROCK PURSLANE
	CAREX DIVULSA	BERKELEY SEDGE
	DIANELLA 'CASSA BLUE'	CASSA BLUE FLAX LILY
	HESPERALOE 'BRAKELIGHTS'	BRAKELIGHTS YUCCA
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH
	SESLERIA AUTUMNALIS 'GREENLEE'	GREENLEE AUTUMN MOOR GRASS
	TEUCRIUM CHAMAEDRYS	GERMANDER

MIDGROUND SHRUBS, GRASSES & GROUNDCOVERS

SYMBOL	BOTANICAL NAME	COMMON NAME
	DIANELLA T. 'VARIEGATA'	VARIEGATED FLAX LILY
	LANTANA 'NEW GOLD'	NEW GOLD LANTANA
	MUHLENBERGIA E. 'EL TORO'	BULL GRASS
	PITTOSPORUM CRASSIFOLIUM 'NANA'	DWARF KARO
	RHAPHIOLEPIS UMBELLATA	YEDDO HAWTHORN
	STRELITZIA REGINAE	BIRD OF PARADISE
	WESTRINGIN F. 'MUNDI'	MUNDI COAST ROSEMARY

BACKGROUND SHRUBS

SYMBOL	BOTANICAL NAME	COMMON NAME
	OLEA X 'MONTRA'	LITTLE OLLIE
	STRELITZIA NICOLAI	GIANT BIRD OF PARADISE
	WESTRINGIA 'WYNYABBIE GEM'	WYNYABBIE GEM COAST ROSEMARY
	XYLOSMA CONGESTUM	XYLOSMA

LSA

FIGURE 3-6

0 60 120

FEET

SOURCE: CallisonRTK, Inc.

Bolsa Chica Senior Living Community

Conceptual Landscape Plan

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A new 8-foot-high masonry wall would be installed along the project site's southern boundary, and the existing retaining wall and fence along the project site's southern boundary would remain intact.

Metal security gates with fire department access would be installed at each of the community's pedestrian entrances to control access from the public sidewalks along Bolsa Chica Street. As described above, 4-foot-high enclosures would be provided on the main roof to screen roof-top equipment, such as the project's heating, ventilation, and air condition (HVAC) units, from view.

The proposed project would be developed with 10-foot setbacks from each of the project site's property boundaries including a fire access road on the project's southern property boundary.

3.4.4 Green Building Characteristics

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

3.4.5 Access, Circulation, and Parking

In the existing condition, the project site is accessed by three driveways along Bolsa Chica Street and two driveways along Warner Avenue. With implementation of the proposed project, vehicle access to the new senior community would be provided via three driveways on Bolsa Chica Street: one entry-only and one exit-only driveway for the porte cochère, and one full-access driveway for the subterranean parking garage). The proposed project would also provide a right-in/right-out only driveway on Warner Avenue (in the northwest corner of the property) for emergency, trash/ recycling, and service vehicles (refer to Figure 3-4). This driveway would feature a gate and a hammerhead turn-around. A passenger arrival and departure zone for the community would be located in front of the main entrance along Bolsa Chica Street under the porte cochère. As described above, an additional fire access road with gate would be provided on the south side of the project site, with full access provided from Bolsa Chica Street.

Pedestrian access to the community would be provided via sidewalks along Warner Avenue and Bolsa Chica Street as well as internal walkways.

The community would provide 207 parking spaces for residents, staff, and visitors, 4 of which would be short-term surface parking spaces (at grade) under the porte cochère. A single-level subterranean parking garage would be built beneath the senior living community and would provide 203 parking spaces. Refer to Table 3.A for a breakdown of the applicable parking requirements for the community. The ramp to the subterranean parking garage would be located on Bolsa Chica Street south of the exit only driveway and adjacent to the multi-purpose room. Pursuant to the 2019 California Building Code Section 11B-208.2, 7 of the 207 parking spaces would be Americans with Disabilities Act (ADA) compliant, including 2 ADA van-accessible spaces. Additionally, 25 of the provided parking spaces would be designated for carpool/clean air vehicles and electric vehicle capable in accordance with the 2019 California Green Building Code (CGBC) Tables 5.106.5.2. and

Table 3.A: Parking Requirements

Unit Type	Parking Requirement	Units	Number of Required Parking Spaces
Memory Care (Skilled Nursing Communities)	0.65 space per unit	28 units	18.2
Assisted Living	0.65 space per unit	62 units	40.3
Independent Living	1.2 spaces per unit	123 units	147.6
		Total Spaces Required & Provided	**207**

Sources: Bolsa Chica Senior Living Community Draft Specific Plan (City of Huntington Beach, July 2022); CallisonRTKL (2022).

5.106.5.3. An additional 2 parking spaces (not included in the project's total parking space count) would be provided in the loading area accessible from Warner Avenue. Guest parking is included in the parking requirement calculation outlined below in Table 3.A.

3.4.6 Lighting

The proposed project would feature outdoor lighting, including pathway lighting, to meet safety and orientation needs of residents and the public utilizing sidewalks adjacent to the community. Wall mounted light fixtures would flank the building perimeter on the first floor. Lighting in public areas would be warmly colored, unobtrusive, and angled in a way that minimizes spill and glare. The level of lighting intensity would vary throughout the day. Lighting would be shielded and directed downward to avoid off-site light spillage.

3.4.7 Infrastructure

The following infrastructure improvements would be included as part of the proposed project:

Water. The Utilities Division of the City's Public Works Department currently provides potable water service to the project site. The proposed project would connect to an existing 8-inch water line running parallel to Warner Avenue as well as to an existing 12-inch water line running parallel to Bolsa Chica Street.

An 8-inch fire service point of connection would be provided at the entrance to the fire access road off of Warner Avenue and at the entrance to the fire access road off of Bolsa Chica Street. An existing fire hydrant would be relocated to the east side of the community near the entrance to the subterranean parking garage off of Bolsa Chica Street. The proposed project would reconnect an existing fire hydrant lateral line to an existing water line running parallel to Warner Avenue. Additional fire hydrants would be provided along the north side of the community near the fire access road entrance off of Warner Avenue, at the northeast corner of the community along Bolsa Chica Street, and at the southwest corner of the fire access road off of Bolsa Chica Street.

Sewer. The Utilities Division of the City's Public Works Department currently provides sewer service to the project site. The proposed project would perpendicularly extend an existing 8-inch sewer lateral line from the north side of the community to connect to an existing 18-inch sewer line running parallel to Warner Avenue. Additional sewer points of connection would be provided along

the east side of the community connecting to an existing 8-inch sewer main running parallel to Bolsa Chica Street.

Drainage. The project site has a relatively flat topography. Stormwater discharged from the project site is directed to a Municipal Separate Storm Sewer System (MS4) that discharges into the westerly flowing Sunset Channel.

Runoff on the project site that flows easterly is ultimately collected by an existing ribbon gutter and by one of the existing City-owned catch basins located on Bolsa Chica Street near the corner of Warner Avenue. The runoff is collected by an existing 48-inch storm drain system located on Bolsa Chica Street flowing north, which increases in size to a 60-inch and then a 72-inch concrete pipe prior to discharging into the Sunset Channel. The Sunset Channel flows into Huntington Harbour and Anaheim Bay.

With implementation of the proposed project, runoff from the project site would be collected by inlets, a trench drain, and multiple roof drains and would flow towards either a biofiltration planter or modular wetlands, or a combination of both, for treatment. Following treatment, runoff would be directed into an existing catch basin located on Warner Avenue, where it would be collected into an existing 48-inch storm drain system.

Prior to construction, a Storm Water Pollution Prevention Plan (SWPPP) will be filed with the appropriate state and local agencies, including the California State Water Resources Control Board (SWRCB) and the Santa Ana Regional Water Quality Control Board (RWQCB). The proposed project will comply with all requirements of such agencies.

Utilities and Service Systems. Utilities for the proposed project would include electricity provided by Southern California Edison, natural gas provided by the Southern California Gas Company, telecommunication facilities, and cable services provided by third-party providers. The City of Huntington Beach contracts third-party services for solid waste collection, recycling, green waste collection, and composting services. Solid waste is taken to a transfer station in Huntington Beach, where it is processed and transported to the Frank Bowerman Landfill in Irvine. Existing power poles and overhead wiring located along the project site's Bolsa Chica Street frontage would be removed and undergrounded. All new utility infrastructure for electricity, natural gas, telecommunications, and cable service that is not installed underground within the proposed development site would be screened from public view with a minimum 3-foot-wide landscaped area in accordance with Section 230.76 of the City's Zoning Code.

3.4.8 Project Design Features

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

- Parking would be located below grade within the subterranean parking garage in order to minimize views of parking to the surrounding uses.'

- Landscaping would be incorporated along the project site perimeters to create a green buffer between the project and surrounding uses.
- The use of multilevel rooflines and varying building setbacks along Warner Avenue and Bolsa Chica Street would break up the scale and massing of the building.
- The project would be architecturally aligned with the City and is intended to complement and enhance the visual character of the surrounding area. It would be developed consistent with the existing Surf City culture and designed to reflect the City's beach lifestyle.
- Contemporary light colors and a variety of building materials would be used for the exterior building finishes to enhance and unite the neighborhood’s aesthetic quality.
- A roll down shutter would enclose the entrance to the subterranean parking garage along Bolsa Chica Street.
- Four-foot-high enclosures would be provided on the main roof to screen roof-top equipment.

3.5 PROJECT IMPLEMENTATION

The development of the new community would require demolition and removal of the existing two commercial buildings, surface parking (including existing asphalt concrete pavement, curb, and gutter), fence and block wall, landscaping, yard lights, signage, and all above-ground water and gas lines on the project site. All existing utility sewer, water, and gas lines below grade would be disconnected and capped. In addition to demolition, construction activities would include excavation and grading of the site; delivery of materials and personnel; construction of the subterranean parking garage and building area; and landscaping. It is anticipated that the construction period for the senior living community, including the subterranean parking garage, would be approximately 28 months. During the peak of construction approximately 200 construction workers are anticipated to be on site each day.

Based on preliminary grading plans, construction of the proposed project would require approximately 55,000 cubic yards of cut that would be exported off site for appropriate disposal. The disposal site is likely approximately 35 miles from the project site at United Rock Products Corporation in Irwindale. No fill is anticipated for the proposed project. The anticipated excavation depth for the proposed project would be approximately 13 feet below the existing ground surface. Demolition, grading, and building activities would involve the use of standard earthmoving equipment.

3.6 DISCRETIONARY ACTIONS, PERMITS, AND OTHER APPROVALS

In accordance with Sections 15050 and 15367 of the *State CEQA Guidelines*, the City is the designated Lead Agency for the proposed project and has principal authority and jurisdiction for CEQA actions and project approval. Responsible Agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project

and/or mitigation. Trustee Agencies are State agencies that have jurisdiction by law over natural resources affected by a proposed project.

The discretionary actions to be considered by the City as a part of the proposed project include:

- General Plan Amendment to change the land use designation from Commercial General (CG) to Mixed Use (MU);
- Adoption of a Specific Plan that will establish development standards to the project site;
- Zoning Map Amendment to change the zoning from CG to Specific Plan (SP);
- Conditional Use Permit (CUP) for convalescent community use;
- Grading, street, and infrastructure permits;
- Utility permits, including sewer, water, and storm drain;
- Building permits; and
- Any other necessary discretionary or ministerial permits and approvals required for the construction and operation of the proposed project.

Other agency approvals anticipated for the proposed project include:

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

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4.0 EXISTING ENVIRONMENTAL SETTING, ENVIRONMENTAL ANALYSIS, IMPACTS, AND MITIGATION MEASURES

OVERVIEW

The following chapter contains ten sections, each of which addresses one environmental topic outlined in Appendix G of the Guidelines for the California Environmental Quality Act (*State CEQA Guidelines*) (California Code of Regulations [CCR] Title 14, Chapter 3, Sections 15000–15397).

For each environmental impact issue analyzed, the Draft Environmental Impact Report (EIR) includes a detailed explanation of the existing conditions, thresholds of significance that will be applied to determine whether the proposed Bolsa Chica Senior Living Community Project (proposed project) impacts are significant or less than significant, analysis of the environmental impacts, and a determination of whether the proposed project would have a significant impact if implemented. A "significant impact" or "significant effect" means "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (14 CCR 15382). Each of the environmental topic sections in Chapter 4.0 also includes a discussion of the cumulative effects of the proposed project when considered in combination with other projects causing related impacts, as required by Section 15130 of the *State CEQA Guidelines*.

Each of the ten environmental sections is organized into the following subsections:

1. **Introduction** briefly describes the topics and issues covered in the section.

2. **Scoping Process** describes the comment letters received during the public review period of the Initial Study/Notice of Preparation (IS/NOP) that are related to the topic.

3. **Existing Environmental Setting** describes the physical conditions that existed at the time the NOP was prepared. This section focuses on physical site characteristics that are relevant to the environmental topic being analyzed.

4. **Regulatory Setting** lists and discusses the laws, ordinances, regulations, and policies that relate to the specific environmental topic and how they apply to the proposed project.

5. **Methodology** describes the approach and methods employed to complete the environmental analysis for the issue under investigation.

6. **Thresholds of Significance** provides the thresholds that are the basis of the conclusions of significance, which are based on the criteria in Appendix G of the *State CEQA Guidelines*. A list of the thresholds that were found to not be significant in the Initial Study, and therefore, are not included in the Draft EIR analysis are also provided.

7. **Project Impacts** describes the potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented. Evidence is presented to show the cause-and-effect relationship between the proposed project and potential changes in

the environment. The exact magnitude, duration, extent, frequency, and range or other parameters of a potential impact are ascertained to the extent feasible to determine whether impacts may be significant.

8. **Level of Significance Prior to Mitigation** describes the significance of potential impacts prior to implementation of mitigation measures.

9. **Standard Conditions** (SCs) are specific standards imposed by the approving agency and are required of the proposed project to reduce its potential environmental effects. Because these features are regulatory, and therefore required, they do not constitute mitigation measures.

10. **Mitigation Measures** (MMs) are project-specific measures that would be required for the project to avoid, minimize, rectify, reduce, eliminate, or compensate for a potentially significant adverse impact.

11. **Level of Significance after Mitigation** describes the significance of potential impacts after implementation of mitigation measures. Potential significant unavoidable impacts are clearly stated in this section.

12. **Cumulative Impacts** refers to potential environmental changes to the existing physical conditions that may occur as a result of project implementation together with other reasonably foreseeable, planned, and approved future projects producing related impacts. Section 15355 of the *State CEQA Guidelines* defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts may result from individually minor but collectively significant projects taking place over a period of time. For each of the environmental topics considered in this Draft EIR, the geographic scope of the cumulative analysis is also defined. Table 4.A provides a list of the approved and pending projects in the City of Huntington Beach that are within approximately 3 miles of the project site and have been used in the cumulative impact analysis.

Table 4.A: Cumulative Projects List

Project Name	Project Location and Approximate Distance to from the Project Site	Status
Hebrew Academy Expansion	14401 Willow Lane; east of Willow Lane at the terminus of Maple Avenue (approximately 3 miles from the project site)	Planning
Park Avenue Residential	16926 Park Avenue; terminus of Park Avenue in Huntington Harbor (approximately 1.5 miles from the project site)	Planning
Short-Term Rentals	Citywide	Planning

Table 4.A: Cumulative Projects List

Project Name	Project Location and Approximate Distance to from the Project Site	Status
Parkside Estates	West side of Graham Street; south of Warner Avenue; along the East Garden Grove Wintersburg Flood Channel (approximately 0.5 mile from the project site)	Under Construction
Chick-Fil-A	16961 Goldenwest Street (approximately 2 miles from the project site)	Under Construction
Harmony Cove (proposed Huntington Harbor Marina and Eating Establishment)	3901 Warner Avenue; north side of Warner Avenue; west of Weatherly Land; former Percy Park (approximately 1.7 miles from the project site)	Planning
Sunset Beach	Sunset Beach (approximately 1.9 miles from the project site)	Planning
Central Park Public Art	7111 Talbert Avenue (approximately 2.4 miles from the project site)	Plan Check
Hardin Hyundai	17242 Beach Boulevard (approximately 3.1 miles from the project site)	Plan Check
Peter's Landing	16330-16470 Pacific Coast Highway (approximately 2.2 miles from the project site)	Under Construction
Sea Dance Housing Development – Former Franklin School Site	14422 Hammon Lane (approximately 2.6 miles from the project site)	Under Construction
Windward Residential Development	17202 Bolsa Chica Street; east side of Bolsa Chica Street; south of Los Patos Avenue (approximately 0.3 mile from the project site)	Planning
Rainbow Environmental Services Transfer Station	17121 Nichols Lane (approximately 3 miles from the project site)	Planning
Gothard Townhomes	19100 Gothard Street (approximately 3.1 miles from the project site)	Under Construction
Holly Triangle Townhomes	19070 Holly Lane (approximately 3.2 miles from the project site)	Planning
Local Coastal Program Update	Citywide	Planning
2021-2029 (6th Cycle) Housing Element	Citywide	Planning
Holly Townhomes	19200 Holly Lane (approximately 3.3 miles from the project site)	Under Construction
Sunset Beach Hotel	17145 pacific Coast Highway (approximately 1.4 miles from the project site)	Plan Check
Fogo de Chao Brazilian Steakhouse	7901 Edinger Avenue (approximately 3.2 miles from the project site)	Planning

Table 4.A: Cumulative Projects List

Project Name	Project Location and Approximate Distance to from the Project Site	Status
Pearce Drive Condos	4861 Pearce Drive (approximately 0.3 mile from the project site)	Planning
Huntington Gateway Business Park Project Phase II	5301 Bolsa Avenue; north side of Bolsa Avenue; south of Skylab Road at Delta Lane (approximately 2.1 miles from the project site)	Plan Check
Huntington Gateway Business Park Project Phase III	Portion of APN 195-111-65; north of Skylab West; east of Bolsa Chica Street at Rando Road (approximately 2.1 miles from the project site)	Planning
Cameron Lane Townhomes	17532 Cameron Lane (approximately 3.1 miles from the project site)	Plan Check
PCH Mixed Use Building	16655 Pacific Coast Highway; northeast corner of PCH and 18th Street; Sunset Beach	Planning
Jamboree Senior Housing	18431 Beach Boulevard; west side of Beach Boulevard; north of Ellis Avenue (approximately 3.3 miles from the project site)	Under Construction
Cannabis Regulatory Framework	Citywide	Planning
Brandywine Townhomes	7225 Edinger Avenue; north side; 200 feet west of Gothard Street (approximately 2.5 miles from the project site)	Planning
Group Homes Ordinance	Citywide	Planning
Wave Pool	7461 Center Avenue; north side of Center Avenue; south of McFadden Avenue (approximately 2.9 miles from the project site)	Planning
Ralph's Commercial Center	19026 Goldenwest Street; southeast corner of Goldenwest Street and Garfield Avenue (approximately 2.9 miles from the project site)	Planning
Bella Terra Residential	7777 Edinger Avenue; north side of Edinger; west of Beach Boulevard, on site of Bella Terra commercial center (approximately 2.9 miles from the project site)	Planning

4.1 AESTHETICS

This section of the Draft Environmental Impact Report (EIR) describes the existing aesthetic character of the project site and visual resources in the vicinity of the project site. The potential visibility of the project site and proposed development is evaluated and the potential changes in visual quality and lighting levels resulting from future development under the proposed Bolsa Chica Senior Living Community Project (proposed project) are addressed below.

4.1.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project and a Scoping Meeting was held on November 10, 2022. The City of Huntington Beach (City) received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to aesthetics.

4.1.2 Methodology

The aesthetics analysis in this section is based on field reconnaissance; review of aerial photographs and site photographs; and evaluation of future development under the proposed project in the context of surrounding existing land uses. Those areas that would have direct views of the project improvements were considered in defining the study area. This also defines the viewer groups (those with views of the project site) that would be exposed to the changes in the visual character of the project site.

The CEQA thresholds of significance require an evaluation of whether the project will substantially degrade the existing visual character or quality of the project site and its surroundings. The determination of whether the changes in the visual quality of a site would degrade an area or its surroundings, or result in a significant impact, can be highly subjective and dependent on the viewer's perspective and aesthetic preferences. Thus, in determining whether the project would degrade the visual character, factors such as the viewer groups of the site (including the number of viewers and their length of exposure to visual changes), the extent to which the project would disrupt existing visual resources, and the extent to which the project would create a visually cohesive environment were evaluated. Visual quality, as preferred by the City and expressed through the design review process, is used to determine whether aesthetic impacts would be adverse or not. It should also be noted, the focus of the CEQA analysis is impacts from public views because private views are not protected.

4.1.3 Existing Environmental Setting

The 3.10-acre project site is located at the southwest corner of Bolsa Chica Street and Warner Avenue in the City. The City is located in northwest coastal Orange County, California. The project site is comprised of two parcels: Assessor's Parcel Number (APN) 163-281-01 and APN 163-281-02. Regional access is provided by Interstate 405 (I-405) to the north and east; State Route 1 (SR-1) or Pacific Coast Highway to the west; and State Route 39 or Beach Boulevard, which bisects the City running north to south. Local access is provided from Bolsa Chica Street and Warner Avenue. In the existing condition, the project site is accessed by three driveways along Bolsa Chica Street and two

driveways along Warner Avenue. The regional location is depicted in Figure 3-1 in Chapter 3.0, Project Description.

The project site is directly bordered by Warner Avenue to the north and Bolsa Chica Street to the east. Surrounding land uses include a mix of older commercial, industrial, and residential uses (refer to Figure 3-3) with some newer retail (large drugstores, tire shops, etc.). Directly north of the project site, across Warner Avenue, is a mix of retail businesses, including Walgreens and CVS. Directly east of the project site, across Bolsa Chica Street, are an automotive repair business and four single-family homes. Immediately south of the project site is an industrial property, and immediately west of the project site is a two-story apartment complex.

The project site is currently fully developed with commercial (retail and office) uses including a two-story commercial building fronting on Warner Avenue, a larger three-story office building fronting on Bolsa Chica Street, and an associated surface parking lot. The project site is located within an urbanized area predominantly developed with commercial, industrial, and residential uses. In the existing condition, the project site contains a variety of trees and ornamental landscaping within the surface parking lot and surrounding the commercial buildings.

4.1.4 Regulatory Setting

This section includes applicable federal, State, regional, and City regulations.

4.1.4.1 Federal Regulations

There are no federal land use policies or regulations that are applicable to the proposed project with respect to aesthetics regulation.

4.1.4.2 State Regulations

California Department of Transportation State Scenic Highway Program. The California Department of Transportation (Caltrans) has a California Scenic Highway Program that classifies highways meeting specific criteria as “scenic” throughout California. The purpose of the program is to protect and enhance the scenic beauty of California highways and adjacent corridors through special conservation treatment. According to Caltrans, “a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view.” The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. An eligible scenic highway becomes an officially designated scenic highway when the local jurisdiction applies for and obtains approval from Caltrans and adopts a Corridor Protection Program (Caltrans 2017).

There are no Officially Listed State-designated Scenic Highways in Huntington Beach, but Pacific Coast Highway (PCH or SR 1) is designated as an Eligible Scenic Highway. PCH, which runs north to south along the entire coastline of Orange County, is approximately 1.1 miles west of the project site.

4.1.4.3 Regional Regulations

There are no regional land use policies or regulations that are applicable to the proposed project with respect to aesthetics regulation.

4.1.4.4 Local Regulations

Huntington Beach Scenic Corridors. As discussed in the Circulation Element of the City's General Plan Update, the City defines scenic corridors as roads that "have notable aesthetic appeal for the community" or offer scenic views and street scenes. The City has classified these corridors as Major Urban Scenic Corridors, Minor Urban Scenic Corridors, and Landscape Corridors. It has also identified primary and secondary entry nodes at intersections in the City that mark the entry points to scenic corridors. To protect scenic corridors, the City has adopted policies for aesthetic treatments, development requirements, and appropriate land uses and has established a rigorous development review process for development proposals along scenic corridors.

The City's General Plan Circulation Element (2017) identifies Pacific Coast Highway ("PCH") as an informal scenic highway and a major urban scenic corridor. The project site is located approximately 1.25 miles northeast of Pacific Coast Highway and is not visible from PCH due to distance and intervening land uses. Warner Avenue east of the intersection with Bolsa Chica Street is a City-designated major urban scenic corridor. Per the City's Circulation Element, developed areas along major urban scenic corridors may be regulated to preserve views within the California Coastal Zone, and landscaping and detailing are required to reinforce the aesthetic beauty of the surrounding area. The segments of Bolsa Chica Street south of the intersection with Warner Avenue and Warner Avenue west of the intersection with Bolsa Chica Street are City-designated landscape corridors. The project site and arterial segments are not in the Coastal Zone. Per the City's Circulation Element, landscape corridors are corridors requiring specific signage, landscaping, and features to reinforce the design continuity of the area.

City of Huntington Beach General Plan. The City of Huntington Beach occupies approximately 27.3 square miles of land area along the southern coast of California. It is surrounded by the cities of Westminster to the north; Seal Beach to the northwest; Fountain Valley to the east; and Costa Mesa to the southeast. The proposed project is subject to the City of Huntington Beach's land use jurisdiction, including City plans, policies, and regulations. As such, the proposed project actions are required to be consistent with the City's General Plan, Zoning Ordinance, and other City imposed requirements. The *City of Huntington Beach General Plan* was comprehensively updated in 2017 and is the primary planning and policy document of the City of Huntington Beach. This document provides the regulatory framework for the use and management of the City's resources and outlines policies related to public and private land use, design guidelines for development and open spaces, housing conservation and new residential development, public services and infrastructure, natural resources, economic resources, and policies to protect against natural and manmade hazards. The City's General Plan includes nine elements including Land Use, Circulation, Environmental Resources and Conservation, Natural and Environmental Hazards, Noise, Public Services and Infrastructure, Historic and Cultural Resources, Housing, Implementation Program, and Coastal. The Coastal Element of the General Plan acts as the Land Use Plan for the Local Coastal Program (LCP) and details land use policies within the designated Coastal Zone.

Goals pertaining to aesthetics and visual resources are described in the City's General Plan and apply to the project site. Elements within the General Plan that include goals and policies applicable to the proposed project include the Land Use Element, the Circulation Element, and the Environmental Resources and Conservation Element. A consistency analysis for these goals and policies is included in Section 4.7, Land Use and Planning, of this Draft EIR.

Huntington Beach Municipal Code/Zoning and Subdivision Ordinance. Section 244 of the Municipal Code establishes the Design Review Board and grants it with the responsibility to complete the design review process for proposed development projects in the City. The Board must consider the arrangement and relationship of proposed structures in creating harmony and compatibility, adequacy of proposed landscaping, performance characteristics, and energy conservation measures in the design review process. As part of this review, the Board may impose and/or recommend any conditions deemed reasonable and necessary to the approval of the proposed development plan.

Park Fees. Section 17.76 of the Municipal Code requires the payment of the Parkland Acquisition and Park Facilities Development Impact Fee by all non-subdivided new residential and nonresidential development. Park fees for the proposed project would be calculated based on the City's 2022 Department of Community Development Planning Fee Schedule.

4.1.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to aesthetics if it would:

Threshold 4.1.1: Have a substantial adverse effect on a scenic vista;

Threshold 4.1.2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

Threshold 4.1.3: In non-urbanized area, substantially degrade the existing visual character of quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

Threshold 4.1.4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As discussed in Section 4.1 of the Initial Study prepared for the proposed project (Appendix A), the proposed project would result in less than significant impacts to scenic vistas (Threshold 4.1.1), would not substantially damage scenic resources within a State Scenic Highway (Threshold 4.1.2), and would not create a new source of substantial light or glare (Threshold 4.1.4). Therefore, these topics are not further addressed below.

4.1.6 Project Impacts

Threshold 4.1.3: In non-urbanized area, substantially degrade the existing visual character of quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The project site is currently fully developed with commercial (retail and office) uses including a two-story commercial building fronting on Warner Avenue, a larger three-story office building fronting on Bolsa Chica Street, and an associated surface parking lot. The project site is located within an urbanized area predominantly developed with commercial, industrial, and residential uses. In the existing condition, the project site contains a variety of trees and ornamental landscaping within the surface parking lot and surrounding the commercial buildings. The proposed project includes the demolition of both existing commercial buildings and associated surface parking lot, and development of a new five-story senior living community with a subterranean parking garage and on-site landscaping and utility improvements.

Grading and construction activities would present temporary views of graded areas, dirt and debris stockpiles, construction equipment, delivery and haul trucks, construction crews, building materials, staging areas, trailer offices, and building activities that would be visible to people near the construction sites or with direct views of the project site. Additionally, it should be noted that a temporary construction fence would be installed around the site to block views of the construction zone within the site. Existing residential uses to the east across Bolsa Chica Street and the apartment complex to the west would have views of the construction site. However, it should be recognized that construction-related views would be temporary and would cease following completion of the project. Therefore, potential adverse visual impacts associated with construction of the proposed project would be less than significant and no mitigation is required.

The project site is currently zoned Commercial General. The Applicant is requesting a Zoning Map Amendment to change the zoning of the site from Commercial General to Specific Plan. The proposed licensed senior living community is considered an RCFE (convalescent community), which is conditionally permitted under the existing zoning designation by the Zoning Administrator and would be a conditionally permitted use under the requested Specific Plan zoning designation. Therefore, a Conditional Use Permit (CUP) is required for the proposed project, and is being processed concurrently.

According to the General Plan Land Use Element (2017), the project site is currently designated as Commercial General (CG). This land use designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercials, hotels/motels, timeshares, cultural facilities, institutional, health care, government offices, and educational uses. The current maximum Floor Area Ratio (FAR) is 1.5, and the current maximum building height is 50 feet. The Applicant is requesting a General Plan Amendment to change the land use designation from Commercial General (CG) to Mixed Use (MU). The Mixed-Use designation provides for any combination of commercial uses; offices, attached single-family

housing, multiple-family housing, and live-work units; institutional uses; cultural facilities; developments including an open space component; and/or civic facilities. Maximum FAR and residential density standards are established within individual specific plan areas. The proposed project includes the adoption of a Specific Plan that would establish site development standards and design guidelines tailored to promote development of a senior living community that meets the highest industry standards. The proposed development as specified in the Specific Plan would (a) achieve consistency with the City's General Plan based upon concurrent approval of the change in land use designation from Commercial General (CG) to Mixed Use (MU). The Mixed-Use designation would accommodate the density of residential living, employment, and amenities that are critical to successful operation of the proposed facility; and (b) would achieve a superior level of urban design. Development standards and design guidelines would be tailored to meet the needs of a high-quality residential care facility, while enhancing the visual character of the surrounding neighborhood. Specifically, the Specific Plan would increase the allowable FAR to 2.5 and the maximum building height to 65 feet (excluding mechanical equipment). The proposed project would have a FAR and building height within the allowable ranges pursuant to the proposed Specific Plan. The proposed project would be developed consistent with the existing Surf City culture, which includes the informal aesthetic elements of the existing beach community. The new facility would be designed to reflect complementary light colors reflective of the City's beach lifestyle and a variety of building materials, including glass, metal, stucco, wood, and composite panels, would be incorporated. The proposed project would use multilevel rooflines and varying building setbacks along Warner Avenue and Bolsa Chica Street to break up the scale and massing of the building. The streetscape design would complement the architecture, frame buildings, and provide trees consistent with the overall character of the area. The main entrance to the facility leading into the reception area would be located along Bolsa Chica Street and would feature a covered entrance. The proposed project design would be developed to complement and enhance the architectural style of the larger surrounding area and would include walls and fences as a functional part of the development, to add visual interest. Given the current visual quality of the project site, implementation of the proposed project consistent with the development standards and design guidelines specified in the Specific Plan would promote a cohesive community identity and enhance the visual quality of the project site to viewers on site and off site. Furthermore, approval of the proposed General Plan Amendment and Zoning Map Amendment would render the proposed project consistent with the General Plan and Zoning Code.

Consistency of the proposed project with the goals and polices of the City's General Plan that address aesthetic values and visual quality is discussed in Section 4.7, Land Use, of this Draft EIR. The consistency analysis shows that the proposed project would not conflict with relevant goals and policies in terms of preserving the visual quality in the City such as ensuring new development projects are of compatible proportion, scale, and character to complement adjoining uses; and protecting existing Surf City culture and identity.

To date, the City has not adopted regulations specifically addressing shade or shadow impacts. However, because the proposed project consists of a five-story community and given the project site's proximity to nearby residential uses, a shade and shadow study was prepared for the proposed project to understand the proposed project's potential impacts on neighboring properties. Two figures were prepared to illustrate the morning and afternoon shade effects of the proposed

community on nearby residential uses for both the winter and summer solstices, which represent the longest shadow, or worst-case, time periods (see Appendix C, Bolsa Chica Senior Living Community Shadow Studies). As shown in those figures, during both the winter and summer solstices, no shadows would be cast in either the morning or afternoon hours on the apartment complex buildings to the west or the single-family residential homes to the east. Shadows from the proposed project would be cast primarily on Bolsa Chica Street and Warner Avenue during the winter solstice, and on Bolsa Chica Street and the apartment complex carports to the west of the project site during the summer solstice. Therefore, implementation of the proposed project would not result in significant shade or shadow impacts to nearby residential uses.

Based on the analysis above, the proposed project would not result in significant impacts related to applicable zoning and other regulations governing scenic quality. No mitigation is required.

4.1.7 Level of Significance Prior to Mitigation

With approval of the proposed General Plan Amendment and Zoning Map Amendment, the proposed project would be consistent with the General Plan and Zoning Code. Impacts related to aesthetics would be less than significant, and no mitigation is required.

4.1.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

No standard conditions, regulatory compliance measures, or mitigation measures are applicable to the proposed project pertaining to aesthetics.

4.1.9 Level of Significance after Mitigation

There would be no significant unavoidable impacts of the proposed project related to aesthetics, and no mitigation is required.

4.1.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines,* cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for aesthetics. The cumulative impact area for aesthetics for the proposed project is the City of Huntington Beach. Several mixed use, residential, commercial and industrial development projects are approved, pending, or in the planning stages in the City. All proposed development in the City would be subject to its own General Plan consistency analysis and would be reviewed for consistency with adopted land use plans and policies.

As described above, the proposed project would include a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. Approval of the General Plan Amendment and Zoning Amendment would render the proposed project consistent with the City's established development standards, and no mitigation would be required. Therefore, cumulative aesthetics impacts with respect to consistency with applicable zoning regulations would be less than significant.

The proposed project would be developed consistent with the existing Surf City culture, in line with the informal aesthetic elements of the existing beach community. The new facility would be designed to reflect complementary light colors reflective of the City's beach lifestyle and a variety of building materials, and it would be compatible in character to surrounding properties.

There are no incompatibilities between the proposed project and planned future projects in the City, which primarily include mixed-use and residential developments. As stated above, proposed projects in the City would be reviewed for consistency with adopted land use plans and policies by the City. For this reason, current and future projects are anticipated to be consistent with applicable General Plan and zoning requirements or would be subject to allowable exceptions. Further, each discretionary project would be subject to CEQA, mitigation requirements, and design review, as applicable. Therefore, the proposed project would not contribute a significant cumulative aesthetic or visual impact in the City, and no mitigation is required.

4.2 AIR QUALITY

This section has been prepared for the proposed Bolsa Chica Senior Living Community Project (proposed project) using methodologies and assumptions recommended in the air quality impact assessment guidelines of the South Coast Air Quality Management District (SCAQMD) in its *California Environmental Quality Act (CEQA) Air Quality Handbook*[1], and associated updates. In keeping with these guidelines, this section describes existing air quality and evaluates short-term impacts during construction, long-term emissions associated with operation, and how potential impacts correlate to human health. Air quality modeling data are included in Appendix D.

4.2.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project and a Scoping Meeting was held on November 10, 2022. The City of Huntington Beach (City) received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to air quality.

4.2.2 Methodology

Implementation of the proposed project would result in criteria pollutant emissions associated with construction and operational sources. Construction activities would generate emissions from off-road construction equipment, and on roadways as a result of construction-related truck hauling, vendor deliveries, and worker commuting. Operational activities would also generate emissions associated with miscellaneous on-site sources, such as natural gas combustion for cooking, heating, and landscaping equipment, and from operational-related traffic. This analysis utilized the California Emissions Estimator Model (CalEEMod) version 2020.4.0 to quantify the criteria pollutant emissions for both construction and operation of the proposed project. The maximum daily emissions are calculated for the criteria pollutants. The CalEEMod output is contained in Appendix D.

CalEEMod provides a platform to calculate both construction emissions and operational emissions from a project. It calculates both the daily maximum and annual average for criteria pollutants as well as total or annual GHG emissions. The model also provides default values for water and energy use. Specifically, the model performs the following calculations:

- Short-term construction emissions associated with demolition, site preparation, grading, building, architectural coating (painting), and paving from off-road construction equipment; on-road mobile equipment associated with workers, vendors, delivery, and hauling; fugitive dust associated with grading, demolition, truck loading, and roads; and volatile emissions of volatile organic compounds (VOCs) from architectural coating and paving.

- Operational emissions, such as on-road mobile vehicle traffic generated by the land uses, fugitive dust associated with roads, volatile emissions of VOCs from architectural coatings, off-

[1] South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook.* Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993), (accessed November 2022)

road emissions from landscaping equipment, volatile emissions of VOCs from consumer products and cleaning supplies, natural gas usage in the buildings, electricity usage in the buildings, water usage by the land uses, and solid waste disposal by the land uses.

In addition, CalEEMod contains default values and existing regulation methodologies to use in each specific local air quality district region. Appropriate statewide default values can be utilized if regional default values are not defined. This analysis utilized project-specific inputs and relevant model default factors for the Orange County (County) area, which is within the SCAQMD jurisdiction for the emissions inventory, consistent with SCAQMD requirements.

4.2.3 Existing Environmental Setting

The City is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAQMD. Background information about air pollutants and health effects, climate, meteorological conditions, and regional air quality conditions in the Basin and local air quality conditions in the vicinity of the project site is provided below.

4.2.3.1 Air Pollutants and Health Effects

Both State and federal governments have established health-based ambient air quality standards for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and Pb are considered local pollutants that tend to accumulate in the air locally.

The primary pollutants of concern in the vicinity of the project site are O_3, CO, and suspended particulate matter. Significance thresholds established by an air quality district are used to manage total regional and local emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual development projects that would contribute to regional and local emissions and could adversely affect or delay the air basin's projected attainment target goals for nonattainment criteria pollutants.

Because of the conservative nature of the significance thresholds, and the basin-wide context of individual development project emissions, there is no direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_X) and reactive organic gases (ROGs).

Further, by its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to by itself result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air

quality would be considered significant. In developing thresholds of significance for air pollutants, the air quality districts have considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise. These populations are referred to as sensitive receptors.

Air pollutants and their health effects, and other air pollution-related considerations are summarized in **Error! Reference source not found.** and are described in more detail below.

Ozone. Ozone (O_3) is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving ROGs and NO_X. The main sources of ROGs and NO_x, often referred to as ozone precursors, are combustion processes (including combustion in motor vehicle engines) and the evaporation of solvents, paints, and fuels. Automobiles are typically the largest source of ozone precursors. Ozone is referred to as a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production through the photochemical reaction process. Ozone causes eye irritation, airway constriction, and shortness of breath and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide. CO is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicles. CO transport is limited – it disperses with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels that adversely affect local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes. Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, and fatigue, impair central nervous system function, and induce angina (chest pain) in persons with serious heart disease. Extremely high levels of CO, such as those generated when a vehicle is running in an unventilated garage, can be fatal.

Particulate Matter. Particulate matter is a class of air pollutants that consists of heterogeneous solid and liquid airborne particles from humanmade and natural sources. Particulate matter is categorized in two size ranges: PM_{10}, for particles less than 10 microns in diameter, and $PM_{2.5}$, for particles less than 2.5 microns in diameter. Motor vehicles are the primary generators of particulates, through tailpipe emissions as well as brake pad, tire wear, and entrained road dust.

Table 4.2.A: Sources and Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	• Precursor sources:[1] motor vehicles, industrial emissions, and consumer products.	• Respiratory symptoms. • Worsening of lung disease leading to premature death. • Damage to lung tissue. • Crop, forest, and ecosystem damage. • Damage to a variety of materials, including rubber, plastics, fabrics, paints, and metals.
Particulate Matter Less than 2.5 Microns in Diameter ($PM_{2.5}$)	• Cars and trucks (especially diesels). • Fireplaces, woodstoves. • Windblown dust from roadways, agriculture, and construction.	• Premature death. • Hospitalization for worsening of cardiovascular disease. • Hospitalization for respiratory disease. • Asthma-related emergency room visits. • Increased symptoms, increased inhaler usage.
Particulate Matter Less than 10 Microns in Diameter (PM_{10})	• Cars and trucks (especially diesels). • Fireplaces, woodstoves. • Windblown dust from roadways, agriculture, and construction.	• Premature death and hospitalization, primarily for worsening of respiratory disease. • Reduced visibility and material soiling.
Nitrogen Oxides (NO_X)	• Any source that burns fuels such as cars, trucks, construction and farming equipment, and residential heaters and stoves.	• Lung irritation. • Enhanced allergic responses.
Carbon Monoxide (CO)	• Any source that burns fuels such as cars, trucks, construction and farming equipment, and residential heaters and stoves.	• Chest pain in patients with heart disease. • Headache. • Light-headedness. • Reduced mental alertness.
Sulfur Oxides (SO_X)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits.
Lead (Pb)	• Contaminated soil.	• Impaired mental functioning in children. • Learning disabilities in children. • Brain and kidney damage.
Toxic Air Contaminants (TACs)	• Cars and trucks (especially diesels). • Industrial sources, such as chrome platers. • Neighborhood businesses, such as dry cleaners and service stations. • Building materials and products.	• Cancer. • Reproductive and developmental effects. • Neurological effects.

Source: California Air Resources Board (2018).

[1] Ozone is not generated directly by these sources. Rather, chemicals emitted by these precursor sources react with sunlight to form ozone in the atmosphere.

Wood burning in fireplaces and stoves, industrial facilities, and ground-disturbing activities such as construction are other sources of such fine particulates. These fine particulates are small enough to be inhaled into the deepest parts of the human lung and can cause adverse health effects. According to the California Air Resources Board (CARB), studies in the United States and elsewhere have demonstrated a strong link between elevated particulate levels and premature deaths, hospital admissions, emergency room visits, and asthma attacks, and studies of children's health in California have demonstrated that particle pollution may significantly reduce lung function growth in

children.[2] Statewide attainment of particulate matter standards could reduce premature deaths, hospital admissions for cardiovascular and respiratory disease, asthma-related emergency room visits, and episodes of respiratory illness in California.

Nitrogen Dioxide. NO_2 is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide. SO_2 is a colorless acidic gas with a strong odor. It is produced by the combustion of sulfur-containing fuels such as oil, coal, and diesel. SO_2 has the potential to damage materials and can cause health effects at high concentrations. It can irritate lung tissue and increase the risk of acute and chronic respiratory disease. SO_2 also reduces visibility and the level of sunlight at the ground surface.

Lead. Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery factories. Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the United States Environmental Protection Agency (USEPA) established national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of USEPA regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically.

Toxic Air Contaminants. In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. Some examples of TACs include: benzene, butadiene, formaldehyde, and hydrogen sulfide. Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

TACs do not have ambient air quality standards, but are regulated by the USEPA, CARB, and the SCAQMD. In 1998, the CARB identified particulate matter from diesel-fueled engines as a TAC. The CARB has completed a risk management process that identified potential cancer risks for a range of activities and land uses that are characterized by use of diesel-fueled engines.[3] High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic

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[2] California Air Resources Board (CARB). 2020. *Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10})*. Website: ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health (accessed November 2022)

[3] CARB. 2000a. *Fact Sheet – California's Plan to Reduce Diesel Particulate Matter Emissions*. October. Website: www.arb.ca.gov/diesel/factsheets/rrpfactsheet.pdf (accessed November 2022).

(distribution centers, truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Unlike TACs emitted from industrial and other stationary sources noted above, most diesel particulate matter is emitted from mobile sources—primarily "off-road" sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as trucks and buses traveling on freeways and local roadways.

The CARB Diesel Risk Reduction Plan is intended to substantially reduce diesel particulate matter emissions and associated health risks through introduction of ultra-low-sulfur diesel fuel—a step already implemented—and cleaner-burning diesel engines.[4] The technology for reducing diesel particulate matter emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions.

High Volume Roadways. Air pollutant exposures and their associated health burdens vary considerably within places in relation to sources of air pollution. Motor vehicle traffic is perhaps the most important source of intra-urban spatial variation in air pollution concentrations. Air quality research consistently demonstrates that pollutant levels are substantially higher near freeways and busy roadways, and human health studies have consistently demonstrated that children living within 100 to 200 meters (328 to 656 feet) of freeways or busy roadways have reduced lung function and higher rates of respiratory disease. At present, it is not possible to attribute the effects of roadway proximity on non-cancer health effects to one or more specific vehicle types or vehicle pollutants. Engine exhaust, from diesel, gasoline, and other combustion engines, is a complex mixture of particles and gases, with collective and individual toxicological characteristics.

4.2.3.2 National and State Ambient Air Quality Standards

Both State and federal governments have established health-based ambient air quality standards for criteria air pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

Both the USEPA and the CARB have established ambient air quality standards for the following common pollutants: CO, O_3, NO_2, SO_2, Pb, and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. These ambient air quality standards are levels of contaminants that avoid specific adverse health effects associated with each pollutant.

[4] CARB. 2000b. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October. Prepared by the Stationary Source Division and Mobile Source Control Division. Website: www.arb.ca.gov/diesel/documents/rrpFinal.pdf (accessed November 2022).

Federal standards include both primary and secondary standards. Primary standards establish limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.[5] State and federal standards for the criteria air pollutants are listed in Table 4.2.B.

4.2.3.3 Existing Climate and Air Quality

The following provides a discussion of the local and regional air quality and climate in the City of Huntington Beach.

Climate and Meteorology. Air quality in Huntington Beach is affected by various emission sources (e.g., mobile and industry) as well as atmospheric conditions (e.g., 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 South Coast Air Basin (Basin) some of the highest pollutant concentrations in the country.

The annual average temperature varies throughout the Basin, ranging from the low- to middle-60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas, including the City of Huntington Beach, show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the project site is the Long Beach station.[6] The monthly average maximum temperature recorded at this station ranged from 65.2°F in January to 80.7°F in August, with an annual average maximum of 72.4°F. The monthly average minimum temperature recorded at this station ranged from 44.8°F in January to 62.1°F in August, with an annual average minimum of 53.4°F. These levels are representative of the project site.

The majority of annual rainfall in the Basin occurs between November and March. Summer rainfall is minimal and is generally limited to scattered thunderstorms in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. The monthly average rainfall at the Long Beach station typically varies from 2.88 inches in January to 0.00 inch in July with an annual total of 12.72 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high, which is the semi-permanent high-pressure area of the north Pacific Ocean and is the dominating factor in California weather. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground.

[5] United States Environmental Protection Agency (USEPA). 2017. Criteria Air Pollutants. October. Website: www.epa.gov/criteria-air-pollutants (accessed November 2022).

[6] Western Regional Climate Center. Recent Climate in the West. Website: http://www.wrcc.dri.edu, (accessed November 2022).

Table 4.2.B: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1-Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[9]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter ($PM_{2.5}$)[9]	24-Hour	–		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	–	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO_2)[10]	Annual Arithmetic Mean	0.03 ppm (57 µg/m³)	Gas Phase Chemi-luminescence	53 ppb (100 µg/m³)	Same as Primary Standard	Gas Phase Chemi-luminescence
	1-Hour	0.18 ppm (339 µg/m³)		100 ppb (188 µg/m³)	–	
Lead (Pb)[12,13]	30-Day Average	1.5 µg/m³	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m³ (for certain areas)[l]	Same as Primary Standard	
	Rolling 3-Month Average [i]	–		0.15 µg/m³		
Sulfur Dioxide (SO_2)[11]	24-Hour	0.04 ppm (105 µg/m3)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3-Hour	–		–	0.5 ppm (1300 µg/m³)	
	1-Hour	0.25 ppm (655 µg/m³)		75 ppb (196 µg/m³)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Visibility-Reducing Particles [12]	8-Hour	See footnote [14]	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride [10]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: Ambient Air Quality Standards (California Air Resources Board 2016).

Table notes continued on the following page

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact USEPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24- hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the three-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the three-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the CARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.

°C = degrees Celsius
µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
mg/m^3 = milligrams per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-

afternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the vicinity of the project site blow predominantly from the west–northwest, with relatively low velocities.[7] Wind speeds in Huntington Beach average between 7 miles per hour (mph) and 4 mph. Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north, or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months and disperse air contaminants. The Santa Ana conditions tend to last for several days at a time.[8]

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollution concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and NO_x because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog or ozone.

Attainment Status. CARB is required to designate areas of the State as attainment, nonattainment, or unclassified for all State standards. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An unclassified designation signifies that data do not support either an attainment or nonattainment status. The California Clean Air Act (CCAA) divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA designates areas for O_3, CO, and NO_2 as one of the following: does not meet the primary standards, or cannot be classified, or better than national standards. For SO_2, areas are designated as: does not meet the primary standards, does not meet the secondary standards, cannot be classified, or better than national standards. Table 4.2.C provides a summary of the attainment status for the Basin with respect to the National and California Ambient Air Quality Standards (NAAQS and CAAQS, respectively).

Air Quality Monitoring Results. Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SCAQMD, together with CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station closest to the project site is 1630 W. Pampas Lane, Anaheim, California.

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7 Iowa Environmental Mesonet. 2021. Windrows. Website: https://mesonet.agron.iastate.edu/sites/windrose.phtml?—network=CA_—ASOS&station=LGB. (accessed November 2022).

8 Ibid.

Table 4.2.C: South Coast Air Basin Attainment Status

Pollutant	State	Federal
O_3 1 hour	Nonattainment	Extreme Nonattainment
O_3 8 hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	N/A	Attainment/Unclassified
Lead	Attainment	Partial Nonattainment[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: South Coast Air Quality Management District (2016b).

[1] Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SO_2 = sulfur dioxide

Pollutant monitoring results for years 2019 to 2021 at the Anaheim monitoring station, shown in Table 4.2.D, indicate that air quality in the vicinity of the project site has generally been good. As indicated in the monitoring results, the federal PM_{10} standard had no exceedances during the three-year period. The State PM_{10} standard had four exceedances in 2019, five exceedances in 2020 and an unknown number of exceedances in 2021. $PM_{2.5}$ levels exceeded the federal standard 4 times in 2019, 12 times in 2020, and an unknown number of times in 2021. The State 1-hour ozone standards had one exceedance in 2019, six exceedances in 2020, and no exceedances in 2021. The State 8-hour ozone standards had one exceedance in 2019, 16 exceedances in 2020, and no exceedances in 2021. The federal 8-hour standards were exceeded one time in 2019, 15 times in 2020, and no times in 2021. The CO and NO_2 standards were also not exceeded in this area during the 3-year period. SO_2 data was not available from 2019-2021.

Toxic Air Contaminant Trends. In 1984, the CARB adopted regulations to reduce TAC emissions from mobile and stationary sources, as well as consumer products. A CARB study showed that ambient concentrations and emissions of the seven TACs responsible for the most cancer risk from airborne exposure declined by 76 percent between 1990 and 2012.[9] Concentrations of diesel particulate matter, a key TAC, declined by 68 percent between 1990 and 2012, despite a 31 percent increase in State population and an 81 percent increase in diesel vehicle miles traveled (VMT), as shown on Figure 4.2-1, below. The study also found that the significant reductions in cancer risk to California residents from the implementation of air toxics controls are likely to continue.

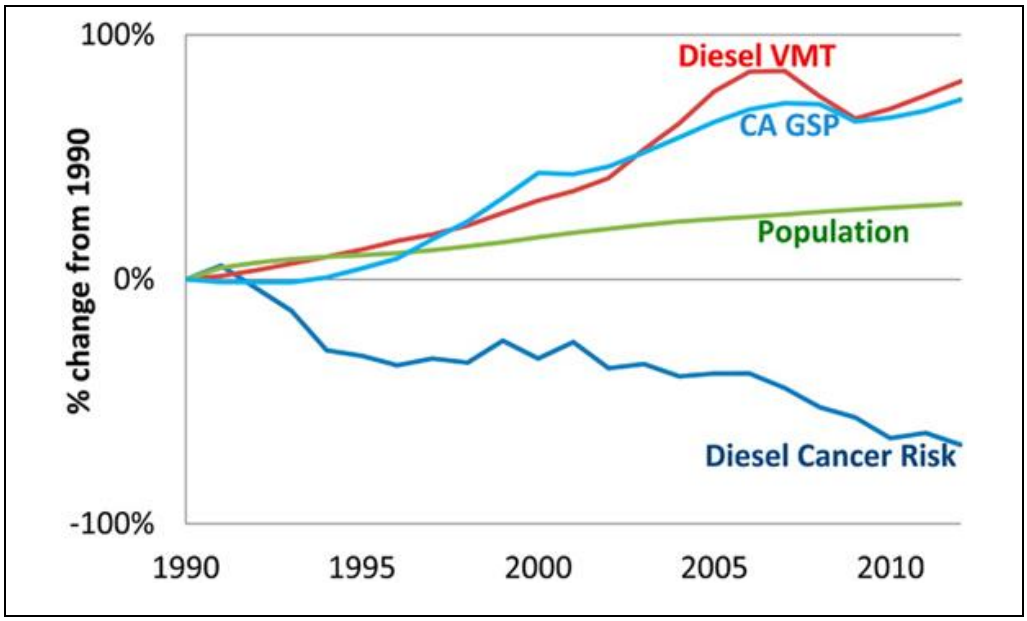
[9] Propper, Ralph, et al. 2015. Ambient and Emission Trends of Toxic Air Contaminants in California. *American Chemical Society: Environmental Science & Technology*. Website: pubs.acs.org/doi/full/ 10.1021/acs.est. 5b02766 (accessed November 2022).

Table 4.2.D: Ambient Air Quality in the Project Vicinity

Pollutant	Standard	2019	2020	2021
Carbon Monoxide (CO)				
Maximum 1-hour concentration (ppm)		2.4	2.3	2.1
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		1.3	1.7	1.5
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O_3)				
Maximum 1-hour concentration (ppm)		0.096	0.142	0.089
Number of days exceeded:	State: > 0.09 ppm	1	6	0
Maximum 8-hour concentration (ppm)		0.082	0.098	0.068
Number of days exceeded:	State: > 0.07 ppm	1	16	0
	Federal: > 0.07 ppm	1	15	0
Coarse Particulates (PM_{10})				
Maximum 24-hour concentration (µg/m^3)		127.1	74.5	63
Number of days exceeded:	State: > 50 µg/m^3	4	5	ND
	Federal: > 150 µg/m^3	0	0	0
Annual arithmetic average concentration (µg/m^3)		24.4	ND	ND
Exceeded for the year:	State: > 20 µg/m^3	Yes	ND	ND
	Federal: > 50 µg/m^3	No	ND	ND
Fine Particulates ($PM_{2.5}$)				
Maximum 24-hour concentration (µg/m^3)		37.1	64.8	54.4
Number of days exceeded:	Federal: > 35 µg/m^3	4	12	ND
Annual arithmetic average concentration (µg/m^3)		9.4	12.4	11.5
Exceeded for the year:	State: > 12 µg/m^3	No	Yes	No
	Federal: > 15 µg/m^3	No	No	No
Nitrogen Dioxide (NO_2)				
Maximum 1-hour concentration (ppm)		0.059	0.070	0.067
Number of days exceeded:	State: > 0.250 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.012	0.013	0.0124
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)				
Maximum 1-hour concentration (ppm)		ND	ND	ND
Number of days exceeded:	State: > 0.25 ppm	ND	ND	ND
Maximum 24-hour concentration (ppm)		ND	ND	ND
Number of days exceeded:	State: > 0.04 ppm	ND	ND	ND
	Federal: > 0.14 ppm	ND	ND	ND
Annual arithmetic average concentration (ppm)		ND	ND	ND
Exceeded for the year:	Federal: > 0.030 ppm	ND	ND	ND

Sources: CARB (2021) and USEPA (2021).
Note: All data were taken from the 1630 W. Pampas Lane, Anaheim Monitoring Station.
CARB = California Air Resources Board
ND = No data. There were insufficient (or no) data to determine the value.
ppm = parts per million
USEPA = United States Environmental Protection Agency

Figure 4.2-1: California Population, Gross State Product (GSP), Diesel Cancer Risk, and Diesel Vehicle Miles Traveled (VMT) Regulatory Context



Source: Ambient and Emission Trends of Toxic Air Contaminants in California (Propper, Ralph, et al. 2015).

4.2.4 Regulatory Setting

The USEPA and CARB regulate direct emissions from motor vehicles. The SCAQMD is the regional agency primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as monitoring ambient pollutant concentrations.

The applicable federal, State, regional, and local regulatory framework is discussed below.

4.2.4.1 Federal Regulations

Federal Clean Air Act. At the federal level, the USEPA has been charged with implementing national air quality programs. The USEPA air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1963. The CAA was amended in 1970, 1977, and 1990.

The CAA required the USEPA to establish primary and secondary NAAQS and required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The CAA Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. The USEPA has responsibility to review all state SIPs to determine conformity with the mandates of the CAA and determine if implementation will achieve air quality goals. If the USEPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area, which imposes additional control measures.

Failure to submit an approvable SIP or to implement the plan within the mandated timeframe may result in sanctions on transportation funding and stationary air pollution sources in the air basin.

The USEPA is also required to develop National Emission Standards for Hazardous Air Pollutants, which are defined as those which may reasonably be anticipated to result in increased deaths or serious illness, and which are not already regulated. An independent science advisory board reviews the health and exposure analyses conducted by the USEPA on suspected hazardous pollutants prior to regulatory development.

4.2.4.2 State Regulations

California Clean Air Act. In 1988, the California Clean Air Act (CCAA) required that all air quality districts in the State endeavor to achieve and maintain CAAQS for carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), and nitrogen dioxide (NO_2) by the earliest practical date. The California Clean Air Act provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A SIP shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

California Air Resources Board. The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances that their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

The California Air Resources Board Handbook. CARB has developed an Air Quality and Land Use Handbook[10] (CARB Handbook) (2005), which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

[10] CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook). April.

Land use designations with air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to further examine project sites for actual health risk associated with the location of new sensitive land uses.

4.2.4.3 Regional Regulations

South Coast Air Quality Management District. The SCAQMD has jurisdiction over most air quality matters in the South Coast Air Basin (Basin). This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin and is tasked with implementing certain programs and regulations required by the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). The SCAQMD prepares plans to attain State and National Ambient Air Quality Standards (NAAQS). SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

- **Regulation IV - Prohibitions:** This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air pollutant emissions, fuel contaminants, start-up/shutdown exemptions, and breakdown events.

- **Rule 402 - Nuisance:** This rule restricts the discharge of any contaminant in quantities that cause or have a natural ability to cause injury, damage, nuisance, or annoyance to businesses, property, or the public. The proposed project will be required to comply with Rule 402.

- **Rule 403 - Fugitive Dust:** This rule requires the prevention, reduction, or mitigation fugitive dust emissions from a project site. Rule 403 restricts visible fugitive dust to a project property line, restricts the net PM_{10} emissions to less than 50 micrograms per cubic meter ($\mu g/m^3$) and restricts the tracking out of bulk materials onto public roads. Additionally, Rule 403 requires an applicant to utilize one or more of the best available control measures (identified in the tables within the rule). Control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, Rule 403 requires that a contingency plan be prepared if so determined by the USEPA. In addition, SCAQMD Rule 403(e), Additional Requirements for Large Operations, includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control training class in the South Coast Air Basin. The proposed project will be required to comply with Rule 403.

- **Regulation XI - Source Specific Standards:** Regulation XI sets emissions standards for different sources.

  - **Rule 1113 - Architectural Coatings:** This rule limits the amount of volatile organic compounds (VOCs) from architectural coatings and solvents, which lowers the emissions of odorous compounds. The proposed project will be required to comply with Rule 1113.

The SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited direct involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with CARB, SCAG, county transportation commissions, local governments, and other federal and State government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. SCAQMD and SCAG are responsible for formulating and implementing the AQMP for the South Coast Air Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. Every several years, SCAQMD prepares a new AQMP, updating the previous plan and the 20-year horizon.[11] The Final 2016 Air Quality Management Plan is the currently adopted AQMP. Key elements of the Final 2016 AQMP include the following:

- Calculating and taking credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)

- A strategy with fair-share emission reductions at the federal, State, and local levels

- Investment in strategies and technologies meeting multiple air quality objectives

[11] SCAQMD. 2016a. Final 2016 Air Quality Management Plan. March.

- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the O_3 strategy
- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (federal Clean Air Act [CAA] Section 182(e)(5) measures)

Southern California Association of Governments. SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) on September 3, 2020. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness.

Using growth forecasts and economic trends, the RTP provides a vision for transportation throughout the region for the next 20 years. It considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The SCS is a required element of the RTP, which

integrates land use and transportation strategies to achieve CARB emissions reduction targets. The inclusion of the SCS is required by Senate Bill (SB) 375, which was enacted to reduce greenhouse gas (GHG) emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The RTP/SCS would successfully achieve and exceed the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 compared to the 2005 level on a per capita basis. This RTP/SCS also meets criteria pollutant emission budgets set by the USEPA.

4.2.4.4 Local Regulations

City of Huntington Beach General Plan. The City of Huntington Beach addresses air quality in the Environmental Resources and Conservation Element of the City's General Plan. The Environmental Resources and Conservation Element contains goals, policies, and implementing actions in relation to government organization roles and responsibilities, transportation, particulate and pollutant emissions, health and sensitive receptors, and land use. The following goals, policies, and implementing actions related to air quality are presented in the Environmental Resources and Conservation Element[12] and are applicable to the proposed project:

GOAL ERC-4. Air quality in Huntington Beach continues to improve through local actions and interagency cooperation

Policies:

- Continue to cooperate with the South Coast Air Quality Management District and other regional, state, and national agencies to enforce air quality standards and improve air quality
- Continue to require construction projects to carry out best available air quality mitigation practices, including use of alternative fuel vehicles and equipment as feasible
- Enforce maximum idling time regulations for off-road equipment
- Require grading, landscaping, and construction activities to minimize dust while using as little water as possible
- Continue to explore and implement strategies to minimize vehicle idling, including traffic signal synchronization and roundabouts
- Minimize exposure of sensitive land uses to toxic air contaminants by locating new pollutant sources away from sensitive uses and disproportionally affected communities and by encouraging existing pollutant sources to reduce emissions when changes to existing operations or permits are proposed.

[12] City of Huntington Beach. 2017. City of Huntington Beach General Plan, Natural Resources and Conservation Element. October. Website: https://www.huntingtonbeachca.gov/files/users/planning/environmental_ resources _conservation_element.pdf (accessed November 2022).

4.2.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to air quality if it would:

Threshold 4.2.1: Conflict with or obstruct implementation of the applicable air quality plan;

Threshold 4.2.2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard;

Threshold 4.2.3: Expose sensitive receptors to substantial pollutant concentrations; or

Threshold 4.2.4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As discussed in Section 4.3.1 of the Initial Study prepared for the proposed project (Appendix A), the proposed project would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people (Threshold 4.2.4), and this impact was determined to be less than significant. Therefore, this topic is not further addressed below.

4.2.6 Project Impacts

Threshold 4.2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategies being based on projections from local General Plans.

Consistency with the 2016 AQMP would be achieved if the project is consistent with the goals, objectives, and assumptions in this plan to achieve the federal and State air quality standards. Per the SCAQMD *CEQA Air Quality Handbook*, there are two main indicators of a project's consistency with the AQMP:

- **Indicator 1:** Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the Ambient Air Quality Standards (AAQS) or emissions reductions in the AQMP.

- **Indicator 2:** Whether the project would exceed the assumptions in the AQMP. The AQMP strategy is, in part, based on projections from local general plans.

Indicator 1: As demonstrated under Threshold 4.2.2 below, the proposed project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by the SCAQMD. As such, the proposed project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the AAQS or emission reductions in the AQMP. Therefore, the proposed project is considered consistent with Indicator 1.

Indicator 2: The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. The proposed project would include the adoption of a General Plan Amendment and a new Specific Plan. As such, this analysis evaluates whether the project would exceed the 2016 AQMP's assumptions for 2040 or yearly increments based on the year of project build out and phasing.

With respect to determining the proposed project's consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's RTP/SCS regarding population, housing, and growth trends. According to SCAG's 2020–2045 RTP/SCS, the City's population, households, and employment are forecast to increase by approximately 8,400 residents, 3,300 households, and 7,400 jobs, respectively, between 2016 and 2045.[13]

As discussed in Section 4.14, Population, of the Initial Study, the proposed project includes the demolition of two commercial buildings (retail and office), and the construction and operation of a five-story, 213-unit senior living community with a subterranean parking garage, and utility and landscaping improvements. The senior living community is not a typical residential use and would likely attract existing residents that already live in the City and surrounding areas rather than inducing new population growth from outside the area. Nevertheless, the project site does not currently contain any permanent residents in the existing condition. As such, implementation of the proposed project would potentially result in an increase in City residents.

The community is intended to house one resident per bed. Therefore, the proposed project could increase the City's population by up to 278 new residents. The addition of 278 new residents represents 0.14 percent of Huntington Beach's 2022 population of 196,100 and 3.3 percent of the population increase identified in the SCAG RTP/SCS. Given the specific services provided by a senior living community, it is expected that a majority of future residents would come from within a 5–7 mile vicinity of the project site. As such, it can be reasonably assumed that a portion of the community's 278 residents would be comprised of individuals who already live in the City, and that a population increase represents a conservative, worst-case scenario. Moreover, this population increase is minimal relative to the City's overall population.

[13] Southern California Association of Governments (SCAG). 2020. *Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy.* Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed November 2022).

In addition, as discussed in Section 4.14, Population, of the Initial Study, during project operation, it is anticipated the community would be staffed by 110 employees, staggered in shifts during which the number of employees on site would range from 20 to 40 employees. According to the most recent data published by the U.S. Census Bureau, Orange County had 9,612 individuals employed at continuing care communities and assisted living communities for the elderly in 2017.[14] Therefore, because the region's existing labor force already includes a large number of people employed in the congregate care industry, it is reasonable to assume that the senior living community's employees would most likely be comprised of individuals who already live in the general area. As such, it is unlikely that these employment opportunities would cause employees to relocate their residences to be close to the project site, thereby inducing growth within the City. Population growth in the area as a result of on-site employment opportunities would be negligible.

In addition, since the proposed project would not include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities, the proposed project is not defined as a significant project as defined by the SCAQMD *CEQA Air Quality Handbook*. Therefore, it is unlikely that the proposed project would interfere with SCAQMD's goals for improving air quality in the region. The proposed project would not conflict with the 2016 AQMP and, as such, would not jeopardize attainment of the CAAQS and NAAQS in the area under the jurisdiction of the SCAQMD. The proposed project is therefore considered consistent with Indicator 2.

Summary: The proposed project would not conflict with or obstruct the implementation of the air quality plans prepared by SCAQMD to attain State and national air quality standards, or violate any air quality standard. As such, the proposed project would result in a less than significant impact related to a conflict or obstruction of implementation of applicable air quality plans. No mitigation is required.

Threshold 4.2.2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard?

Less Than Significant Impact. The Basin is currently designated as nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the PM_{10} standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

[14] United States Census Bureau. 2020. 2017 Economic Census for Health Care and Social Assistance. Website: https://www.census.gov/data/tables/2017/econ/economic-census/naics-sector-62.html (accessed July 20, 2022).

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Table 4.2.E lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

Table 4.2.E: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_x	CO	PM_{10}	$PM_{2.5}$	SO_x
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: Air Quality Significance Thresholds (SCAQMD n.d.). Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed November 2022)

CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

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

Construction. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by demolition, grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, VOCs, directly-emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Project construction activities would include demolition, export, excavation, grading, site preparation, building construction, architectural coating, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the grading phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site.

Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

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

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod. Construction of the proposed project is anticipated to commence in 2024 and end in 2026, occurring over a 24-month period. The proposed project would require the demolition of the existing on-site structures, the excavation and export of approximately 55,000 cubic yards (the associated haul trucks are assumed to travel an average trip length of 35 miles). In addition, during peak construction, approximately 200 construction workers would be anticipated. All of these assumptions were included in CalEEMod. Demolition, grading, and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment, which was assumed in the analysis. This analysis assumes the use of Tier 2 construction equipment and assumes the overlapping of building construction and architectural phases as part of the construction phase schedule. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

As specified in Regulatory Compliance Measures AQ-1 through AQ-4, construction of the proposed project would comply with SCAQMD standard conditions, including Rule 403 (Fugitive Dust) to control fugitive dust and Rule 1113 (Architectural Coatings) to control VOC emissions from paint. Compliance with SCAQMD standard conditions is a regulatory requirement and was considered in the analysis of construction emissions.

The maximum daily emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$ that would result from construction of the proposed project are summarized in Table 4.2.F and compared to the SCAQMD regional significance thresholds. As shown in Table 4.2.F, construction emissions associated with the proposed project would not exceed the significance thresholds established by the SCAQMD for any of the criteria pollutants.

Table 4.2.F: Project Construction Emissions (in Pounds Per Day)

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	1.3	33.8	25.5	<0.1	1.8	1.1
Site Preparation	1.3	33.8	23.5	<0.1	10.0	5.5
Grading	1.8	81.9	36.8	0.3	13.0	5.0
Building Construction	1.7	25.3	24.1	0.1	3.4	1.6
Architectural Coating	8.3	2.4	2.8	<0.1	0.5	0.2
Paving	0.8	16.1	14.0	<0.1	0.8	0.6
Peak Daily Emissions	**10.0**	**81.9**	**36.8**	**0.3**	**13.0**	**5.5**
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA Associates, Inc. (November 2022).
[1] Peak daily emissions of VOCs occur during overlap of the Building Construction and Architectural Coating phases.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compound

As shown in Table 4.2.F, construction emissions associated with the project would not exceed the SCAQMD thresholds for VOCs, NO_x, CO, SO_X, $PM_{2.5,}$ or PM_{10} emissions. As discussed above, according to SCAQMD guidance, projects that exceed the significance thresholds are considered by SCAQMD to result in cumulatively considerable air quality impacts. Conversely, projects that do not exceed the significance thresholds are generally not considered to result in cumulatively considerable air quality impacts. Therefore, based on the fact that emissions during construction of the proposed project would not exceed any of the air quality significance thresholds for any criteria pollutants, the proposed project would not have a cumulatively considerable air quality impact. Therefore, with compliance with regulatory requirements (as specified in Regulatory Compliance Measures AQ-1 through AQ-4), construction impacts related to the cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable NAAQS or CAAQS would be less than significant, and no mitigation is required.

Operation. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas), area sources (e.g., architectural coatings and the use of landscape maintenance equipment), and stationary sources (e.g. diesel emergency backup generator) related to the proposed project.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. The emission factor is determined by the fuel source, with cleaner energy

sources, like renewable energy, producing fewer emissions than conventional sources. The proposed project would comply with the latest California Building Standards Code (California Code of Regulations [CCR], Title 24).

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of architectural coatings, consumer products, and landscaping equipment.

Long-term operation emissions associated with the proposed project and existing uses were calculated using CalEEMod. Based on the trip generation provided in Section 4.17 of the Initial Study (Appendix A), the proposed project is expected to generate approximately 537 average daily trips and the existing uses currently generate approximately 947 average daily trips, which was included in CalEEMod. The proposed project would include a 600-kilowatt generator, which was included in CalEEMod. In addition, the CalEEMod analysis assumes the proposed project would include drought tolerant landscaping. In addition, long-term operational emissions associated with the existing uses were evaluated in CalEEMod. Model results are shown in Table 4.2.G below. CalEEMod output sheets are included in Appendix D.

Table 4.2.G: Project Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Emissions						
Existing Area Sources	1.0	<0.1	<0.1	0.0	<0.1	<0.1
Existing Energy Sources	<0.1	0.1	0.1	<0.1	<0.1	<0.1
Existing Mobile Sources	2.2	2.2	19.7	<0.1	4.9	1.3
Total Existing Emissions	**3.2**	**2.3**	**19.8**	**<0.1**	**4.9**	**1.3**
Proposed Project Emissions						
Project Area Sources	7.9	3.4	18.9	<0.1	0.4	0.4
Project Energy Sources	0.1	0.6	0.3	<0.1	<0.1	<0.1
Project Mobile Sources	1.4	1.4	13.7	<0.1	3.9	1.1
Project Stationary Sources	0.2	0.8	0.5	<0.1	<0.1	<0.1
Total Project Emissions	**9.6**	**6.2**	**33.4**	**<0.1**	**4.3**	**1.5**
Net New Emissions	**6.4**	**3.9**	**13.6**	**0.0**	**-0.6**	**0.2**
SCAQMD Thresholds	55.0	55.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA Associates, Inc. (November 2022)
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

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As shown in Table 4.2.G, project emissions would not exceed the significance criteria for VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions; therefore, the proposed project would not have a significant effect on regional air quality. As such, operational impacts related to the cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable NAAQS or CAAQS would be less than significant, and no mitigation is required.

Localized Significance Threshold. The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[15] This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the North Coastal Orange County area (SRA 18). SCAQMD provides LST screening tables for 25, 50, 100, 200, and 500-meter source-receptor distances. The closest sensitive receptors include the Monticello Apartments immediately west of the project site. In cases where receptors may be closer than 82 feet (25 meters), any distances within the 82-foot (25-meter) buffer zone can be used. As such, the minimum distance of 25 meters was used. Based on the anticipated construction equipment, it is assumed that the maximum daily disturbed acreage for the proposed project would be 3.5 acres.[16] Table 4.2.H lists the emissions thresholds that apply during project construction and operation.

Table 4.2.H: SCAQMD LST Thresholds (in Pounds Per Day)

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction (3.5-acres, 25-meter distance)	164	1,337	11	7
Operations (3.5-acres, 25-meter distance)	164	1,337	3	2

Source: SCAQMD. *Final Localized Significance Threshold Methodology* (July 2008).
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

The results of the LST analysis are summarized in Table 4.2.I and Table 4.2.J.

Construction activities would result in localized exhaust emissions that have the potential to affect nearby sensitive receptors. In order to identify impacts to sensitive receptors, the SCAQMD recommends analyzing LSTs for construction. Table 4.2.I shows that the localized construction emissions would not exceed the LSTs that apply to the project site.

15 SCAQMD. 2008. *Final Localized Significance Threshold Methodology.* July.

16 SCAQMD. n.d. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed November 2022).

Table 4.2.I: Project Localized Construction Emissions (in Pounds Per Day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	34.0	25.0	9.8	5.5
Localized Significance Threshold	164.0	1,337.0	11.0	7.0
Exceeds?	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc. (November 2022)

As shown in Table 4.2.I, construction emissions associated with the proposed project would not exceed the LSTs established by SCAQMD. Further, as specified in Regulatory Compliance Measure AQ-1, construction of the proposed project would comply with SCAQMD standard conditions, including Rule 403 (Fugitive Dust) to control fugitive dust. Compliance with SCAQMD standard conditions is a regulatory requirement and was considered in the analysis of construction emissions. Because the project emissions would not exceed the LSTs with their compliance with regulatory requirements (and would be further reduced with implementation of Regulatory Compliance Measures AQ-1 through AQ-4), impacts related to the exposure of sensitive receptors to substantial pollutant concentrations during project construction would be less than significant. No mitigation is required.

In addition, a project would generate localized exhaust emissions that have the potential to affect nearby sensitive receivers if the project includes stationary sources, or attracts mobile sources that may spend long periods queueing and idling at the site (e.g., warehouse or transfer facilities). As such, operational LSTs are not applicable to the proposed project. Although the proposed project does not include such uses, impacts associated with the operational localized emissions have been analyzed for disclosure purposes. Operational LSTs apply to NO_X, CO, PM_{10}, and $PM_{2.5}$.

Screening-level analysis of LST is recommended for operational activities at the project site only. Off-site vehicle trips are not included in the LST analysis. The CalEEMod model includes all operational emissions for both on- and off-site sources. For a worst-case scenario assessment, the LST emissions shown in Table 4.2.J include all on-site project-related stationary and area sources that would occur on site. A total of 5 percent is considered conservative because more than 95 percent of the project-related vehicle trips would occur off site. Table 4.2.J shows the maximum daily emissions for the project's operational activities compared with the SCAQMD LSTs for NO_X, CO, PM_{10}, and $PM_{2.5}$.

Table 4.2.J: Project Localized Operational Emissions (in Pounds Per Day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	4.3	20.0	<1.0	<1.0
Localized Significance Threshold	164.0	1,337.0	3.0	2.0
Exceeds?	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc. (November 2022).

As shown in Table 4.2.J, project operational source emissions would not exceed LSTs established by the SCAQMD. Therefore, because the project would not exceed the LSTs established by the SCAQMD, localized emissions from operation of the proposed project would not expose any

sensitive receptors to substantial pollutant concentrations, impacts would be less than significant, and no mitigation is required.

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project site are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 parts per million (ppm)
- California State 8-hour CO standard of 9 ppm

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Anaheim monitoring station, the closest station to the project site that monitors CO, showed a highest recorded 1-hour concentration of 2.3 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.7 ppm (the State standard is 9 ppm) during the past 3 years (Table 4.2.D). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

The proposed project would result in a net decrease in 50 AM peak hour trips and net decrease in 73 PM peak hour trips compared to existing conditions. As such, the proposed project does not meet the criteria for an evaluation of study area intersection or roadway segment LOS. Therefore, it is assumed that the addition of the proposed project traffic would not create any significant adverse impacts to nearby intersections.

Therefore, given the extremely low levels of CO concentrations in the vicinity of the project site, and lack of traffic impacts at any intersections, project-related vehicle trips are not expected to contribute significantly to or result in CO concentrations exceeding the State or federal CO standards. Impacts related to CO hot spots would be less than significant, and no mitigation is required.

Threshold 4.2.3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. Land uses located adjacent to the project site include residential and commercial uses. The closest sensitive receptors to the project site are the Monticello Apartments located immediately west of the project site.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD rules for standard construction practices. As shown in Table 4.2.I and Table 4.2.J, the project would not result in significant localized or regional emissions during project construction or operation. Therefore, once the project is constructed, the project would not be a source of substantial pollutant emissions and sensitive receptors would not be exposed to substantial pollutant concentrations during either project construction or operation. As such, impacts are considered to be less than significant and no mitigation is required.

In addition, although the emissions from operations resulting from implementation of the proposed project are not expected to exceed the SCAQMD's project level thresholds, this does not in itself constitute a less than significant health impact to residents within the project site and the Basin.

The SCAQMD's numeric regional mass daily emissions thresholds are based in part on Section 180 (e) of the federal Clean Air Act. It should be noted that the numeric regional mass daily emissions thresholds have not changed since their adoption as part of the SCAQMD's *CEQA Air Quality Handbook* published in 1993 (nearly 30 years ago). The numeric regional mass daily emission thresholds are also intended to provide a means of consistency in significance determination within the environmental review process.

Notwithstanding, simply exceeding the SCAQMD's numeric regional mass daily emissions thresholds does not constitute a particular health impact to an individual nearby. The reason for this is that the mass daily emissions thresholds are represented in pounds per day emitted into the air, whereas health effects are determined based on the concentration of a pollutant in the air at a particular location (e.g., ppm by volume of air or $\mu g/m^3$ of air). CAAQS and NAAQS were developed to protect the most susceptible population groups from adverse health effects and were established in terms of ppm or $\mu g/m^3$ for the applicable emissions.

For this reason, the SCAQMD developed a methodology to assist lead agencies in analyzing localized air quality impacts from proposed projects as they relate to CO, NO_X, $PM_{2.5}$, and PM_{10}. This methodology is collectively referred to as localized significance thresholds (LSTs). LSTs differ from the numeric regional mass daily emissions thresholds in that LSTs are based on (1) the amount of emissions generated from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS, and (2) the ambient concentrations of the

pollutant and the relative distance to the nearest sensitive receptor (the SCAQMD performed air dispersion modeling to determine what amount of emissions generated a particular concentration at a particular distance). As shown in Table 4.2.J, project operational source emissions would not exceed LSTs established by the SCAQMD.

As noted in the Brief of Amicus Curiae by the SCAQMD[17], the SCAQMD has acknowledged that for criteria pollutants, it would be extremely difficult, if not impossible, to quantify health impacts for various reasons, including modeling limitations as well as where in the atmosphere air pollutants interact and form.

Additionally, the SCAQMD acknowledges that health effects quantification from O_3, as an example, is correlated with the increases in ambient levels of O_3 in the air (concentration) that an individual person breathes. The SCAQMD goes on to state that it would take a large amount of additional emissions to result in a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on its own modeling in its 2012 AQMP, a reduction of 432 tons (864,000 pounds) per day of NO_X and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O_3 levels at the highest monitored site by only 9 parts per billion (ppb). As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NO_X or VOC emissions from relatively small projects (defined as projects that are not regional in scope) due to photochemistry and regional model limitations (see page 11 of the SCAQMD Brief of Amicus Curiae).

To underscore this point, the SCAQMD goes on to state that it has only been able to correlate potential health outcomes for very large emissions sources. As part of its rulemaking activity, specifically 6,620 pounds per day (lbs/day) of NO_X and 89,180 lbs/day of VOCs were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O_3.

The proposed project would not generate 6,620 lbs/day of NO_X or 89,190 lbs/day of VOC emissions. As shown previously in Tables 4.2.F and 4.2.G, the proposed project would generate a maximum of 81.9 lbs/day of NO_X during construction (1.2 percent of 6,620 lbs/day) and up to 6.2 lbs/day of NO_X during operations (0.1 percent of 6,620 lbs/day), respectively. The proposed project would also generate a maximum of 10.0 lbs/day of VOC emissions during construction (less than 0.1 percent of 89,190 lbs/day) and a maximum of 9.6 lbs/day of VOC emissions during operations (less than 0.1 percent of 89,190 lbs/day), respectively.

Therefore, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a Basin-wide level. Notwithstanding, as previously noted, this air quality analysis does include a site-specific localized impact analysis that correlates potential project health impacts on a local level to immediately adjacent land uses. The SCAQMD Brief of Amicus Curiae is incorporated by reference into this EIR, including all references therein.

[17] SCAQMD. 2015. *Amicus Curiae Brief of South Coast Air Quality Management District*, April. Website: www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf (accessed November 2022).

Current scientific, technological, and modeling limitations prevent the relation of expected adverse air quality impacts to likely health consequences. As such, impacts are considered less than significant.

4.2.7 Level of Significance Prior to Mitigation

Prior to mitigation, the proposed project would result in less than significant impacts. However, the following regulatory compliance measures are existing SCAQMD regulations that are applicable to the proposed project and are considered in the analysis of potential impacts related to air quality. These requirements are considered to be mandatory regulatory compliance measures; therefore, they are not mitigation measures.

4.2.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

The following regulatory compliance measures pertaining to air quality are applicable to the proposed project.

Regulatory Compliance Measure AQ-1

SCAQMD Rule 403. During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventative measures by using the following procedures, in compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 during construction. The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Pave construction access roads at least 100 feet (30 meters) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

Regulatory Compliance Measure AQ-2

All trucks that are to haul excavated or graded material shall comply with State Vehicle Code Section 23114, with

special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

Regulatory Compliance Measure AQ-3 Prior to approval of the project plans and specifications, the City of Huntington Beach shall confirm that the construction bid packages specify:

- Contractors shall use high-volume low-pressure paint applicators with a minimum transfer efficiency of at least 50 percent;
- Coatings and solvents that will be utilized have a volatile organic compound content lower than required under SCAQMD Rule 1113; and
- To the extent feasible, construction/building materials shall be composed of pre-painted materials.

Regulatory Compliance Measure AQ-4 The project shall comply with SCAQMD Rule 402. Rule 402 prohibits the discharge of air contaminants or other material from any type of operations, which can cause nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort or repose of any such persons, or the public.

4.2.9 Level of Significance after Mitigation

There would be no significant unavoidable adverse impacts of the proposed project related to air quality, and no mitigation is required.

4.2.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for air quality. The cumulative impact area for air quality related to the proposed project is the Basin.

Air pollution is inherently a cumulative type of impact measured across an air basin. The discussion under Threshold 4.2.2, above, includes an analysis of the proposed project's contribution to cumulative air impacts. To summarize the conclusion with respect to that analysis, the incremental effect of projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively considerable. The proposed project's construction- and operation-related regional daily emissions are less than the SCAQMD significance thresholds for all criteria pollutants. In addition, adherence to SCAQMD rules and regulations would substantially reduce potential impacts associated with Basin-wide air pollutant emissions. Therefore, the proposed project would not have a cumulatively considerable increase in emissions, and the proposed project's cumulative air quality impacts would be less than significant. No mitigation is required.

4.3 CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (EIR) evaluates the potential for the Bolsa Chica Senior Living Community Project (proposed project) to impact cultural resources. Cultural resources are sites, buildings, structures, objects, and districts over 50 years old that may have traditional or cultural value for the historical significance they possess. The information and analysis presented in this section are based on the City of Huntington Beach's (City) General Plan Historic and Cultural Resources Element (2015) and the Cultural Resource Research, Records Review & Structure Documentation Report (Cultural Resources Research and Records Review; SRSINC, July 2022) and Addendum (SRSINC, January 2023). The Cultural Resources Research and Records Review is provided in Appendix E (Confidential Appendix) of this Draft EIR.

The term "site" is used in two contexts in this section:

- The "project site" should be interpreted to mean the approximately 0.4-acre site proposed for development.
- A "cultural resources site" should be interpreted to mean the specific locations of documented cultural materials or artifacts.

4.3.1 Scoping Process

The City of Huntington Beach received one comment letter during the public review period of the Initial Study/Notice of Preparation (IS/NOP). For copies of the IS/NOP comment letters, refer to Appendix B of this Draft EIR. One comment letter included comments related to Cultural Resources.

The letter from Native American Heritage Commission (NAHC) received on November 3, 2022 (Appendix B), suggested contacting the California Historical Research Information System Center for an archaeological records search. They indicated that if an archaeological inventory survey is required a professional report detailing findings and recommendations shall be included. Additionally, the NAHC advised that the lack of surface evidence of archaeological resources does not preclude their subsurface existence. As discussed, a Cultural Resource Research and Review Report was prepared for the proposed project.

4.3.2 Methodology

A resources study was performed by SRSINC in July 2022 for the project site and findings were documented in the Cultural Resources Research, Records Review, and Structure Documentation Report. SRSINC submitted a California Historical Resources Information System (CHRIS) Data Request Form to the South Central Coastal Information Center (SCCIC) on July 11, 2022. The SCCIC is the official repository of cultural resources records and reports for Orange County. The records search included a review of all recorded historic-period and prehistoric cultural resources within a 1-mile radius of the project site, as well as a review of known cultural resources surveys and excavation reports. The records search also included a review of the following State and federal inventories:

- California Points of Historical Interest (SPHI),
- California Historical Landmarks (SHL),
- California Register of Historical Resources (CRHR),
- National Register of Historic Places (NRHP),
- California State Historic Properties Directory (HPD),
- And local inventories of cultural resources

Materials reviewed included reports of previous cultural resources investigations, archaeological site records, and historical maps. Preparation of the Cultural Resources Research and Records Review required additional background research and also included a review of aerial photographs, historic-period maps, and geologic maps to assess the potential for subsurface archaeological deposits at the project site.

4.3.2.1 Results

The records search results indicate that four previously conducted cultural resources studies have included the project site, including: two architectural/historical surveys, one archaeological report, and one research design for proposed evaluation. An additional 74 cultural resources reports have been conducted within 1 mile of the project site. These reports consist of: archaeological surveys (57), excavation reports (5), evaluation reports (6), literature reviews (3), environmental planning documents (2), and an archaeological monitoring report (1).

As a result of these previous cultural resource studies, no cultural resources have been previously recorded within the project site. In total, 28 cultural resources have been previously recorded within 1 mile of the project site: a prehistoric/protohistoric/historic-period site (1), prehistoric/historic-period sites (3), prehistoric-period sites (11), historic-period sites (3), a historic-period building (1), a historic building/district (1), historic-period structures (7), and a historic object (1).

The nearest historic-period resource to the project site is the Baker House located east of the project site at 17042 Bolsa Chica Road. The Baker Home was built in the mid-1950s and joined a series of homes already present at the end of Bolsa Chica Street. The Baker family's connection to the examined home at 17042 Bolsa Chica Street is well-established and worthy of note. As determined by the Cultural Resource Research and Records Review, a strong significance cannot be clearly established under The Secretary of the Interior's Criteria B: Association with a significant individual or group. However, the adobe ranch's unique and well-defined architectural features are worthy of note under Criterion C: Design/Construction.

4.3.3 Existing Environmental Setting

The proposed project is located on the southwest corner of Warner Avenue and Bolsa Chica Street at 4952 & 4972 Warner Avenue. The project site is currently fully developed with commercial (retail and office) uses and an associated surface parking lot. The existing commercial and retail uses total approximately 55,000 square feet and are contained in two buildings comprised of a three-story office building fronting on Bolsa Chica Street and a smaller retail commercial building fronting on Warner Avenue. There are currently two vehicular access points along Warner Avenue and three vehicular access points along Bolsa Chica Street. Implementation of the proposed project would

involve demolition of the existing on-site structures and removal of the surface parking to allow for construction of the new senior living community.

Surrounding land uses include a mix of commercial, industrial, and residential uses, including a Walgreens (former Lewis Cleaner) and CVS to the north. To the east across Bolsa Chica Street is an automotive repair business and four single-family homes. To the south of the project site is an industrial property and to the west of the project site is a two-story apartment building. The property is currently designated as Commercial General (CG) in both the City's General Plan and Zoning Map.

4.3.4 Regulatory Setting

4.3.4.1 Federal Regulations

There are no federal policies or regulations related to cultural resources that are applicable to the proposed project.

4.3.4.2 State Regulations

California Environmental Quality Act (CEQA) Requirements. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project's lead agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5(a)). A historical resource consists of:

> "Any object, building, structure, site, area, place, record, or manuscript which a Lead Agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…. Generally, a resource shall be considered by the Lead Agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" *State CEQA Guidelines* Section 15064.5(a)(3).

In accordance with *State CEQA Guidelines* Section 15064.5(b), a substantial adverse change in the significance of a historical resource is a significant effect on the environment.

CEQA requires a lead agency to determine whether an archaeological cultural resource meets the definition of a historical resource, a unique archaeological resource, or neither (*State CEQA Guidelines* Section 15064.5(c)). Prior to considering potential impacts, the lead agency must determine whether an archaeological cultural resource meets the definition of a historical resource in *State CEQA Guidelines* Section 15064.5(c)(1). If the archaeological cultural resource meets the definition of a historical resource, it is treated like any other type of historical resource in accordance with *State CEQA Guidelines* Section 15126.4. If the archaeological cultural resource does not meet the definition of a historical resource, then the lead agency determines whether it meets the definition of a unique archaeological resource as defined in *State CEQA Guidelines* Section

21083.2(g). In practice, however, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource. Should the archaeological cultural resource meet the definition of a unique archaeological resource, it must be treated in accordance with *State CEQA Guidelines* Section 21083.2. If the archaeological cultural resource does not meet the definition of a historical resource or an archaeological resource, the effects to the resource are not considered significant effects on the environment (*State CEQA Guidelines* Section 15064.5(c)(4)).

California Public Resources Code Section 5097.5. PRC Section 5097.5 provides for the protection of cultural resources and prohibits the removal, destruction, injury, or defacement of archaeological features on any lands under the jurisdiction of State or local authorities.

California Health and Safety Code Section 7050.5. California Health and Safety Code (HSC) Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

California Register of Historical Resources (PRC Section 5020 et seq.) State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the *State CEQA Guidelines*. These criteria are nearly identical to those of the National Register of Historic Places (National Register).

The State Historic Preservation Officer (SHPO) maintains the California Register. Properties listed, or formally designated eligible for listing, on the National Register are nominated to the California Register and then selected to be listed on the California Register, as are State Landmarks and Points of Interest.

4.3.4.3 Regional Regulations

There are no regional policies or regulations related to cultural resources that are applicable to the proposed project.

4.3.4.4 Local Regulations

City of Huntington Beach General Plan Historic and Cultural Resources Element. The City's Historic and Cultural Resources Element (2015) of the General Plan addresses protection of the City's historic and cultural resources. The following policies related to cultural resources are applicable to the proposed project:

> **Policy HCR 1.1.2:** Consider the designation of any historically significant public trees, archaeological sites, parks, structures, sites or areas deemed to be of historical,

archaeological, or cultural significance as a Huntington Beach City Historical Point, Site or District. (I-HCR 1, and I-HCR 2, I-HCR 3,)

Policy 1.2.1: Utilize the State of California Historic Building Code, Secretary of Interior Standards for Historic Rehabilitation, and standards and guidelines as prescribed City of Huntington Beach Historic and Cultural Resources Element (Adopted October 19, 2015) 9-35 by the State Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the site's architectural and historic integrity. (I-HCR 1, I-HCR 3, and I-HCR 5)

Policy HCR 1.2.2: Encourage new development to be compatible with adjacent existing historic structures in terms of scale, massing, building materials and general architectural treatment. (I-HCR 6)

4.3.5 Thresholds of Significance

The thresholds for cultural resources impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines*. The proposed project may be deemed to have a significant impact with respect to cultural resources if it would:

Threshold 4.3.1: Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.

Threshold 4.3.2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

Threshold 4.3.3: Disturb any human remains, including those interred outside of dedicated cemeteries.

As discussed in Section 4.5 of the Initial Study prepared for the proposed project (Appendix A), the proposed project would result in less than significant impacts related to the disruption of human remains (Threshold 4.3.3). Therefore, this topic is not further addressed below.

4.3.6 Project Impacts

Threshold 4.3.1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. Pursuant to Section 15064.5 of the *State CEQA Guidelines*, the term "historical resource" is defined as:

(1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources [California Register] (Pub. Res. Code § 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852) including the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

B. Is associated with the lives of persons important in our past.

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

A "substantial adverse change" to a historical resource, according to Public Resources Code (PRC) § 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

A records search of the CHRIS was conducted by the SCCIC on October 14, 2022 (Records Search file No. 24034.10260) for the project site and a 1-mile radius of the project site. The results of the record search indicated that no cultural resources have been previously recorded within the project site. Twenty-eight resources were documented within 1-mile of the project site including 2 archaeological sites and 2 historic buildings with determinations of eligibility. All project actions would occur exclusively within the limits of the project site; and therefore, none of the historical resources identified within 1-mile of the project site would be impacted by implementation of the proposed project.

The project site is currently developed with two commercial buildings, located at 4952 and 4972 Warner Avenue, that were constructed in 1977 and 1979. Pursuant to CEQA, because these buildings are less than 50 years of age, they do not require evaluation for historical significance as

part of the environmental review process for the proposed project. However, further evaluation of these buildings concluded they are not tied to exceptional importance, nor do they meet the criteria for historic designation under the California Register's Criterion 1-4. Removal of these buildings would not impact any significant elements of the built environment. Therefore, the buildings on the project site do not qualify as "historical resources" as defined by CEQA.

Although there are no known archaeological resources on the project site that would qualify as "historical resources" as defined by CEQA, as described in the Cultural Resources Research and Records Review Report, the whole Bolsa Chica Mesa is considered to be a Sacred Lands Site Complex by Native Americans. No artifacts have been recorded around the immediate project site; however, early historic development covered the area with structures prohibiting archaeological surface surveys. Therefore, subsurface excavations associated with development of the proposed project have the potential to unearth previously unknown cultural or historical resources. Implementation of Mitigation Measure CUL-1, Archaeological Site Monitoring, would reduce potential impacts associated with previously unknown cultural or historical resources to a less than significant level.

Threshold 4.3.2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. A "substantial adverse change" to an archaeological resource, according to Public Resources Code (PRC) §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired.

As discussed under Threshold 4.3.1, above, a records search of the CHRIS was conducted by the SCCIC on October 14, 2022 (Records Search file No. 24034.10260) for the project site and a 1-mile radius of the project site. The results of the record search indicated that no archaeological resources have been previously recorded within the project site. All project actions would occur exclusively within the limits of the project site; and therefore, none of the 18 archaeological resources identified within 1-mile of the project site would be impacted by implementation of the proposed project.

Soils on the project site have been previously disturbed from development of the existing two commercial buildings on the site, landscaping, parking, and associated infrastructure, and no artifacts have been recorded on or around the immediate project site. However, as described in the Cultural Resources Research and Records Review Report, the whole Bolsa Chica Mesa is considered to be a Sacred Lands Site Complex by Native Americans, and the area surrounding the project site was extensively used during prehistoric times. While no archaeological sites or artifacts have been recorded in the immediate vicinity of the project site, development of this area occurred in the historic-period and could have resulted in the undocumented removal of archaeological resources. Given this information, there is an elevated potential for the project site to contain subsurface archaeological resources.

Therefore, subsurface excavations associated with development of the proposed project have the potential to unearth previously unknown archaeological resources. Implementation of Mitigation

Measure CUL-1, Archaeological Site Monitoring, would reduce potential impacts associated with previously unknown cultural or archaeological resources to a less than significant level.

4.3.7 Level of Significance Prior to Mitigation

The proposed project would result in a potentially significant impact to archaeological resources prior to mitigation.

4.3.8 Compliance Measures and Mitigation Measures

4.3.8.1 Mitigation Measures

The following mitigation measure is required to reduce potentially significant impacts to archaeological resources:

Mitigation Measure CUL-1 **Archaeological Site Monitoring.** Prior to the issuance of a grading permit, a City of Huntington Beach (City)-approved archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards for archaeology shall prepare an Archaeological Mitigation and Monitoring Plan (AMMP) for the proposed project. The AMMP shall include protocols for mitigation of any finds through a Research Design and Recovery Plan outlining significance testing of the inadvertent finds, laboratory analyses, curatorial requirements, and reporting requirements. The AMMP shall include language that all work must be stopped within 50 feet of an archaeological find while the find is assessed by the archaeologist and any Native American monitors.

The City-approved archaeologist shall oversee archaeological monitoring of construction-related ground disturbance. Monitoring shall continue until the archaeologist determines that there is a low potential for encountering subsurface archaeological, cultural, or tribal cultural resources. In the event that archaeological cultural resources are identified during ground-disturbing project activities, the protocols outlined in the project's AMMP shall be implemented.

4.3.9 Level of Significance after Mitigation

With incorporation of Mitigation Measure CUL-1, potential impacts to subsurface archaeological and historical cultural resources would be reduced to a less than significant level. All anticipated impacts to cultural resources would be considered less than significant.

4.3.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects. The cumulative impact area for cultural resources for the proposed project is the City of Huntington Beach.

As discussed above, the proposed project would not have an impact on historical resources. Potential impacts of the proposed project to unknown archaeological resources, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Huntington Beach, could contribute to a cumulatively significant impact due to the overall loss of archaeological resources unique to the region. However, each discretionary development proposal received by the City is required to undergo environmental review pursuant to CEQA. If there were any potential for significant impacts to archaeological resources associated with specific projects in the cumulative impact area, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures. When archaeological resources are assessed and/or protected as they are discovered, impacts to these resources are considered less than significant.

The proposed project would have a less than significant impact related to unknown cultural resources with implementation of Mitigation Measure CUL-1. As such, the proposed project, in conjunction with other development in the City, would not result in a significant cumulative impact to unique cultural or archaeological resources.

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4.4 ENERGY

This section discusses energy use resulting from implementation of the Bolsa Chica Senior Living Community Project (proposed project) and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency. The energy use analysis in this section is based on information from the California Emissions Estimator Model (CalEEMod) version 2020.4.0 modeling results in Appendix D of this Draft Environmental Impact Report (EIR).

4.4.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project, and a Scoping Meeting was held on November 10, 2022. The City of Huntington Beach (City) received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to energy.

4.4.2 Methodology

The analysis of electricity/natural gas usage is based on the CalEEMod modeling conducted by LSA, which quantifies energy use for project operations. Fuel consumption (diesel fuel and gasoline) from vehicle trips during operation was estimated for the opening year (2026) of the proposed project based on trip estimates from the CalEEMod model and fuel efficiencies from the California Air Resources Board's (CARB) EMission FACtor Model (EMFAC2021) model. Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB EMFAC2021 model.

The analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, natural gas, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in Orange County. The electricity/natural gas use of the proposed project is analyzed as a whole on an annual basis.

4.4.3 Existing Environmental Setting

4.4.3.1 Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).[1]

[1] United States Energy Information Administration (EIA). 2020a. Electricity Explained. Website: https://www.eia.gov/energyexplained/electricity/ (accessed November 2022).

According to the most recent data available, in 2020, California's electricity was generated primarily by natural gas (37.06 percent), renewable sources (33.09 percent), large hydroelectric (12.21 percent), nuclear (9.33 percent), and coal (2.74 percent). Total electric generation in California in 2020 was 272,576 gigawatt-hours (GWh), down 2 percent from the 2019 total generation of 277,704 GWh.

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.[2] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2021 was 103,045.2 GWh (36,375.8 GWh for the residential sector and 66,669.4 GWh for the non-residential sector). Total electricity consumption in Orange County in 2021 was 18,931.8 GWh (7,272.3 GWh for the residential sector).[3]

4.4.3.2 Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).[4]

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[5]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[6] According to the CEC, total natural gas consumption in the SoCalGas service area in 2021 was 6,755.6 million

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2 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed November 2022).

3 CEC. 2020a. Electricity Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed November 2022).

4 United States EIA. 2020b. Natural Gas Explained- Use of Natural Gas. Website: https://www.eia.gov/energyexplained/index.php?page=natural_gas_use (accessed November 2022).

5 CEC. 2020c. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed November 2022).

6 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed November 2022).

therms (2,308.9 million therms for the residential sector). Total natural gas consumption in Orange County in 2021 was 580.2 million therms (362.2 million therms for the residential sector).[7]

4.4.3.3 Petroleum/Transportation Energy

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020.[8] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. The Act, which originally mandated a national fuel economy standard of 35 mpg by year 2020[9], applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, total gasoline consumption in California was 289,918 thousand barrels or 1,464.7 trillion British Thermal Units (Btu) in 2020.[10] Of the total gasoline consumption, 273,289 thousand barrels or 1,380.7 trillion Btu were consumed for transportation.[11] Based on fuel consumption obtained from EMFAC2021, and approximately 1.2 billion gallons of gasoline and approximately 154.1 million gallons of diesel will be consumed from vehicle trips in Orange County in 2022.

4.4.4 Regulatory Setting

4.4.4.1 Federal Regulations

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings,

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7 CEC. 2020b. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed November 2022).

8 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed November 2022).

9 U.S. Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: https://www.afdc.energy.gov/laws/eisa (accessed November 2022).

10 A British Thermal Unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

11 United States EIA. 2021. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2020. Website: eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed November 2022).

and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy (CAFE) Standards. On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

4.4.4.2 State Regulations

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require EIRs to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

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

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2021*

Integrated Energy Policy Report[12] and the *2022 Integrated Energy Policy Report Update*.[13] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standards. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all State's electricity to come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[14]

Title 24, California Building Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Nonresidential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every 3 years, and the current 2019 CBC went into effect on January 1, 2020. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24.

California Green Building Standards Code (CALGreen Code). In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five

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12 CEC. 2022a. *2021 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 21-IEPR-01.

13 CEC. 2022b. *2022 Integrated Energy Policy Report Update*. California Energy Commission. Docket Number: 22-IEPR-01.

14 California Public Utilities Commission (CPUC). 2020. Renewables Portfolio Standard (RPS) Program. Website: https://www.cpuc.ca.gov/rps/ (accessed November 2020).

categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce greenhouse gas (GHG) emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the California Public Utilities Commission (CPUC) adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

4.4.4.3 Regional Regulations

There are no regional energy regulations that apply to the proposed project.

4.4.4.4 Local Regulations

City of Huntington Beach General Plan. The City of Huntington Beach addresses energy in the Environmental Resources and Conservation Element of the City's General Plan. The Environmental Resources and Conservation Element contains goals, policies, and implementing actions in relation to energy conservation and renewable energy. The following goals, policies, and implementing actions related to energy are presented in the Environmental Resources and Conservation Element[15] and are applicable to the proposed project.

Goal ERC-12. New buildings are increasingly energy efficient and ultimately equipped to support zero net energy performance

Policies:

- Create incentives for proposed development and reuse projects to exceed the minimum energy efficiency standards established in the California Building Standards Code when constructing new or significantly renovated residential and nonresidential buildings, including achieving zero net energy performance in advance of state-level targets.

[15] City of Huntington Beach. 2017. City of Huntington Beach General Plan, Environmental Resources and Conservation Element. October. Website: https://www.huntingtonbeachca.gov/files/users/planning/environmental_resources_conservation_element.pdf (accessed November 2022).

- Promote the use of passive solar design techniques and technologies in new buildings to reduce energy use for heating and cooling.
- Construct all new City facilities to be more energy efficient than the minimum energy efficiency standards in the California Building Standards Code, and achieve zero net energy performance for new City facilities when possible.

Goal ERC-13. Increase both distributed generation and utility renewable energy sources within municipal and community-wide practices

Policies:

- Encourage the use of solar energy systems in homes and commercial businesses as a form of renewable energy, including in support of zero net energy goals.
- Encourage renewable energy options that are affordable and benefit all community members.
- Create incentives that promote renewable energy systems as a component of new development or reuse projects.
- Maximize renewable energy capacity on municipal property and renewable energy use in City-sponsored projects and activities.
- Support opportunities to increase energy storage capacity in the community.
- Support Community Choice Aggregation (CCA) feasibility studies.
- Support public-private partnerships on energy efficiency, energy storage, and microgrid development to achieve cost savings, reduce energy use, and improve energy reliability.

4.4.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to energy if it would:

Threshold 4.4.1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, or

Threshold 4.4.2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

As discussed in Section 4.6.1 of the Initial Study prepared for the proposed project (Appendix A), the impacts related to energy consumption will be evaluated as part of this Draft EIR.

4.4.6 Project Impacts

Threshold 4.4.1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed project would increase the demand for energy through day-to-day operations and fuel consumption associated with project construction. This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

Construction. Project construction would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Construction of the proposed project is anticipated to begin in 2024 and end in 2026, occurring over a 24-month period. The proposed project would require demolition, site preparation, grading, infrastructure, surface paving activities during construction, and architectural coatings (painting). The construction-related equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from the project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the project site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from EMFAC2021. Construction of the proposed project is anticipated to occur over an approximately 24-month timeline, which was included in CalEEMod. The proposed project would require the demolition of the existing on-site structures, which were included in CalEEMod. The proposed project would require the export of approximately 55,000 cubic yards and the associated haul trucks are assumed to travel an average trip length of 35 miles, which was also included in CalEEMod. In addition, during peak construction, approximately 200 construction workers would be anticipated, which was included in CalEEMod. Demolition, grading, and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment, which was assumed in the analysis. This analysis assumes the use of Tier 2 construction equipment. This analysis also assumes the overlapping of building construction and architectural phases as part of the construction phase schedule. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used. Fuel consumption estimates are presented in Table 4.4.A. CalEEMod output sheets are included in Appendix D, and detailed energy calculations are included in Appendix F of this Draft EIR.

Table 4.4.A: Construction Energy Consumption Estimates

Energy Type	Total Energy Consumption
Gasoline (gallons/year)	103,833.5
Diesel Fuel (gallons/year)	143,446.0

Source: Compiled by LSA Associates, Inc. (November 2022).
kWh = kilowatt-hours

As indicated in Table 4.4.A, the project would consume approximately 143,446.0 gallons of diesel fuel and approximately 103,833.5 gallons of gasoline during construction. As discussed above, the proposed project would be constructed over an approximately 24-month planning period; therefore, when averaged over two years, the proposed project would consume approximately 51,617 gallons of gasoline per year and 71,723 gallons of diesel fuel per year during construction. Based on fuel consumption obtained from EMFAC2021, approximately 1.5 billion gallons of diesel and approximately 1.2 billion gallons of gasoline will be consumed from vehicle trips in Orange County in 2022. Therefore, construction of the proposed project would increase the annual construction generated fuel use in Orange County by less than 0.01 percent for gasoline and diesel fuel usage. As such, project construction would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

Operation. Energy use consumed by the proposed project would be associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.). Annual natural gas and electricity usage estimates associated with project operation were obtained from CalEEMod. Table 4.4.B provides the proposed project's estimated annual operational energy usage.

In addition, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. Based on the trip generation prepared by LSA, the proposed project is expected to generate approximately 537 average daily trips and the existing uses currently generate approximately 947 average daily trips, which was included in CalEEMod. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage in Orange County.

Table 4.4.B: Proposed Project Energy Consumption Estimates

Energy Type	Annual Energy Consumption
Existing Uses Operational Energy Consumption	
Existing Uses Electricity Consumption (kWh/year)	711,955.0
Existing Uses Natural Gas Consumption (therms/year)	4,000.0
Proposed Project Operational Energy Consumption	
Proposed Project Electricity Consumption (kWh/year)	1,251,306.0
Proposed Project Natural Gas Consumption (therms/year)	23,753.0
Net New Electricity Consumption	**539,351.0**
Net New Natural Gas Consumption	**19,753.0**
Existing Uses Fuel Consumption	
Existing Uses Gasoline (gallons/year)	88,066.4
Existing Uses Diesel Fuel (gallons/year)	7,161.4
Proposed Project Fuel Consumption	
Proposed Project Gasoline (gallons/year)	64,579.2
Proposed Project Diesel Fuel (gallons/year)	5,378.8
Net New Gasoline Consumption	**-23,487.2**
Net New Diesel Fuel Consumption	**-1,782.6**

Source: Compiled by LSA Associates, Inc. (November 2022).
kWh = kilowatt-hours

Electricity, natural gas, and fuel usage estimates associated with the proposed project are shown in Table 4.4.B.

As shown in Table 4.4.B, the estimated net potential increase in electricity demand associated with the operation of the proposed project is 539,351.0 kilowatt-hours (kWh) per year. Total electricity demand in Orange County in 2021 was approximately 18,931.8 GWh (18,931,838,624 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in Orange County by less than 0.01 percent.

As shown in Table 4.4.B, the estimated net potential increase in natural gas demand associated with the proposed project is 19,753.0 therms per year. Total natural gas consumption in Orange County in 2021 was approximately 580.2 million therms (580,187,556 therms). Therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Orange County by less than 0.01 percent.

Electrical and natural gas demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. In addition, the proposed project would be designed to meet sustainability goals, including the CALGreen Code, Title 24 energy efficiency requirements, and Assembly Bill (AB) 1881 water efficient landscape requirements. The proposed project would also incorporate a number of energy and water conservation measures, green building features, and Low Impact Development (LID) design features. CALGreen Code and Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including

appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage.

The proposed project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle trips. As shown in Table 4.4.B, fuel use associated with the vehicle trips generated by the proposed project is estimated at a net decrease of approximately 23,487.2 gallons of gasoline and a net decrease of 1,782.6 gallons of diesel fuel per year. As such, since the proposed project would result in a net decrease in fuel consumption, fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Therefore, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant, and no mitigation is required.

Threshold 4.4.2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

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

The CEC's *2021 Integrated Energy Policy Report* and *2022 Integrated Energy Policy Report Update* provide the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the overall use in Orange County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant, and no mitigation is required.

4.4.7 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to energy, and no mitigation is required.

4.4.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

No standard conditions, regulatory compliance measures, or mitigation measures are applicable to the proposed project pertaining to energy.

4.4.9 Level of Significance after Mitigation

There would be no significant unavoidable adverse impacts of the proposed project related to energy, and no mitigation is required.

4.4.10 Cumulative Impacts

The geographic area for cumulative analysis of electricity is that of the SCE service area, while the geographic area for cumulative analysis of natural gas service is that of the SoCalGas service area. The proposed project would result in an increased services demand in electricity and natural gas. Although the proposed project would result in a net increase in demand for electricity, this increase would not require SCE to expand or construct infrastructure that could cause substantial environmental impacts. As discussed previously, total electricity consumption in the SCE service area in 2020 was 103,045.2 GWh. By 2030, consumption is anticipated to increase by approximately 12,000 GWh for the low-demand scenario and by 22,000 GWh for the high-demand scenario.[16] While this forecast represents a large increase in electricity consumption, the proposed project's share of cumulative consumption would be negligible. The proposed project, in combination with cumulative development, is well within SCE's system-wide net annual increase in electricity supplies over the 2018 to 2030 period, and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands.

Similarly, additional natural gas infrastructure is not anticipated due to cumulative development. Total natural gas consumption in the SoCalGas service area in 2021 was 6,755.6 million therms. Between 2018 and 2030, total natural gas consumption in the SoCalGas service area is forecast to remain steady for the low- and mid-demand scenarios and to increase by approximately 650 million therms in the high-demand scenario due to intense energy efficiency efforts.[17] The proposed project's share of cumulative consumption of natural gas in the SoCalGas service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of the related projects without additional facilities. In addition, both SCE and SoCalGas demand forecasts include the growth contemplated by the proposed project and the related projects. Increased energy efficiency to comply with building energy efficiency standards would reduce energy consumption on a per-square-foot basis. Furthermore, utility companies are required to increase their renewable energy sources to meet the Renewable Portfolio Standards mandate of 60 percent renewable supplies by 2030. SCE and SoCalGas plan to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

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[16] CEC. 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed November 2022).

[17] Ibid.

Transportation energy use would also increase; however, this transportation energy use would not represent a major amount of energy use when compared to the amount of existing development and to the total number of vehicle trips and VMT throughout Orange County and the region. The proposed project and related projects are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances, and reduce VMT.

As such, the proposed project would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable, and no mitigation is required.

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4.5 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (EIR) provides a discussion of the existing geology and soils setting and an analysis of the potential impacts related to geology and soils from implementation of the proposed Bolsa Chica Senior Living Community Project (proposed project). This section also addresses potential impacts due to the local geology underlying the project site, as well as slope stability, ground settlement, soil conditions, grading, and regional and local seismic conditions. This section also summarizes information provided in the *Geotechnical Site Evaluation, Bolsa Chica Senior Living Community, Huntington Beach, California*[1] (Geotechnical Site Evaluation) and the *Phase I Environmental Site Assessment*[2] (Phase 1 ESA). These reports are included as Appendices G and H to this Draft Environmental Impact Report (EIR).

This section also evaluates potential impacts to paleontological resources and summarizes information provided in the *Cultural Resource Research, Records Review & Structure Documentation, Bolsa Chica Senior Living Community, Bolsa Chica Street and Warner Avenue, Huntington Beach, CA*[3] (Cultural Resource Assessment) which is included as Appendix E to this Draft EIR.

Data from the City of Huntington Beach (City) General Plan and the City of Huntington Beach Municipal Code, numerous State and federal studies of geologic and seismic hazards in the vicinity of the City, site-specific investigations within the project site, and field observations are also incorporated into this section.

4.5.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project and a Scoping Meeting was held on November 10, 2022. The City received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to geology and soils.

4.5.2 Methodology

To assess the impacts of the proposed project with respect to geological and soil conditions, Langan Engineering and Environmental Services, Inc. (LANGAN) conducted a Geotechnical Site Evaluation and field explorations and reviewed previous geotechnical reports prepared by others with respect to the project site. The discussion below describes the scope of the exploration, including methods used during site reconnaissance and the results of pertinent prior explorations, laboratory tests, and engineering analyses.

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1 LANGAN. 2022. *Geotechnical Site Evaluation, Bolsa Chica Senior Living Community, Huntington Beach, California.* April 14, 2022 (Appendix G).

2 Terracon Consultants, Inc. 2021. *Phase I Environmental Site Assessment, Proposed Senior Living Development – HB, 4952 and 4972 Warner Avenue, Huntington Beach, Orange County, California.* April 2, 2021 (Appendix H).

3 Wiley, Nancy Anastasia, Ph.D., Sue Hall, Ph.D., and Joe Stewart, Ph.D. SRS Inc. 2022. *Cultural Resource Research, Records Review & Structure Documentation, Bolsa Chica Senior Living Community, Bolsa Chica Street and Warner Avenue, Huntington Beach, CA.* July 2022 (Appendix E).

To assess the impacts of the proposed project with respect to paleontological resources, SRS Inc. reviewed the fossil locality search of the project site and surrounding area prepared by the Natural History Museum of Los Angeles, as well as the 2016 Geologic Map of the Long Beach 30 x 60-Minute Quadrangle, compiled by George H. Saucedo, H. Gary Greene, Michael P. Kennedy, and Stephen P. Bezore for the California Geological Survey.[4]

4.5.3 Existing Environmental Setting

4.5.3.1 Regional Geology

The project site is located along the southwesterly portion of the Orange County Coastal Plain which is bounded on the northeast by highland areas and foothills including the Puente and Coyote Hills and on the southwest by low coastal hills and mesas. The project site is underlain by shallow marine deposits which date to the late to middle Pleistocene in age. These deposits are underlain by marine and sedimentary bedrock of the Lakewood and San Pedro Formations. The shallow marine deposits beneath the project site consist of moderately permeable, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits.[5]

The project site is located in the Peninsular Range Geomorphic Province of California. The closest fault zone to the project site is the Newport-Inglewood Alt 2 fault zone, which is approximately 0.84 mile east of the site. The next closest fault zones to the project site are the Newport-Inglewood Alt 1 fault zone and the Compton Fault zone which are located approximately 1.03 miles north of the project site and 4.1 miles north of the project site, respectively.

4.5.3.2 Project Site

The project site is an approximately 3.1-acre parcel of land located on the southwest corner of Bolsa Chica Street and Warner Avenue in Huntington Beach. The project site is bordered by multi-family residential developments on the west, commercial development on the south, Warner Avenue to the north, and Bolsa Chica Street to the east. Topographically, the project site is located approximately 40 feet above mean sea level (amsl), and the site slopes towards the north.

The site is currently occupied by existing commercial development and at-grade parking. Overhead power lines are present along the project site's eastern boundary along Bolsa Chica Street. An existing 18-inch sewer line runs east to west along Warner Avenue and two existing 21-inch and 8-inch sewer lines run north to south along Bolsa Chica Street. An existing 12-inch domestic water line runs north to south along Bolsa Chica Street, and existing 24-inch stormdrain connects to the project site on the northeastern corner of the site extending onto Bolsa Chica Street.

4.5.3.3 Seismicity and Faulting

The geologic structure of the entire Southern California area is dominated by northwest-trending faults associated with the San Andreas Fault system. The project site is in a seismically active area

[4] Saucedo, G.J., Greene, H.G., Kennedy, M.P., and Bezore, S.P., 2016, Geologic Map of the Long Beach 30 x 60-minute Quadrangle, California, Version 2.0, Regional Map Series, Scale = 1:100,000, 1 Sheet, California Department of Conservation, California Geological Survey.

[5] LANGAN. 2022. op cit (Appendix G).

that has historically been affected by generally moderate to occasionally high levels of ground motion. However, the project site is not situated within an "Alquist-Priolo" Earthquake Fault Zone or Fault Rupture Study Area. As mentioned above, the nearest active fault zone to the project site is the Newport-Inglewood Alt 2 fault zone, which is approximately 0.84 mile east of the site.

4.5.3.4 Groundwater and Surface Water Conditions

The presence of groundwater may increase the susceptibility to liquefaction for loose to medium granular soils, low-plasticity silts, and some clays when subjected to sufficient ground shaking. Groundwater was encountered at the depth of 44.7 feet at one of the boring locations, LB-2, which was located at the center of the project site. The Seismic Hazard Zone Report 020 indicates that the site's historically highest groundwater is approximately 30 feet below existing grade.[6]

4.5.3.5 Liquefaction, Lateral Spreading, and Landslides

Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses shear strength resulting from the buildup of excess pore-water pressure, especially during earthquake-induced cyclic loading. Flow failure, lateral spreading, differential settlement, loss of bearing, ground fissures, and sand boils are evidence of excess pore-pressure generation and liquefaction. Soil susceptible to liquefaction includes loose to medium-dense sands and gravels, low-plasticity silts, and some low-plasticity clay deposits below the groundwater table. According to Seismic Hazard Zone Report 020 and the 2017 City of Huntington Beach Seismic Hazard Zones (Liquefaction and Landslides) map, the project site is mapped in a "low" liquefaction-potential investigation zone. [7,8]

Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. The soil is transported downslope or in the direction of a free face, such as a slope, by earthquake and gravitational forces. Lateral spreading is not anticipated at the project site.[9]

A review of the 2017 City of Huntington Beach Seismic Hazard Zones (Liquefaction and Landslides) map and Seismic Hazard Zone Report 020 indicates that the project site is not within a mapped, currently established zone of landslide occurrences or areas. [10]

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6 California Department of Conservation, Division of Mines and Geology (DMG). *Seismic Hazard Zone Report for the Seal Beach 7.5-Minute Quadrangle, Los Angeles and Orange Counties, California*, revised 17 January 2006 (SHZR 020).

7 Ibid.

8 City of Huntington Beach. 2017. General Plan Natural and Environmental Hazards Element. Website: https://www.huntingtonbeachca.gov/files/users/planning/Natural-and-Environmental-Hazards.pdf (accessed December 2, 2022).

9 LANGAN. 2022. *Geotechnical Site Evaluation, Bolsa Chica Senior Living Community, Huntington Beach, California. April 14, 2022* (Appendix G).

10 Ibid.

4.5.3.6 Expansion Potential

Expansive soils occur when the moisture content in the soil causes swelling or shrinking as a result of cyclic wet/dry weather cycles, installation of irrigation systems, change in landscape plantings, or changes in grading. Swelling and shrinking soils can result in differential movement of structures including floor slabs and foundations, and site work including hardscape, utilities, and sidewalks. Expansion index testing of the near-surface material indicated that the soil on the project site exhibits a "medium" expansion potential with an expansion index of 51.

4.5.3.7 Paleontological Resources

As indicated in the Cultural Resource Assessment, the Bolsa Chica Mesa has been extensively studied as a part of several different studies for development projects in the 1990s and 2000s. Because the geologic mapping indicates that the project site lies in old shallow marine deposits on wave-cut surface of Pleistocene age with Pleistocene sediments near the surface, the project site is sensitive for paleontological fossil remains of mammoths and horse remains which have been produced by nearby sites.

According to the paleontological records search requested from the Natural History Museum of Los Angeles (LACM) for the proposed project, there are several localities that have produced fossils in the area near the project site. Localities of Pleistocene age located approximately 0.3 mile southeast of the project site at a depth of approximately 150 to 350 feet have produced four types of sharks and seven types of bony fish fossils. Additional localities of Pleistocene age located approximately 5 miles southeast of the project site near the ground surface have produced shark, stickleback, three types of salamanders, tree frog, toad, five types of lizards, seven kinds of snakes, turtle, two kinds of birds, bat, mole, shrew, seven types of rodents, rabbit, and remains of mammoth and horse.

Additionally, a 2018 records search conducted by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County has noted that nearby localities are known to produce older Quaternary Terrace deposits. These deposits include terrestrial taxa, or animals that have predominantly or entirely lived on land. These records search results suggest that if excavations take place into the older Quaternary deposits, Quaternary mammalian fossil remains may be encountered.

4.5.4 Regulatory Setting

4.5.4.1 Federal Regulations

There are no federal policies or regulations related to geology and soils that are applicable to the proposed project.

4.5.4.2 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act (1972). The Alquist-Priolo Earthquake Fault Zoning Act of 1972 and updates (California Public Resources Code [PRC], Section 2621, et seq.) is the principal California State guidance to prevent the construction of habitable structures on the surface trace of active earthquake faults. If an active fault is found, a structure for human occupancy must be set

back from the fault (generally a 50-foot setback). The Alquist-Priolo Earthquake Fault Zoning Act only addresses the hazard of surface fault rupture; it does not consider other earthquake hazards.

Seismic Hazard Mapping Act (1990). The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 to address the potential hazards posed by secondary effects of seismic activity, including strong ground shaking, soil liquefaction, and associated ground failure and seismically induced landslides. The California Geological Survey (CGS) prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. The seismic hazard zones are referred to as "zones of required investigation" because site-specific geological investigations are required for construction projects located within these areas. Before a project can be permitted, a geologic investigation, evaluation, and written report must be prepared by a licensed geologist to demonstrate that the potential hazards can be successfully mitigated.

California Building Code. Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the code is also known as Title 24, Part 2, of the California Code of Regulations (CCR). Local jurisdictions often adopt local, more restrictive amendments that are based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on site, and the strength of ground shaking with a specified probability at a site. The 2019 CBC took effect on January 1, 2020 (it should be noted that the 2022 update to the CBC takes effect on January 1, 2023).

Requirements for Geotechnical Investigations. Requirements for geotechnical investigations for subdivisions requiring tentative and final maps and for other types of structures are provided in California Health and Safety Code, Sections 17953 through 17955, and in Section 1802 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

California Public Resources Code Section 5097.5. PRC Section 5097.5 protects nonrenewable resources including fossils, described as follows:

- A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.

- As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

- A violation of this section is a misdemeanor.

California Public Resources Code Section 5097.5. Section 5097.5 of the PRC provides for the protection of cultural and paleontological resources and prohibits the removal, destruction, injury, or defacement of archaeological and paleontological features on any lands under the jurisdiction of State or local authorities.

4.5.4.3 Local Regulations

City of Huntington Beach Municipal Code. Building and construction in the City are subject to the regulations of the City of Huntington Beach Municipal Code. CCR Title 24, Part 2, of the CBC (2019) provides minimum standards for building design in the State. Local codes are permitted to be more restrictive than Title 24, but not less restrictive. The procedures and limitations for the design of structures are based on site characteristics, occupancy type, configuration, structural system height, and seismic design category. The seismic ratings used in the CBC are derived from the International Building Code specifications. Most of Southern California is located in Seismic Design Category D. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in the California Occupational Safety and Health Administration (Cal/OSHA) regulations (CCR, Title 8). In addition, uses constructed as part of the proposed project would adhere to the seismic and building standards in the City's Building Code that have adopted the CBC with amendments and modifications.

The following provisions of the City's Municipal Code address geologic hazards and paleontological resources:

- **Chapter 17.04.010 (Adoption):** Adopts the 2019 CBC Volumes 1 and 2 including Appendix I and all national codes and standards referenced therein.

- **Chapter 17.05.020 (Scope):** Sets rules and regulations to control excavation, grading, and earthwork construction, including fills and embankments, and establishes administrative requirements for issuance of grading permits and approval of plans and inspection of grading construction in accordance with requirements for grading and excavation as contained int eh Uniform Building Code.

City of Huntington Beach General Plan. The Natural and Environmental Hazards Element of the City's General Plan puts forth goals, objectives, and policies related to the safety of the environment and community members. The following goals, objectives, and policies address geologic hazards and paleontological resources:

- **Goal HAZ-1:** Structures are designed and retrofitted to be more resilient to earthquakes and other geologic and seismic hazards, protecting against injury while also preserving the structural integrity of the structure.

    - **Policy A:** Ensure that new and significantly retrofitted structures are sited and designed to reduce the risk of damage from geologic and seismic hazards.

- **Policy C:** Construct new key facilities to be resistant to damage from geologic and seismic hazards.

4.5.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to geology and soils if it would:

Threshold 4.5.1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;

b) Strong seismic ground shaking;

c) Seismic-related ground failure, including liquefaction;

d) Landslides;

Threshold 4.5.2: Result in substantial soil erosion or loss of topsoil;

Threshold 4.5.3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;

Threshold 4.5.4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;

Threshold 4.5.5: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater; or

Threshold 4.5.6: Directly or indirectly destroy a unique paleontological resources or site or unique geologic feature.

As discussed in Section 4.7 of the Initial Study prepared for the proposed project (Appendix A), the proposed project would result in less than significant impacts due to the rupture of a known earthquake fault, seismic ground shaking, and seismic related ground failure (Threshold 4.5.1). The proposed project would not result in impacts associated with landslides (Threshold 4.5.1.d). In addition, the proposed project would have less than significant impacts associated with soil erosion or loss of topsoil (Threshold 4.5.2), ground stability (Threshold 4.5.3) and expansive soils

(Threshold 4.5.4), and would not result in impacts related to soil capability to support the use of septic tanks (Threshold 4.5.5). Therefore, these topics are not further addressed below.

4.5.6 Project Impacts

Threshold 4.5.6: Directly or indirectly destroy a unique paleontological resources or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. As indicated above, the project site is located within the Peninsular Range Geomorphic Province of California which consists of three major fault-bounded blocks, one of which is the Santa Ana Mountains. Tertiary sedimentary rocks that range in age from Paleocene through Pliocene lie beneath most of the western part of the Santa Ana block. As indicated in the Cultural Resource Assessment, the project site and surrounding areas lie within Qom, or "old shallow marine deposits on wave-cut surface" which contain old marine deposits that are poorly consolidated and composed of mostly fine to coarse-grained sand.[11]

As discussed above, according to the records search conducted for the project site, localities LACM 7657-7659 of Pleistocene age are located at Ellis Avenue and Patterson Lane approximately 0.3 mile southeast of the project site at a depth of approximately 150 to 350 feet. These localities have produced four types of sharks and seven types of bony fish fossils. Localities LACM 7366, 7422-7425, and 7679 of Pleistocene age are located near Pacific Coast Highway and Huntington Drive approximately 5 miles southeast of the project site near the ground surface. These localities have produced a shark, a stickleback, three types of salamanders, a tree frog, a toad, five types of lizards, seven kinds of snakes, a turtle, two kinds of birds, a bat, a mole, a shrew, seven types of rodents, a rabbit, and remains of mammoth and horse.

Additionally, a 2018 records search conducted by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County has noted that nearby localities are known to produce older Quaternary Terrace deposits. These deposits include terrestrial taxa, or animals that have predominantly or entirely lived on land. These records search results suggest that if excavations take place into the older Quaternary deposits, Quaternary mammalian fossil remains may be encountered.

The records search, as well as geologic mapping in the area, indicate that there is the potential for Pleistocene sediments to be located at or near the surface on the project site. Nearby Pleistocene sites have produced vertebrate as well as invertebrate fossils. Therefore, this background information suggests there is high potential that near surface excavations on the project site could produce Pleistocene fossils which would be considered significant paleontological resources. Implementation of Mitigation Measure (MM) GEO-1 and MM GEO-2 would ensure that potential impacts to scientifically significant, nonrenewable paleontological resources inadvertently discovered within the project area would remain less than significant during project construction.

[11] Wiley, Nancy Anastasia, Ph.D., Sue Hall, Ph.D., and Joe Stewart, Ph.D. SRS Inc. 2022. *Cultural Resource Research, Records Review & Structure Documentation, Bolsa Chica Senior Living Community, Bolsa Chica Street and Warner Avenue, Huntington Beach, CA*. July 2022 (Appendix E).

4.5.7 Level of Significance Prior to Mitigation

The proposed project would result in a potentially significant impact related to unique paleontological resources prior to mitigation.

4.5.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

The following mitigation measures are required to reduce potentially significant impacts related to unique paleontological resources:

Mitigation Measure GEO-1 A City of Huntington Beach (City)-approved paleontologist shall be retained to observe grading activities during grading or trenching activities that cut into the Pleistocene wave-cut marine terrace units. Prior to issuance of any permits the paleontologist shall prepare a Paleontological Resource Impact Management Plan (PRIMP) to orient the protocols for monitoring and fossil recovery.

Mitigation Measure GEO-2 The City-approved paleontologist shall be present at the pre-grade conference and shall establish procedures for paleontological resource surveillance and procedures for temporarily halting and redirecting work to permit sampling and identification and evaluation of fossils. If the resources are deemed to be significant, the paleontologist shall determine appropriate actions, in cooperation with the Applicant, which ensure proper exploration and/or salvage. Full-time monitoring and salvage efforts will be necessary whenever previously undisturbed sediments are being disturbed (8 hours per day during grading or trenching activities). Once the earth moving is 50 percent completed, monitoring may be reduced if no fossils are being recovered. The paleontologist shall be empowered to temporarily divert or direct grading operations to facilitate assessment and salvaging of exposed fossils. Collection and processing of matrix samples through fine screens will be necessary to salvage any micro-vertebrate remains. If a deposit of micro-vertebrates is discovered, matrix material can be moved off to one side of the grading area to allow for further screening without delaying construction activities. Collected fossils shall be prepared to the level of identification, and all fossils shall be identified to the most specific taxonomic level possible. All fossils and their contextual stratigraphic data shall go to an institution with a research interest in the materials. A final report that details methods, fossils recovered, and their significance shall be prepared and submitted to the City and the institution curating the fossils. This document shall also show compliance with any and all requirements.

4.5.9 Level of Significance after Mitigation

With incorporation of MM GEO-1 and MM GEO-2, potential impacts related to unique paleontological resources would be reduced to a less than significant level**.** All anticipated impacts related to geology and soils would be considered less than significant.

4.5.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines,* cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for geology and soils. Typically, cumulative geology and soils impacts are specific to a particular site and there is little, if any, cumulative relationship between the development of a proposed project and development within a larger cumulative area. Moreover, while seismic conditions are regional in nature, seismic impacts on a given project site are site specific.

Potential impacts of the proposed project to unknown paleontological resources and unique geologic features, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Huntington Beach could contribute to a cumulatively significant impact due to the overall loss of paleontological remains unique to the region. However, each discretionary development proposal received by the City is required to undergo environmental review pursuant to CEQA. If there were any potential for significant impacts to paleontological resources or unique geologic features, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures. When resources are assessed and/or protected as they are discovered, impacts to these resources would be less than significant. As such, adherence to MM GEO-1 and MM GEO-2 would ensure that the proposed project, together with cumulative projects, would not result in significant cumulative impacts to unique paleontological resources or unique geologic features.

4.6 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (EIR) summarizes existing greenhouse gas (GHG) emissions and discusses global climate change, its causes, and the contribution of human activities. This section also estimates the likely GHG emissions that would result from construction and operational activities associated with development of the proposed Bolsa Chica Senior Living Community Project (proposed project), including vehicular traffic, energy consumption and other emission sources.

4.6.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project, and a Scoping Meeting was held on November 10, 2022. The City of Huntington Beach (City) received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to GHG emissions.

4.6.2 Methodology

The proposed project would result in GHG emissions from construction and operational sources. Construction activities would generate emissions from off-road construction equipment, and on roadways as a result of construction-related truck hauling, vendor deliveries, and worker commuting. Operational GHG emissions are typically associated with mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). This analysis uses the California Emissions Estimator Model version 2020.4.0 (CalEEMod) to quantify GHG emissions for both construction and operation associated with the proposed project. CalEEMod output is contained in Appendix D.

4.6.3 Existing Environmental Setting

The following describes existing GHG emissions in the City of Huntington Beach, beginning with typical GHG types and sources, impacts of global climate change, the regulatory framework surrounding these issues, and current emission levels.

4.6.3.1 Background

The following section provides background information on GHGs and global climate change.

Global Climate Change. Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ± 0.2° Celsius (°C) or 1.1 ± 0.4° Fahrenheit (°F) in the 20th century. The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. GHGs are

released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[1]

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

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF_6)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

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

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The global warming potential is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e). Table 4.6.A shows the GWP for each type of GHG. For example, sulfur hexafluoride is 22,800 times more potent at contributing to global warming than carbon dioxide.

[1] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse allows heat from sunlight in and reduces the heat escaping, GHGs like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of GHGs results in global warming, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.

Table 4.6.A: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoromethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: *Climate Change 2007: The Physical Science Basis* (Intergovernmental Panel on Climate Change [IPCC] 2007).

The following summarizes the characteristics of the six GHGs and black carbon. Black carbon also contributes to climate change and is therefore discussed below.

Carbon Dioxide. In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (breathing) of humans, animals and plants, volcanic out gassing, decomposition of organic matter and evaporation from the oceans. Human caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of CO_2 each year, far outweighing the 7 billion tons of man-made emissions of CO_2 each year. Nevertheless, natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of man-made CO_2, and consequently, the gas is building up in the atmosphere.

In 2020, total annual CO_2 accounted for approximately 80.2 percent of California's overall GHG emissions.[2] Transportation is the single largest source of CO_2 in California, which is primarily comprised of on-road travel. Electricity production, industrial and residential sources also make important contributions to CO_2 emissions in California.

Methane. Methane (CH_4) is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH_4 emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation in dairy cows, manure management, and rice cultivation are also significant sources of CH_4 in California. Total annual emissions of CH_4 accounted for approximately 10.5 percent of GHG emissions in California in 2020.

Nitrous Oxide. Nitrous oxide (N_2O) is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O, and the

[2] California Air Resources Board (CARB). 2022a. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed November 2022).

quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of non-naturally occurring N_2O emissions in California. Nitrous oxide emissions accounted for approximately 3.5 percent of GHG emissions in California in 2020.

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.[3] PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry has resulted in greater use of PFCs. HFCs, PFCs, and SF_6 accounted for about 5.5 percent of GHG emissions in California in 2020.[4]

Black Carbon. Black carbon is the most strongly light-absorbing component of particulate matter (PM) formed by burning fossil fuels such as coal, diesel, and biomass. Black carbon is emitted directly into the atmosphere in the form of particulate matter less than 2.5 microns in size ($PM_{2.5}$) and is the most effective form of PM, by mass, at absorbing solar energy. Per unit of mass in the atmosphere, black carbon can absorb one million times more energy than CO_2.[5] Black carbon contributes to climate change both directly, such as absorbing sunlight, and indirectly, such as affecting cloud formation. However, because black carbon is short-lived in the atmosphere, it can be difficult to quantify its effect on global-warming.

Most U.S. emissions of black carbon come from mobile sources (52 percent), particularly from diesel fueled vehicles.[6] The other major source of black carbon is open biomass burning, including wildfires, although residential heating and industry also contribute. Black carbon emissions in the U.S. are projected to decline substantially by 2030, largely due to controls on new mobile diesel emissions.[7]

Effects of Global Climate Change. Effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme weather events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis.

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3 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

4 CARB. 2022. op cit.

5 United States Environmental Protection Agency (USEPA). 2017. Black Carbon, Basic Information. February 14, 2017. Website: 19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html (accessed November 2022).

6 Ibid.

7 USEPA. 2017. Black Carbon, Basic Information. February 14, 2017. Website: 19january2017snapshot. epa.gov/www3/airquality/blackcarbon/basic.html (accessed November 2022).

Extreme events such as flooding and hurricanes can displace people and agriculture. Global climate change may also result in impacts to local air quality from increased ground-level ozone and particulate matter.[8]

Additionally, according to the 2006 California Climate Action Team (CAT) Report,[9] the following climate change effects, which are based on trends established by the United Nations Intergovernmental Panel on Climate Change (IPCC), can be expected in California over the course of the next century:

- The loss of sea ice and mountain snow pack, resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[10]
- Rise in global average sea level, primarily due to thermal expansion and melting of glaciers and ice caps in the Greenland and Antarctic ice sheets;[11]
- Changes in weather that include widespread changes in precipitation, ocean salinity, wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;[12]
- Decline of the Sierra snowpack, which accounts for approximately one-half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;[13]
- Increase in the number of days conducive to ozone (O_3) formation by 25 to 85 percent (depending on the future temperature scenario) in high O_3 areas of Los Angeles and the San Joaquin Valley by the end of the 21st century;[14] and
- High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level.[15]

A summary of these potential effects is provided in Table 4.6.B, below.

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8 USEPA. 2020. Air Quality and Climate Change Research. Website: https://www.epa.gov/air-research/air-quality-and-climate-change-research (accessed November 2022).

9 California Environmental Protection Agency (CalEPA). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

10 Ibid.

11 Ibid.

12 Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis, Summary for Policymakers*. February.

13 CalEPA. 2006, op. cit.

14 Ibid.

15 Ibid.

Table 4.6.B: Potential Impacts of Global Warming and Expected Consequences for California

Potential Water Resource Impacts	Anticipated Consequences Statewide
Reduction of the State's average annual snowpack	• The decline of the Sierra snowpack would lead to a loss in half of the surface water storage in California by 70% to 90% over the next 100 years • Potential loss of 5 million acre-feet or more of average annual water storage in the State's snowpack • Increased challenges for reservoir management and balancing the competing concerns of flood protection and water supply • Higher surface evaporation rates with a corresponding increase in tropospheric water vapor
Rise in average sea level	• Potential economic impacts related to coastal tourism, commercial fisheries, coastal agriculture, and ports • Increased risk of flooding, coastal erosion along the State's coastline, seawater intrusion into the Sacramento-San Joaquin River Delta (Delta) and levee systems
Changes in weather	• Changes in precipitation, ocean salinity, and wind patterns • Increased likelihood for extreme weather events, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones
Changes in the timing, intensity, location, amount, and variability of precipitation	• Potential increased storm intensity and increased potential for flooding • Possible increased potential for droughts • Long-term changes in vegetation and increased incidence of wildfires • Changes in the intensity and timing of runoff • Possible increased incidence of flooding and increased sedimentation • Sea level rise and inundation of coastal marshes and estuaries • Increased salinity intrusion into the Delta • Increased potential for Delta levee failure • Increased potential for salinity intrusion into coastal aquifers (groundwater) • Increased potential for flooding near the mouths of rivers due to backwater effects
Increased water temperatures	• Increased environmental water demand for temperature control • Possible increased problems with foreign invasive species in aquatic ecosystems • Potential adverse changes in water quality, including the reduction of dissolved oxygen levels • Possible critical effects on listed and endangered aquatic species
Changes in urban and agricultural water demand	• Changes in demand patterns and evapotranspiration
Increase in the number of days conducive to O_3 formation	• Increased temperatures • Potential health effects, including adverse impacts to respiratory systems

Source: *Environmental Water Account Draft Supplemental EIS/EIR to the Environmental Water Account Final EIS/EIR, Bureau of Reclamation Mid-Pacific Region*, Sacramento, California (U.S. Department of the Interior, October 2007).
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
O_3 = ozone

Effects of Rising Ocean Levels in California. Rising ocean levels, more intense coastal storms, and warmer water temperatures may increasingly threaten the Huntington Beach coastal region. As previously described, global surface temperatures have increased by 1.5 degrees Fahrenheit (°F) during the period from 1880 to 2012, with temperatures anticipated to rise in California by 3 to 10.5°F by the end of the century.

Rising sea levels may affect the natural environment in the coming decades by eroding beaches, converting wetlands to open water, exacerbating coastal flooding, and increasing the salinity of estuaries and freshwater aquifers. Coastal headlands and beaches are expected to erode at a faster pace in response to future sea level rise. The California Coastal Commission estimates that 450,000 acres of wetlands exist along the California coast,[16] but additional work is needed to evaluate the extent to which these wetlands would be degraded over time, or to what extent new wetland habitat would be created if those lands are protected from further development. Cumulatively, the effects of sea level rise may be combined with other potential long-term factors such as changes in sediment input and nutrient runoff. The cumulative impacts of physical and biological change due to sea level rise on the quality and quantity of coastal habitats are not well understood. [17]

Sea level along the west coast of the United States is affected by a number of factors, including climate patterns such as El Niño, effects from the melting of modern and ancient ice sheets, and geologic processes such as plate tectonics. Regional projections for California, Oregon, and Washington show a sharp distinction at Cape Mendocino in northern California. South of that point, sea-level rise is expected to be very close to global projections. Projections are lower north of Cape Mendocino because the land is being pushed upward as the ocean plate moves under the continental plate along the Cascadia Subduction Zone.

Emissions Inventories. An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emission inventories.

Global Emissions. Worldwide emissions of GHGs in 2018 totaled 25.6 billion metric tons (MT) of CO_2e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change.[18]

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16 California Coastal Commission (CCC). n.d. Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone. Website: http://www.coastal.ca.gov/wetrev/wetch4.html (accessed November 2022).

17 Climate Change Science Program (CCSP) 4.1. January 15, 2009, 1 of 784 Final Report, United States CCSP, Synthesis and Assessment Product 4.1. Coastal Sensitivity to Sea-Level Rise: A Focus on the Mid-Atlantic Region. Lead Agency: U.S. Environmental Protection Agency, Other Key Participating Agencies: U.S. Geological Survey, National Oceanic and Atmospheric Administration. Contributing Agencies: Department of Transportation.

18 United Nations Framework Convention on Climate Change (UNFCCC). 2021. GHG Data from UNFCCC. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed November 2022).

United States Emissions. In 2020, the year for which the most recent data are available, the United States emitted about 5,222 million metric tons of CO_2e (MMT CO_2e). Overall, emissions in 2020 decreased by 11 percent since 2019 and were 21 percent lower than 2005 levels. The primary driver for the decrease was an 11 percent decrease in CO_2 emissions from fossil fuel combustion. This decrease was primarily due to a 13 percent decrease in transportation emissions driven by decreased demand due to the ongoing COVID-19 pandemic. Electric power sector emissions also decreased 10 percent, reflecting both a slight decrease in demand from the COVID-19 pandemic and a continued shift from coal to less carbon intensive natural gas and renewables. Of the five major sectors – residential and commercial, agricultural, industry, transportation, and electricity generation – transportation accounted for the highest amount of GHG emissions in 2020 (approximately 27 percent), with electricity generation second at 27 percent and emissions from industry third at 24 percent.[19]

State of California Emissions. The State emitted approximately 369.2 MMT CO_2e emissions in 2020, 35.3 MMT CO_2e lower than 2019 levels and 61.8 MMT CO_2e below the 2020 GHG limit of 431 MMT CO_2e.[20] The California Air Resources Board (CARB) estimates that transportation was the source of approximately 37 percent of the State's GHG emissions in 2020, which is a smaller share than recent years, as the transportation sector saw a significant decrease of 26.6 MMT CO_2e in 2020, likely due in large part to the impact of the COVID-19 pandemic. The next largest sources included industrial sources at approximately 20 percent and electricity generation at 16 percent. The remaining sources of GHG emissions were commercial and residential activities at 10 percent, agriculture at 9 percent, high GWP at 6 percent, and waste at 2 percent.[21]

City of Huntington Beach Emissions. In 2012, the total emissions in Huntington Beach were 1,432,540 MT CO_2e. The City's total emissions showed little change between 2005 and 2012, declining by 19,530 MT CO_2e (approximately 1 percent). Table 4.6.C compares emissions by sector for 2005 and 2012.

4.6.4 Regulatory Setting

4.6.4.1 Federal Regulations

Federal Clean Air Act. The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the United States Environmental Protection Agency (USEPA) has the authority to regulate CO_2 emissions under the federal Clean Air Act (CCA). While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

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19 USEPA. 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks (accessed November 2022).

20 CARB. 2022a. *California Greenhouse Gas Emissions for 2000 to 2020, Trends of Emissions and Other Indicators Report*. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf (accessed November 2022).

21 Ibid.

Table 4.6.C: City of Huntington Beach GHG Emissions by Sector (2005 and 2012)

Sector	2005 MT CO_2e	2012 MT CO_2e	Percentage Change, 2005–2012
Residential energy	313,310	327,340	4
Nonresidential energy	286,260	301,840	5
Transportation	723,440	726,190	<1
Off-Road Equipment	35,240	11,580	-67
Resource Management	67,210	38,620	-43
Water and Wastewater	10,000	10,410	4
Oil Drilling	16,610	16,560	<~1
TOTAL	**1,452,070**	**1,432,540**	**-1**

Source: City of Huntington Beach, General Plan Environmental Resources and Conservation Element, Greenhouse Gas Reduction Program, n.d. (Website: https://www.huntingtonbeachca.gov/files/users/planning/environmental_resources_conservation_element.pdf, accessed November 2022).
GHG = greenhouse gas
MT CO_2e = metric tons of carbon dioxide

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the federal Clean Air Act, finding that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

In October 2012, the USEPA and the NHTSA, on behalf of the U.S. Department of Transportation, issued final rules to further reduce GHG emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond (77 *Federal Register* 62624). The NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon, limiting vehicle emissions to 163 grams of CO_2 per mile for the fleet of cars and light-duty trucks by model year 2025 (77 *Federal Register* 62630).

On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

4.6.4.2 State Regulations

The California Air Resources Board (CARB) is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 1493 (2002). In a response to the transportation sector's significant contribution to California CO_2 emissions, Assembly Bill (AB) 1493 was enacted on July 22, 2002. AB 1493 requires the CARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of Clean Air Act Preemption was not granted by the USEPA until June 30, 2009. CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025. The Trump administration revoked California's waiver in 2019, but the Biden administration restored California's waiver in 2021.

Executive Order S-3-05 (2005). Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05 on June 1, 2005, which proclaimed that California is vulnerable to the impacts of climate change. To combat those concerns, the executive order established California's GHG emissions reduction targets, which established the following goals:

- GHG emissions should be reduced to 2000 levels by 2010;
- GHG emissions should be reduced to 1990 levels by 2020; and
- GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

The Secretary of the California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various State agencies in order to collectively and efficiently reduce GHGs. A biannual progress report must be submitted to the Governor and State Legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, the coastline, and forestry, and report possible mitigation and adaptation plans to address these impacts.

The Secretary of CalEPA leads this CAT made up of representatives from State agencies as well as numerous other boards and departments. The CAT members work to coordinate statewide efforts to implement global warming emission reduction programs and the State's Climate Adaptation Strategy. The CAT is also responsible for reporting on the progress made toward meeting the statewide GHG targets that were established in the executive order and further defined under AB 32, the "Global Warming Solutions Act of 2006." The first CAT Report to the Governor and the Legislature was released in March 2006, which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the executive order. The most recent report was released in December 2020.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG

emissions in 1990 at 427 million metric tons (MMT) of CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 required the CARB to prepare a Scoping Plan outlining the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The Scoping Plan identifies 18 emission reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT CO_2e by 2020.

On August 24, 2011, the CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. The CARB also approved a more robust CEQA equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

CARB has not yet determined what amount of GHG reductions it recommends from local government operations and local land use decisions; however, the Scoping Plan states that land use planning and urban growth decisions will play an important role in the State's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions (meanwhile, CARB is also developing an additional protocol for community emissions). CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the Scoping Plan expects an approximately 5.0 MMT CO_2e reduction due to implementation of SB 375.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed the CARB and the CAT to identify a list of "discrete early action GHG reduction measures" that could be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed EO S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel Standard (LCFS). This executive order sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs the CARB to consider the LCFS as a discrete early action measure. In 2011, U.S. District Court Judge Lawrence O'Neil issued an injunction preventing implementation of the LCFS, ruling that it is unconstitutional. In 2012, the Ninth Circuit Court of Appeal stayed the District Court's injunction, allowing implementation of the LCFS. The Ninth Circuit decided to uphold the LCFS.

In June 2007, the CARB approved a list of 37 early action measures, including three discrete early action measures (LCFS, Restrictions on GWP Refrigerants, and Landfill CH_4 Capture).[22] Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code Section 38560.5. The CARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of PFCs from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and SF_6 reductions from the non-electricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 MMT.[23]

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[24] to reflect the 2030 target set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan[25] was approved in December 2022 and assesses progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

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22 CARB. 2007b. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October.

23 CARB. 2007a. "ARB approves tripling of early action measures required under AB 32" News Release 07-46. October 25.

24 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

25 CARB. 2021. *2022 Scoping Plan Update*. May 10. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed December 2022).

Senate Bill 97 (2007). SB 97, signed by the Governor in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code [PRC], Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Resources Agency guidelines for mitigating GHG emissions or the effects of GHG emissions, as required by CEQA.

The California Natural Resources Agency adopted the amendments to the *State CEQA Guidelines* in November 2018, which went into effect in December 2018. The amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. The amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs when they perform individual project analyses.

Senate Bill 375 (2008). SB 375, the Sustainable Communities and Climate Protection Act, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State on September 30, 2008. On September 23, 2010, the CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the Metropolitan Planning Organization (MPOs); the targets require a 6 to 15 percent reduction by 2020 and between 13 to 19 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs such as the Southern California Association of Governments will work with local jurisdictions in the development of Sustainable Communities Strategy (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. Pursuant to SB 375, the Los Angeles/Southern California reduction targets for per capita vehicular emissions were 8 percent by 2020 and are 19 percent by 2035 as shown in Table 4.6.D.

Table 4.6.D: Senate Bill 375 Regional Greenhouse Gas Emissions Reduction Targets

Metropolitan Planning Organization	By 2020 (%)	By 2035 (%)
San Francisco Bay Area	10	19
San Diego	15	19
Sacramento	7	19
Central Valley/San Joaquin	6–13	13–16
Los Angeles/Southern California	8	19

Source: California Air Resources Board (2018).

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this legislation requires state energy agencies to plan for, and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016 the Legislature passed, and the Governor signed, SB 32, and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an IPCC analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100 (SB 100). On September 10, 2018, Governor Brown signed SB 100, which raises California's Renewables Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Title 24, Building Standards Code and CALGreen Code. In November 2008, the California Building Standards Commission established the California Green Building Standards Code (CALGreen Code), which sets performance standards for residential and non-residential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is updated every 3 years and was most recently updated in 2019 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2020. The next set of standards were adopted in 2022 and will apply to projects seeking building permits on or after January 1, 2023.

California Building Efficiency Standards (Title 24, Part 6). The California Building Standards Code, or Title 24 of the California Code of Regulations (CCR) contains the regulations that govern the construction of buildings in California. Within the Building Standards Code, two parts pertain to the incorporation of both energy efficient and green building elements into land use development. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2020, must follow the 2019 standards. The next set of standards were adopted in 2022 and apply to projects seeking building permits on or after January 1, 2023. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Cap and Trade. The development of a cap-and-trade program was included as a key reduction measure of the CARB AB 32 Climate Change Scoping Plan. The cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. The cap-and-trade emissions trading program developed by the CARB took effect on January 1, 2012, with enforceable compliance obligations beginning January 1, 2013. The cap-and-trade program aims to regulate GHG emissions from the largest producers in the State by setting a statewide firm limit, or cap, on allowable annual GHG emissions. The cap was set in 2013 at approximately 2 percent below the emissions forecast for 2020. In 2014, the cap declined approximately 2 percent. Beginning in 2015 and continuing through 2020, the cap has been declining approximately 3 percent annually. The CARB administered the first auction on November 14, 2012, with many of the qualified bidders representing corporations or organizations that produce large amounts of GHG emissions, including energy companies, agriculture and food industries, steel mills, cement companies, and universities.

On January 1, 2015, compliance obligation began for distributors of transportation fuels, natural gas, and other fuels. The cap-and-trade program was initially slated to sunset in 2020, but the passage of SB 398 in 2017 extended the program through 2030.[26]

Executive Order N-79-20. EO N-79-20, which was signed by the Governor on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero emissions by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible.

California Integrated Waste Management Act. To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. The resulting 2012 Mandatory Commercial Recycling Regulation requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939, the Integrated Waste Management Act. In April 2016, AB 1826 further modified the California Integrated Waste Management Act, requiring businesses that generate a specified amount of organic waste per week to arrange for recycling services for that organic waste in a specified manner. If CalRecycle determines that statewide disposal of organic waste has not been reduced by 50 percent below 2014 levels by 2020, businesses generating more than two cubic yards of organic waste per week would be subject to these waste collection requirements. CalRecycle intended to make this assessment in the fall of 2020. Diverting organic waste from landfills reduces emissions of CH_4. This is equivalent to reducing anaerobic decomposition of organic waste that would have otherwise occurred in landfills where organic waste is often buried with other inorganic waste.

Low Carbon Fuel Standard. In January 2007, EO S-01-07 established an LCFS. This executive order calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that an LCFS for transportation fuels be established for California. The LCFS applies to all refiners, blenders, producers, or importers ("Providers") of transportation fuels in California, including fuels used by off-road construction equipment. In June 2007, CARB adopted the LCFS under AB 32 pursuant to Health and Safety Code Section 38560.5, and, in April 2009, CARB approved the new rules and carbon intensity reference

[26] CARB. 2014. Cap-and-Trade Program. Website: www.arb.ca.gov/cc/capandtrade/capandtrade.htm (accessed September 2022).

values with new regulatory requirements taking effect in January 2011. The standards require providers of transportation fuels to report on the mix of fuels they provide and demonstrate they meet the LCFS intensity standards annually. This is accomplished by ensuring that the number of "credits" earned by providing fuels with a lower carbon intensity than the established baseline (or obtained from another party) is equal to or greater than the "deficits" earned from selling higher intensity fuels. In response to certain court rulings, CARB re-adopted the LCFS regulation in September 2015, and the LCFS went into effect on January 1, 2016. In 2018, CARB approved amendments to the regulation to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote zero emission vehicle (ZEV) adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector.

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory standards for vehicle model years 2017 through 2025. The new regulations strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's ZEVs regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 40 percent fewer GHGs and 75 percent fewer smog-forming emissions than 2012 model year vehicles.

Executive Order B-48-18. In January 2018, Governor Brown signed EO B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential land uses, through the LCFS Program, and recommend how to ensure affordability and accessibility for all drivers.

4.6.4.3 Regional Regulations

The City is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAG and the South Coast Air Quality Management District (SCAQMD). SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), adopted September 3, 2020, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and

public health goals. A GHG consistency analysis was conducted to determine whether or not the proposed Project would be consistent with the RTP/SCS.

Southern California Association of Governments. SCAG is a regional council consisting of the following six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In total, the SCAG region encompasses 191 cities and over 38,000 square miles within Southern California. SCAG is the MPO serving the region under federal law and serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the RTP/SCS and the 2008 Regional Comprehensive Plan (RCP).

On September 3, 2020, SCAG adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).[27] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled (VMT) from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[28] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

South Coast Air Quality Management District. In 2008, the SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans[29] that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency. The SCAQMD has not presented a finalized version of these thresholds to the governing board.

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[27] Southern California Association of Governments (SCAG). 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed November 2021).

[28] SCAG. 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed November 2021).

[29] South Coast Air Quality Management District (SCAQMD). 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.

The SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, the SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the post-2020 emissions targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State will be able to accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and future post-2020 targets.

4.6.4.4 Local Regulations

City of Huntington Beach General Plan. The City of Huntington Beach addresses greenhouse gases in the Environmental Resources and Conservation Element of the City's General Plan. The Environmental Resources and Conservation Element contains goals, policies, and implementing actions to reduce greenhouse gas emissions in the community. The following goals, policies, and implementing actions related to greenhouse gases are presented in the Environmental Resources and Conservation Element[30] and are applicable to the proposed project:

Goal ERC-5. Greenhouse gas emissions from activities occurring in Huntington Beach are reduced to levels consistent with state goals.

Policies:

- By 2020, reduce community-wide greenhouse gas emissions to 15 percent below 2005 levels. By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the states 2050 greenhouse gas emissions reduction goals.
- Explore strategies to reduce greenhouse gas emissions from off-road construction and landscaping equipment
- Support efforts by the South Coast Air Quality Management District and the California Air Resources Board to decrease greenhouse gas emissions from large industrial facilities and other stationary sources
- Pursue funding sources to develop and implement programs and projects identified in the greenhouse gas reduction program

Greenhouse Gas Reduction Program . The Greenhouse Gas Reduction Program (GGRP) is the City of Huntington Beach's approach to reduce GHG emissions. The GGRP establishes the City's existing, projected, and target levels of GHG emissions and identifies how the City can achieve target levels through an extensive set of strategies, emphasizing actions that are voluntary, economically viable, consistent with community character, and advance the priorities of Huntington Beach residents,

[30] City of Huntington Beach. 2017. City of Huntington Beach General Plan, Natural Resources and Conservation Element. October. Website: https://www.huntingtonbeachca.gov/files/users/planning/environmental_ resources_ conservation_element.pdf (accessed November 2022).

businesses, and visitors. The GGPR contains 42 strategies, 36 of which have measurable GHG reduction benefits. The strategies are divided into the following nine categories:

1. Land Use (LU)
2. Alternative Fuels (F)
3. Energy Efficiency (EE)
4. Water and Wastewater (WW)
5. Community Awareness (CA)
6. Transportation (T)
7. Renewable Energy (RE)
8. Off-Road Equipment (OR)
9. Resource Management (RM)

4.6.5 Thresholds of Significance

The following thresholds of significance criteria are based on Appendix G of the *State CEQA Guidelines* Based on these thresholds, implementation of the proposed project would have a significant adverse impact related to global climate change if it would:

Threshold 4.6.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold 4.6.2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases.

As discussed in Section 4.8.1 of the Initial Study prepared for the proposed project (Appendix A), the impacts related to greenhouse gas emissions will be evaluated as part of this Draft EIR.

4.6.6 Project Impacts

Threshold 4.6.1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The SCAQMD has adopted a significance threshold of 10,000 MT CO_2e per year (MT CO_2e/yr) for permitted (stationary) sources of GHG emissions for which SCAQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2. Consistency with a locally adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG

emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD, under Option 1, is proposing a "bright-line" screening-level threshold of 3,000 MT CO_2e/yr for all land use types or, under Option 2, the following land-use-specific thresholds: 1,400 MT CO_2e for commercial projects, 3,500 MT CO_2e for residential projects, or 3,000 MT CO_2e for mixed-use projects. This bright-line threshold is based on a review of the Governor's Office of Planning and Research's database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.

- **Tier 4. Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per capita efficiency targets. SCAQMD is not recommending use of a percentage emissions reduction target. Instead, SCAQMD proposes a 2020 efficiency target of 4.8 MT CO_2e per year per service population (MT CO_2e/yr/SP) for project-level analyses and 6.6 MT CO_2e/yr/SP for plan-level projects (e.g., program-level projects such as general plans). The GHG efficiency metric divides annualized GHG emissions by the service population, which is the sum of residents and employees, per the following equation:

  Rate of Emission: GHG Emissions (MT CO_2e/yr) ÷ Service Population

  The efficiency evaluation consists of comparing the project's efficiency metric to efficiency targets. Efficiency targets represent the maximum quantity of emissions each resident and employee in the State of California could emit in various years based on emissions levels necessary to achieve the statewide GHG emissions reduction goals. A project that results in a lower rate of emissions would be more efficient than a project with a higher rate of emissions, based on the same service population. The metric considers GHG reduction measures integrated into a project's design and operation (or through mitigation). The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for the CARB's 2008 Scoping Plan.

For the purpose of this analysis, the proposed project will first be compared to the screening-level Tier 3 Numerical Screening Threshold of 3,000 MT CO_2e/yr for all land use types. If it is determined that the proposed project is estimated to exceed this screening threshold, it will then be compared to the efficiency-based threshold.

This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. SCAQMD has not addressed emissions thresholds for

construction in its *CEQA Air Quality Handbook* (1993); however, SCAQMD requires quantification and disclosure. Thus, this section discusses construction emissions.

Construction. Construction activities associated with the proposed project would produce combustion emissions from various sources. Construction would emit GHGs through the operation of construction equipment and from worker and builder supply vendor vehicles for the duration of the 24-month construction period. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, the fueling of heavy equipment emits CH_4. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier.

Construction emissions were estimated for the project using CalEEMod. Construction of the proposed project is anticipated to commence in 2024 and end in 2026, occurring over a 24-month period, which was assumed in CalEEMod. The proposed project would require the demolition of the existing onsite structures and would require the excavation and export of approximately 55,000 cubic yards of material and the associated haul trucks are assumed to travel an average trip length of 35 miles, which was included in CalEEMod. Demolition, grading, and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment, which was assumed in the analysis. This analysis assumes the use of Tier 2 construction equipment. This analysis also assumes the overlapping of building construction and architectural phases as part of the construction phase schedule. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

Using CalEEMod, it is estimated that the project would generate 1,601.8 MT CO_2e during construction of the project. When annualized over the 30-year life of the project, annual emissions would be 53.4 MT CO_2e.

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

Following guidance from the SCAQMD, GHG emissions were estimated using CalEEMod. Based on the trip generation estimates prepared by LSA, the proposed project is expected to generate approximately 537 average daily trips, while the existing uses currently generate approximately 947 average daily trips. These factors were included in CalEEMod. The proposed project would include a 600 kilowatt generator, which was included in CalEEMod. In addition, the CalEEMod analysis assumes the proposed project would include drought tolerant landscaping. Existing operational emissions associated with the current land uses were evaluated in CalEEMod. Table 4.6.E shows the calculated GHG emissions for the existing uses on the project site and the proposed project.

Table 4.6.E: GHG Emissions (Metric Tons Per Year)

Emission Type	Operational Emissions				
	CO_2	CH_4	N_2O	CO_2e	Percentage of Total
Existing Uses Emissions					
Existing Uses Area Source	<0.1	0.0	0.0	<0.1	<1
Existing Uses Energy Source	147.6	<0.1	<0.1	148.4	15
Existing Uses Mobile Source	742.1	0.1	<0.1	753.1	79
Existing Uses Waste Source	8.8	0.1	0.0	21.8	2
Existing Uses Water Source	26.7	0.2	<0.1	34.2	4
Total Existing Uses Emissions				**957.5**	**100**
Proposed Project Emissions					
Project Area Source	49.6	<0.1	<0.1	50.0	4
Project Energy Source	348.6	<0.1	<0.1	350.5	31
Project Mobile Source	541.6	<0.1	<0.1	549.2	49
Project Stationary Source	15.3	<0.1	0.0	15.4	1
Project Waste Source	39.5	2.3	0.0	97.8	9
Project Water Source	53.8	0.5	<0.1	68.6	6
Total Project Operational Emissions				**1,131.5**	**100.0**
Amortized Construction Emissions				53.4	-
Total Project Emissions				**1,184.9**	**-**
Total Net Annual Emissions				**227.4**	**-**
SCAQMD Threshold				**3,000**	-
Exceeds Threshold?				**No**	**-**

Source: LSA Associates, Inc. (November 2022).
GHG = greenhouse gas
SCQMD = South Coast Air Quality Management District

Based on the results of the analysis, mobile source emissions are the largest source of GHG emissions for the project at 49 percent of the project total. Energy use is the next largest category at approximately 31 percent and waste sources are about 9 percent of the total emissions, respectively. In addition, water is approximately 6 percent of the total emissions. Area sources are about 4 percent and stationary sources are 1 percent of the total emissions. Appendix D provides additional calculation details.

As discussed above, according to SCAQMD, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 MT CO_2e/yr. Based on the analysis results, the proposed project would result in a net increase of 227.4 MT CO_2e/yr, which would be well below the numeric threshold of 3,000 MT CO_2e/yr. Therefore, operation of the

proposed project would not generate significant GHG emissions that would have a significant effect on the environment. Impacts would be considered less than significant, and no mitigation is required.

Threshold 4.6.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?

Less Than Significant Impact. Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, SCAG's 2020–2045 RTP/SCS, and the City's GGRP. A consistency analysis with these plans for the proposed project is presented below.

CARB Scoping Plan. EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reduction target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. CARB released the 2017 Scoping Plan to reflect the 2030 target set by EO B-30-15 and codified by SB 32.[31] SB 32 builds on Assembly Bill (AB) 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 that is intended to provide easier public access to air emission data collected by the CARB was posted in December 2016.

The 2022 Scoping Plan[32] assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy measures are intended to increase renewable energy generation sources. The proposed project would be designed to meet sustainability goals, including the CALGreen Code, Title 24

[31] CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.
[32] CARB. 2021. op. cit.

energy efficiency requirements, and Assembly Bill (AB) 1881 water efficient landscape requirements. The proposed project would also incorporate a number of energy and water conservation measures, green building features, and Low Impact Development (LID) design features. The CALGreen Code and Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. In addition, electricity would be provided by Southern California Edison (SCE), which is required to increase its renewable energy sources to meet the Renewable Portfolio Standards mandate of 60 percent renewable supplies by 2030. In addition, SCE plans to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand. Therefore, the proposed project would not conflict with applicable energy measures.

The goal of transportation and motor vehicle measures is to increase zero emission vehicles and decrease VMT. As discussed above, based on the trip generation estimates prepared by LSA, the proposed project is expected to generate approximately 537 average daily trips, while the existing uses currently generate approximately 947 average daily trips. As such, the proposed project would result in a net decrease in vehicle trips and VMT. Therefore, the proposed project would not conflict with the transportation measures.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the Scoping Plan, EO B-30-15, SB 32, and AB 197 and would be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, impacts are considered less than significant. No mitigation is required.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy. SCAG's 2020–2045 RTP/SCS was adopted September 3, 2020. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2020–2045 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit oriented communities. The 2020–2045 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecast development that is generally consistent with regional-level general plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels). The 2020–2045 RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the 2020–2045 RTP/SCS, but provides incentives for consistency for governments and developers.

The proposed project would demolish the existing onsite approximately 55,000-square-foot commercial buildings and would construct a 298,000-square-foot, senior living community consisting of 213 total units. Based on the trip generation estimates prepared by LSA, the proposed project would result in a net reduction of 410 average daily trips in comparison to the existing uses

on the project site. Therefore, the proposed project would not conflict with the 2020–2045 RTP/SCS transportation strategies.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets. As stated above, the proposed project would not conflict with the goals of the RTP/SCS; therefore, the proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per capita emissions levels by 2035, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and as such, it would not conflict with the SCAG RTP/SCS targets as those targets were established and are applicable on a regional level.

Based on the nature of the proposed project, it is anticipated that its implementation would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to GHG emission, and impacts are considered less than significant. No mitigation is required.

City of Huntington Beach Greenhouse Gas Reduction Program. The City's GGRP is the City's comprehensive approach to reducing GHG emissions within the community to help achieve the following goals:

- By 2020, reduce community-wide GHG emissions by 15 percent below 2005 levels,
- By 2040, reduce GHG emissions by 53.33 percent below the 2020 target level, and
- By 2050, reduce GHG emissions by 80 percent below 1990 levels.

The GGRP includes 42 different strategies to help the City reach these GHG reduction goals. As discussed above in the analysis for Threshold 4.6.1, the proposed project would result in a net increase of 227.4 MT CO_2e/yr, which would be well below the numeric threshold of 3,000 MT CO_2e/yr. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment. Thus, as the proposed project would be below the applicable threshold, which was developed to conform with existing applicable State GHG reduction policies and regulations to reduce local community GHG emissions, the proposed project would be consistent with the goal of the GGRP of reducing GHG emissions by 2040 and 2050. It should also be noted that the second largest GHG emissions source of the project would be from energy use. SB 100 requires that all retail electricity sold be from a renewable carbon free source by 2045, with at least 60 percent being carbon free by 2030. This would further increase the project's GHG reductions compared to the existing conditions.

Furthermore, the proposed project would incorporate a number of energy and water conservation measures, green building features, and LID design features. The project would be designed to meet the requirements of CALGreen and the Title 24 Building Standards Code. In doing so, the project would include features to enhance sustainability, including energy efficiency, water efficiency, material conservation, and resource efficiency. Therefore, the proposed project would be beneficial

in helping the City meet its GGRP goals and impacts would be less than significant. No mitigation is required.

4.6.7 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to GHG emissions, and no mitigation is required.

4.6.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

No standard conditions, regulatory compliance measures, or mitigation measures are required for the proposed project.

4.6.9 Level of Significance After Mitigation

There would be no significant unavoidable adverse impacts of the proposed project related to GHG emissions, and no mitigation is required.

4.6.10 Cumulative Impacts

Cumulative impacts are the collective impacts of one or more past, present, or future projects, that when combined, result in adverse changes to the environment. Climate change is a global environmental problem in which: (a) any given development project contributes only a small portion of any net increase in GHGs, and (b) global growth is continuing to contribute large amounts of GHGs across the world. Land use projects may contribute to the phenomenon of global climate change in ways that would be experienced worldwide, and with some specific effects felt in California. However, no scientific study has established a direct causal link between individual land use project impacts and global warming.

The analysis of impacts related to GHG emissions is inherently cumulative. The proposed project would have no conflict with applicable statewide and regional climate action measures. In addition, as discussed above, the project's operational-related GHG emissions would not exceed the SCAQMD's numeric threshold. GHG emissions impacts associated with the proposed project would be less than significant, and therefore the cumulative impact would also be less than significant. No mitigation is required.

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4.7 LAND USE AND PLANNING

This section describes the existing land uses on the project site and in its vicinity and evaluates the compatibility of the proposed project with surrounding land uses and relevant land use policy and planning documents. The consistency analysis in this section was prepared in compliance with the *State California Environmental Quality Act (CEQA) Guidelines* Section 15125(d). Information presented in this section is based on information provided in the following documents: The City of Huntington Beach's (City) existing General Plan (as amended), the City's Zoning Code (Title 21), and associated Zoning Map, the Southern California Association of Government's (SCAG) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, and SCAG's 2008 Regional Comprehensive Plan (2008 RCP).

4.7.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project and a Scoping Meeting was held on November 10, 2022. The City received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to land use and planning.

4.7.2 Existing Environmental Setting

The 3.10-acre project site is located at the southwest corner of Bolsa Chica Street and Warner Avenue in the City. The City is located in northwest coastal Orange County, California. The project site is comprised of two parcels: Assessor's Parcel Numbers (APNs) 163-281-01 and 163-281-02. Regional access is provided by Interstate 405 (I-405) to the north and east; State Route 1 (SR-1) or Pacific Coast Highway to the west; and State Route 39 or Beach Boulevard, which bisects the City running north to south. Local access is provided from Bolsa Chica Street and Warner Avenue. In the existing condition, the project site is accessed by three driveways along Bolsa Chica Street and two driveways along Warner Avenue. The regional location is depicted in Figure 3-1 in Chapter 3.0, Project Description.

4.7.2.1 General Plan Designation and Zoning

The project site is zoned and designated in the General Plan, Land Use Element as Commercial General (CG). The CG designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/ motels, timeshares, cultural facilities, institutional health care, governmental offices, and educational uses. The project site is not within the designated Coastal Zone. Within CG designations, the maximum Floor Area Ratio (FAR) is 1.5, and the maximum building height is 50 feet.

The Applicant is requesting a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. The Specific Plan would increase the allowable FAR to 2.5 and the maximum building height to 65 feet. A Conditional Use Permit would also be required for the proposed project to allow

development and operation of a Residential Care Community for the Elderly (RCFE) and independent living apartments.

4.7.2.2 On-Site Uses

The 3.10-acre project site is currently fully developed with commercial (retail and office) uses and an associated surface parking lot. The existing commercial uses total approximately 55,000 square feet. The commercial uses are contained in two buildings comprised of a three-story office building fronting on Bolsa Chica Street and a smaller retail commercial building fronting on Warner Avenue. There are currently two vehicle access points along Warner Avenue and three vehicular access points along Bolsa Chica Street. Refer to Figure 3-2 in Chapter 3.0, Project Description, for the existing conditions on the project site, including the locations of existing on-site structures and surface parking.

4.7.2.3 Surrounding Uses

The project site is directly bordered by Warner Avenue to the north and Bolsa Chica Street to the east. Surrounding land uses include a mix of commercial, industrial, and residential uses. Refer to Figure 3-3 in Chapter 3.0, Project Description, for surrounding land uses. Directly north of the project site, across Warner Avenue, is a mix of retail businesses, including Walgreens and CVS. Directly east of the project site, across Bolsa Chica Street, are an automobile repair business and four single-family homes. Immediately south of the project site is an industrial property, and immediately west of the project site is a two-story apartment complex.

Surrounding zoning designations are Residential Medium High Density (RMH) to the west and south of the project site and Residential Medium Density (RM) to the east. Additional Commercial General zoning designations are located to the north of the project site, and Residential Low Density (RL) further east. Residential Low Density – Coastal Zone Overlay (RL-CZ) area are located further southeast of the project site.

4.7.3 Regulatory Setting

4.7.3.1 Federal Policies and Regulations

There are no federal land use policies or regulations that are applicable to the proposed project with respect to land use regulation.

4.7.3.2 State Policies and Regulations

California Coastal Act (CCA). The California Coastal Act (CCA) requires local governments located within a designated Coastal Zone to prepare a Local Coastal Program (LCP). LCPs are documents certified by the California Coastal Commission (CCC) designed to regulate and implement policies and requirements of the CCA. LCPs are comprised of two primary components: A Land Use Plan containing policies designed to implement Chapter 3 of the CCA and; An Implementation Program which includes zoning ordinances and other regulations used to implement the goals and policies established the certified LCP.

The City of Huntington Beach includes a designated Coastal Zone regulated by a certified LCP and subject to the policies and regulations set forth in the CCA (California State Resources Code Division 20 Sections 30000 et. seq.). The CCA includes specific policies addressing issues including public access and recreation, visual resources, alteration to existing landforms, visitor accommodations, habitat protection, and development within the Coastal Zone. The project site is located outside the designated Coastal Zone and is not subject to the development regulations dictated in the CCA. No project actions will occur within the Coastal Zone.

California State Planning and Zoning Law. This law, which is codified in California Government Code Sections 65000-66037, delegates most of the State's local land use and development decisions to cities and counties. The California Government Code establishes specific requirements pertaining to the regulation of land uses by local governments, including general plan requirements, specific plans, subdivisions, and zoning. California Government Code Section 65302 requires that all California cities and counties include the following seven elements in their general plans:

- Land Use
- Circulation
- Housing
- Conservation
- Open Space
- Noise
- Safety

Cities and counties that have identified disadvantaged communities must also address environmental justice in their general plans, including air quality.[1] The City of Huntington Beach has addressed environmental justice issues in the Land Use Element of the General Plan and is therefore in compliance with Senate Bill (SB) 1000.

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375). This statute requires California's regional planning agencies to include a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy in their Regional Transportation Plans (RTP). SB 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, California's regional planning agencies are required to include an SCS in their RTPs. The SCS provides a plan for meeting the regional emissions reduction targets established by the California Air Resources Board (CARB). If the emissions reduction targets cannot be met through the SCS, an Alternative Planning Strategy (APS) may be developed that shows how the targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures of policies. SB 375 also offers local governments regulatory and other incentives to encourage more compact new development and transportation alternatives.

[1] Senate Bill 1000, adopted in 2016, requires both cities and counties that have disadvantaged communities to incorporate environmental justice (EJ) policies into their general plans, either in a separate EJ element or by integrating related goals, policies, and objectives throughout the other elements. This update, or revision if the local government already has EJ goals, policies, and objectives, must happen "upon the adoption or next revision of two or more elements concurrently on or after January 1, 2018."

The requirements of SB 375 are reflected in the 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) adopted by the Southern California Association of Governments (SCAG), which serves as the regional planning agency in the six-county metropolitan region composed of Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties. The 2020–2045 RTP/SCS is discussed in further detail below.

4.7.3.3 Local and Regional Plans and Policies

The City is covered by several planning documents and programs that have varying degrees of regulation. The City has wide-ranging discretion over the land uses within the City. The adopted planning documents regulating land use are the City's General Plan, the Zoning Code, and various specific plans.

Applicable regional, local, and conservation land use policies and guidelines from each of these planning documents are described below. In addition, pursuant to *State CEQA Guidelines* Section 15125 (d), the proposed project's consistency with other applicable regional plans and programs, such as the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP), is addressed in the appropriate topical sections of this Draft EIR. The following paragraphs explain the regulations, plans, and policies applicable to the proposed project.

Regional Comprehensive Plan. SCAG's Regional Comprehensive Plan (RCP) provides a policy framework for regional planning in Southern California. The RCP calls for City and County coordination and improvement when addressing regional issues related to growth management and development. However, the RCP serves as a voluntary "toolbox" to assist local jurisdictions in making their General and Specific Plans and individual projects in implementing sustainable measures. As identified in Resolution No. 08-502-1 (Resolution of the Southern California Associated of Governments Accepting the 2008 Regional Comprehensive Plan for the SCAG Region), given its advisory nature, the 2008 RCP is not used in SCAG's Inter-Governmental Review (IGR) process (SCAG 2008a).

Regional Transportation Plan/Sustainable Communities Strategy. SCAG is the Metropolitan Planning Organization (MPO) serving the region under federal law, and serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) and the 2008 Regional Comprehensive Plan (RCP).

On September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS (Connect SoCal). The 2020–2045 RTP/SCS is a long-range planning document that provides a common foundation for regional and local planning, policymaking, and infrastructure goals in the SCAG region.[2] The core vision for the 2020–2045 RTP/SCS is to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal includes new initiatives at the intersection of land use, transportation and technology

[2] Southern California Association of Governments (SCAG). September 2020. RTP/SCS. Website: https://scag.ca.gov/read-plan-adopted-final-plan (accessed November 2022).

to close the gap and reach greenhouse gas reduction goals. The plan also includes robust financial analysis that considers operations and maintenance costs to ensure the existing transportation system's reliability, longevity, resilience, and cost effectiveness. In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's greenhouse gas emission reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries and more efficient use of resources.

City of Huntington Beach General Plan. The City of Huntington Beach occupies approximately 27.3 square miles of land area along the southern coast of California. It is surrounded by the cities of Westminster to the north; Seal Beach to the northwest; Fountain Valley to the east; and Costa Mesa to the southeast. The proposed project is subject to the City of Huntington Beach's land use jurisdiction, including City plans, policies, and regulations. As such, the proposed project actions are required to be consistent with the City's General Plan, Zoning Ordinance, and other City imposed requirements.

The *City of Huntington Beach General Plan* was comprehensively updated in 2017 and is the primary planning and policy document of the City of Huntington Beach. This document provides the regulatory framework for the use and management of the City's resources and outlines policies related to public and private land use, design guidelines for development and open spaces, housing conservation and new residential development, public services and infrastructure, natural resources, economic resources, and policies to protect against natural and manmade hazards. The City's General Plan includes nine elements, including Land Use, Circulation, Environmental Resources and Conservation, Natural and Environmental Hazards, Noise, Public Services and Infrastructure, Historic and Cultural Resources, Housing, Implementation program, and Coastal. The Coastal Element of the General Plan acts as the Land Use Plan for the LCP and details land use policies within the designated Coastal Zone.

Land Use Element. The Land Use Element of the *City of Huntington Beach General Plan* was adopted in 2017 as part of the City's General Plan Update. This element includes the Issues, Goals, Policies, and Land Use standards relating to land use in the City of Huntington Beach. Specifically, the Land Use Element identifies the location and extent of land uses within the City, design guidelines and economic issues affecting the City's planning area, standards for residential density and nonresidential development within designated land uses, and population growth effects on the City. The City's Land Use Element also includes an Urban Design Plan, "outlining the fundamental components of community form" in the City and an Economic Development Plan which recommends development strategies related to community economic sustainability. Future development must be consistent with land uses established for each parcel of land and must also be consistent with applicable goals and policies established for the land designation.

Circulation Element. The goal of the Circulation Element is to ensure "that mobility options in Huntington Beach remain diverse and efficient." The Circulation Element includes goals, policies, and implementation programs for the 2040 planning horizon for the City's roadway system and highlights the City's need to provide an effective circulation system to service the needs of existing and future local and regional traffic. The multimodal circulation system includes bikeways,

equestrian trails, sidewalks and jogging paths, and includes the public transit services for the City provided by the Orange County Transportation Authority (OCTA). The policies and programs in this element aim to serve the demands of current and planned land uses identified in the Land Use Element through goals and policies to help reduce and prevent traffic congestion, provide for safe active transportation, and assist in planning for new transit opportunities.

Environmental Resources and Conservation Element. The Environmental Resources and Conservation Element includes the goals and policies that aim to protect and conserve the City of Huntington Beach's environmental resources such as the beaches and open space within the City. The element also aims to implement regulations to address issues regarding air quality, water quality, biological resources, and other natural resources present in the City. Included in this element is the Open Space Plan that guides the protection of open space sued for the preservation of natural resources, outdoor recreation, and public health. The Open Space Plan also identifies local open spaces including the beach and other coastal areas. The Conservation Plan portion of the element discusses the quality of natural resources and the issues, goals, and policies for both open space and conservation to protect and improve the environmental resources present within the City.

Natural and Environmental Hazards Element. Section 65302(g) of the California Government Code mandates the inclusion of a city's preparation for emergency situations, improvement of the community resilience, and recovery. The issues, goals, and policies regarding hazards and hazards response is covered in the Natural and Environmental Hazards Element of the General Plan. This element also includes assessment of seismically induced conditions such as ground shaking, surface rupture, ground failure, tsunami, seiche, and dam failure; slope instability and potential mudslide and landslide prone areas; subsidence; liquefaction; flooding; wildland and urban fires; and evacuation routes. Addition safety and hazards issues specified in the element include costal hazards, hazardous materials and waste, aircraft hazards, and disaster and emergency preparedness. The element also includes the Hazards Plan that discusses the natural and environmental risks present in Huntington Beach and any foreseeable future variations to the existing conditions in the area.**Noise Element.** The Noise Element of the General Plan describes the fundamentals of noise, defines noise standards including noise levels contour maps, and recommends strategies to achieve goals and related policy implementation. This element also outlines the important noise issues affecting Huntington Beach and the consideration of noise control measures in the planning process by identifying noise sensitive land uses, existing noise sources and potential noise impact areas, and methods to protect the health and safety of the public from excessive noise. In addition, the Noise Element provides measures to reduce noise levels related to construction noise and mechanical equipment, roadway noise, barking dogs, and other nuisance causing noise sources. This is done to minimize and prevent public health issues in compliance with requirements set by California Government Code Section 65302(f) to "identify and appraise noise problems in a community" and to "analyze and quantify, the extent practicable, current and projected noise levels.".

Public Services and Infrastructure Element. The Public Services and Infrastructure Element of the General Plan examines the existing and future service and infrastructure needs of the City of Huntington Beach as they relate to water, waste, energy, and sewage, as well as public services such

as police, fire, and schools. Included in this element is the Public Facilities and Services Plan which identifies police and fire services, the level of service and school and library systems, and other community services. The Infrastructure Plan describes the infrastructure systems for the collection, treatment, and management of water resources, solid waste, and power. The issues, goals, and policies described in the element detail the required level of service to provide efficient and affordable community services and infrastructure needs of the current and future residents of the City.

Housing Element. Huntington Beach's Housing Element (2020) is used to plan and meet the existing and projected housing needs of all economic demographics of the community pursuant to requirements outlined in the State Housing Law to meet the service needs of existing and future housing across all income groups. The City's 2020 Housing Element is based on the assessment of the City's demographics and household types, used to assess potential constraints and strategies to meet the City's housing needs. The element also establishes strategies and programs based on SCAG's Regional Housing Needs Assessment (RHNA). These strategic objectives aim to protect and improve housing and neighborhoods; provide adequate housing; provide for affordable housing; remove potential housing investment constraints, encourage fair and equal housing; and promote sustainable housing initiatives. Prior to the adoption of a new housing element, the City must obtain approval from the California Department of Housing and Community and Development (HCD) finding that the housing element is substantially compliant with state housing element laws. The City is required to adopt a new housing element every eight years. The current iteration of the City's 2013-2021 Housing Element was amended and adopted in 2020. At the time of publication of this Draft EIR, the Huntington Beach City Council is considering an updated Housing Element for the 2021-2029 housing cycle. The City's existing and proposed Housing Elements do not contain any conflicting policies that apply to the project; the Bolsa Chica Senior Living Community is consistent with both the 2020 and the current version of the 2021-2029 Housing Element.

General Plan Implementation Programs. Implementation programs within the General Plan are structures to address each General Plan element and are based on the type of program and the City's requirements. Implementation programs include City Plans, Ordinances and Programs; Capital Improvements; Development Review Requirements; Interjurisdictional Coordination; and Public Outreach and Information. These programs establish the applicable departments or agencies, funding, and schedules for program actions. Environmental impacts associated with the goals and policies in the General Plan may use the implementation programs as mitigation measure to reduce the potentially significant impacts associated with the plan guidelines.

City of Huntington Beach Zoning Code. Zoning is the division of a city or county into districts and the application of development regulations specific to each district. The Huntington Beach Zoning and Subdivision Ordinance ("HBZSO" or "Zoning Code") regulates the use of private property and designates guidelines and requirements for residential, commercial, industrial, and other land uses within the City. Huntington Beach uses the Zoning Code to evaluate a proposed project's land use compatibility with existing ordinances, provisions, and other zoning requirements. The Zoning Code includes regulations concerning where and under what conditions a business may operate in the City. It also establishes zone-specific height limits, setback requirements, parking ratios, and other development standards, for residential and commercial sites.

4.7.4 Methodology

The impact analysis of this section considers the physical impacts of the proposed project related to land use compatibility and considers whether or not there are potential inconsistencies of the proposed project with applicable planning documents from the City and other agencies with relevant plans or policies. A determination regarding a project's consistency with an applicable plan is made by the CEQA Lead Agency when it acts on the project. The analysis in this Draft EIR discusses the findings of policy review and is meant to provide a guide for decision-makers during policy interpretation.

A project's inconsistency with a policy is only considered significant if such inconsistency would cause significant physical environmental impacts. This Draft EIR section determines whether any project inconsistencies with public land use policies and documents would be significant and whether mitigation is feasible. Under this approach, a policy conflict is not in and of itself considered a significant environmental impact. An inconsistency between a proposed project and an applicable plan is a legal determination that may or may not indicate the likelihood of environmental impact. In some cases, an inconsistency may be evidence that an underlying physical impact is significant and adverse, while in other cases such an inconsistency may not result in significant physical impacts.

4.7.5 Thresholds of Significance

The following thresholds of significance criteria are based on Appendix G of the *State CEQA Thresholds of Significance.* Based on these thresholds, implementation of the proposed project would have a significant adverse impact related to land use and planning if it would:

Threshold 4.7.1: Physically divide an established community

Threshold 4.7.2: 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 Initial Study, included as Appendix A, substantiates that the proposed project actions would result in no impacts associated with Threshold 4.7.1. Construction and implementation of the project would not result in the physical division of an established community, and no mitigation would be required. This threshold will not be further addressed in the following analysis.

4.7.6 Project Impacts

Threshold 4.7.2: 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?

Less Than Significant Impact. The project site is under the City's land use planning and regulatory jurisdiction. Several regionally and locally adopted land use plans, policies, and regulations would be applicable to the proposed project, including the SCAG 2008 Regional Comprehensive Plan, the City of Huntington Beach General Plan, and the Huntington Beach Zoning Code.

Southern California Association of Governments Regional Comprehensive Plan (RCP). The RCP addresses issues such as housing, traffic, air quality, and water resources as a guide for local agencies to use in preparing plans that deal with regional issues. The RCP outlines a vision of how the Southern California region can balance growth with conservation in order to achieve a higher quality of life. The fundamental goals of SCAG's RTP/SCS are to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income class. Table 4.7.A, below, presents the proposed project's consistency with the relevant adopted 2020–2045 RTP/SCS goals. The adopted 2020–2045 RTP/SCS seeks to link the goal of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging fair and equitable access to residents impacted by socioeconomic, geographic, and commercial conditions. Implementation of the proposed project would be consistent with the goals and the intent of the 2020-2045 RTP/SCS. The analysis of the consistency with the 2020–2045 RTP/SCS goals is provided in Table 4.7.A.

Table 4.7.A: Consistency with Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal	Project Consistency
RTP/SCS Goal No. 1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent.** The proposed project would not involve any of the plan investments and is a private sector development project. The proposed project would create a senior living community including 213 living units with daily living amenities for residents. The project would serve future residents as well as the region overall as implementation of the proposed project would create both jobs and housing, providing economic benefits to the local area and region.
RTP/SCS Goal No. 2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent**. The proposed vehicular and pedestrian circulation system is described in Chapter 3.0, Project Description, and would be designed, developed, and maintained to meet local and regional transportation standards to ensure efficient mobility and access. On site circulation would provide convenient, safe, and efficient access/connections to adjacent streets (including Warner Avenue and Bolsa Chica Street), and would meet emergency response vehicle requirements. In addition, van services would be provided for residents. No conflict with the policy would occur.
RTP/SCS Goal No. 3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent.** Project implementation would ensure travel safety and reliability for people and goods through the proposed on-site circulation system consisting of driveways and walkways. In addition, van services will be provided for residents. The project would not disturb or disrupt commuter circulation or mobility in the area. No conflict with the policy would occur.
RTP/SCS Goal No. 4: Preserve and ensure a sustainable regional transportation system.	**Consistent.** The project proposes a senior living community including on-site amenities. On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. The project would not make any changes to the public right-of-way in the project vicinity and would not conflict with existing or planned pedestrian, bicycle, or transit facilities. The project would not

Table 4.7.A: Consistency with Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal	Project Consistency
	result in individual or cumulative impacts to the regional transportation system, and no conflict with this policy would occur.
RTP/SCS Goal No. 5: Maximize the productivity of our transportation system.	**Consistent.** The proposed project does not require the extension of the regional transportation system to previously undeveloped areas. The proposed project would provide an internal circulation system that would provide convenient, safe, and efficient access and connections. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. The project would not make any changes to the public right-of-way in the project vicinity and would not conflict with existing or planned pedestrian, bicycle, or transit facilities. No conflict with this policy would occur.
RTP/SCS Goal No. 6: Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** The CEQA process ensures that plans at all levels of government consider environmental impacts. Various sections of this Draft EIR appropriately address the potential environmental impacts related to future developments and outline mitigation measures and regulatory requirements that would reduce environmental impacts, as applicable and feasible. Section 4.2, Air Quality, discusses the proposed project's impacts on air quality. No conflict with this policy would occur.
RTP/SCS Goal No. 7: Activity encourage and create incentives for energy efficiency, where possible.	**Consistent.** Section 4.4, Energy, discusses energy conservation and identifies how the proposed project would avoid and reduce inefficient, wasteful, and unnecessary consumption of energy during construction and operation. Proposed development would comply with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings, incorporate a number of energy and water conservation measures, green building features, and Low Impact Development (LID) design features. In addition, 25 of the 207 provided parking spaces would be designated for carpool/clean air vehicles and electric vehicle capable in accordance with the 2019 California Green Building Code (CALGreen Code) Tables 5.106.5.2 and 5.106.5.3. No conflict with this policy would occur.
RTP/SCS Goal No. 8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent.** Implementation of the proposed project would result in a net reduction in vehicle trips when compared to the existing uses on the site. The proposed project would facilitate non-vehicular circulation for residents on the project site through internal pedestrian walkways. In addition, the project on-site amenities for recreation, exercise, dining, and entertainment, and would decrease dependency on automobiles for residents by providing such amenities on-site. The project would also provide van service for residents. Furthermore, on street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. No conflict with this policy would occur.

Table 4.7.A: Consistency with Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal	Project Consistency
RTP/SCS Goal No. 9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent.** The proposed project does not involve the construction or expansion of the regional transportation system. Therefore, security associated with the regional transportation systems is not applicable to the project. The potential impact of the proposed project associated with public services, including police and fire protection, was discussed in Section 4.15 of the Initial Study and impacts were determined to be less than significant.

Source: SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Pursuant to Threshold 4.7.2, the proposed project would generally be consistent with the applicable goals and policies of the Regional Transportation Plan/Sustainable Communities Strategy goals as described in Table 4.7.A above.

City of Huntington Beach General Plan and Zoning Code. As discussed above in Section 4.7.2, Regulatory Setting, the proposed project is subject to the City's land use jurisdiction, including the City's plans, policies, and regulations. The following compares the proposed project to the General Plan and Zoning Ordinance. As indicated under Section 4.7.2, Existing Environmental Setting, above, the project site is identified in the *City of Huntington Beach General Plan* and Zoning Code as Commercial General (CG). The CG designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/motels, timeshares, cultural facilities, institutional health care, governmental offices, and educational uses. The project site is not within the designated Coastal Zone. Within CG designations, the maximum Floor Area Ratio (FAR) is 1.5, and the maximum building height is 50 feet.

The following identifies changes to the existing City General Plan, Zoning designation, and establishment of the Specific Plan to reflect the proposed project. In order to implement the proposed project, the follow approvals would be required:

- General Plan Amendment (GPA) to amend the land use designation on the project site from Commercial General (CG) to Mixed Use (MU).

- Zoning Map Amendment (ZMA) to amend the existing zoning from Commercial General (CG) to Specific Plan (SP). A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. The Specific Plan would increase the allowable FAR to 2.5 and the maximum building height to 65 feet.

- Conditional Use Permit would also be required for the proposed project to allow development and operation of a Residential Care Community for the Elderly and independent living apartments.

Table 4.7.B compares the proposed project to the applicable objectives and policies of the City of Huntington Beach General Plan.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
Land Use Element	
Goal LU-1: New commercial, industrial, and residential development is coordinated to ensure that the land use pattern is consistent with the overall goals and needs of the community.	
LU-A: Ensure that development is consistent with the land use designations presented in the Land Use Map, including density, intensity, and use standards applicable to each land use designation.	**Inconsistent.** Although the proposed project is not consistent with the existing General Plan land use and Zoning designations for the site, as part of the discretionary actions, a General Plan Amendment and Zone Change are proposed that would render the proposed project consistent with the plans.
LU-B: Ensure new development supports the protection and maintenance of environmental and open space resources.	**Consistent.** The proposed project would support the protection and maintenance of the environmental and open space resources near the project site through the development standards outlines in the Specific Plan under Land Use Plan and Development Standards. The surrounding land uses include a mix of commercial, industrial, and residential uses and the project site is not within the designated Coastal Zone. No conflict with this policy would occur.
LU-D: Ensure that new development projects are of compatible proportion, scale, and character to complement adjoining uses.	**Consistent.** The proposed five-story, approximately 298,000 square-foot senior living facility would include 213 living units, 207 on-site parking spaces, various amenities for use by residents, and associated hardscape and landscaping improvements. Surrounding land uses include a mix of commercial, industrial, and residential uses. Although the proposed five-story community would be larger in scale than the adjacent two-story apartment complex to the west of the project site, it would be compatible in character to surrounding properties. Visual character and aesthetics are discussed in Section 4.1, Aesthetics. No conflict with this policy would occur.
Goal LU-2: New Development preserves and enhances a distinct Surf City identity, culture, and character in neighborhoods, corridors, and centers.	
LU-A: Ensure that new development and reuse projects protect existing Surf City culture and identity and preserve and recognize unique neighborhoods and areas as the building blocks of the community. **LU-B:** Ensure that new and renovated structures and building architecture and site design are context-sensitive, creative, complementary of the city's beach culture, and compatible with surrounding development and public spaces.	**Consistent.** The proposed project would be developed consistent with the existing Surf City culture, in line with the informal aesthetic elements of the existing beach community. The new facility would be designed to reflect a traditional style of architecture. Complementary light colors reflective of the City of Huntington Beach's beach lifestyle and a variety of building materials, including glass, metal, stucco, wood, and composite panels, would be incorporated. For a discussion of compatibility with the surrounding uses, refer to LU-1D above. No conflict with these policies would occur.
LU-C: Distinguish neighborhoods and subareas by character and appearance and strengthen physical and visual distinction, architecture, edge and entry treatment, landscape, streetscape, and other elements. Evaluate the potential for enhancement of neighborhood entrances and perimeter walls.	**Consistent.** The proposed project would be designed to reflect a traditional style of architecture. The streetscape design would complement the architecture, frame buildings, and provide trees consistent with the overall character of the area. The main entrance to the facility leading into the reception area would be located along Bolsa Chica Street and

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
	would feature a covered entrance. The proposed project design would be developed to complement and enhance the architectural style of the larger surrounding area and would include walls and fences as a functional part of the development, to add visual interest. No conflict with this policy would occur.
LU-D: Maintain and protect residential neighborhoods by avoiding encroachment of incompatible land uses.	**Consistent.** Land uses surrounding the project site include a mix of commercial, industrial, and residential uses. The proposed project would develop a senior living community with on-site amenities which would be compatible with surrounding land uses including adjacent residential neighborhoods. No conflict with this policy would occur,
LU-E: Intensify the use and strengthen the role of public art, architecture, landscaping, site design, and development of patterns to enhance the visual image of Huntington Beach.	**Consistent.** The proposed project would be designed to reflect a traditional style of architecture that would be reflective of the City's beach lifestyle and complement and enhance the architectural style of the larger surrounding area. The proposed design would incorporate a variety of building materials and would use multilevel rooflines and varying building setbacks along Warner Avenue and Bolsa Chica Street to break up the scale and massing of the building. Parking for the proposed project would be subterranean to further enhance the visual appeal and character of the proposed community. Landscaping would include a variety of tree and plant species and would be designed to complement the architecture, frame buildings, and be consistent with the overall character of the project area. No conflict with this policy would occur.
Goal LU-3: Neighborhoods and attractions are connected and accessible to all residents, employees, and visitors.	
LU-A: Ensure that future development and reuse projects are consistent with the Land Use Map to provide connections between existing neighborhoods and City attractions.	**Inconsistent.** As indicated previously, the proposed project is not consistent with the existing General Plan land use and Zoning designations for the site. However, as part of the discretionary actions, a General Plan Amendment and Zone Change are proposed that would render the proposed project consistent with the plans.
LU-B: Improve trail, bicycle pathway, roadway, sidewalk, and transit connections to new development and reuse projects. **LU-C:** Ensure connections are well maintained and safe for users.	**Consistent.** The proposed project provides sidewalks and walkways throughout the project site promoting connectivity. On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. The project would not make any changes to the public right-of-way in the project vicinity and would not conflict with existing or planned pedestrian, bicycle, or transit facilities. No conflict with these policies would occur.
Goal LU-4: A range of housing types is available to meet the diverse economic, physical, and social needs of future and existing residents, while neighborhood character and residences are well maintained.	
LU-A: Ensure a mix of residential types to accommodate people with diverse housing needs.	**Consistent.** The proposed project involves development of a senior living community with 213 total living units. Of the total 223 senior living units, 28 would be Memory Care units,

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
	62 would be Assisted Living units, and 123 would be Independent Living units. No conflict with this policy would occur.
Goal LU-7: Neighborhoods, corridors, and community subareas are well designed, and buildings, enhanced streets, and public spaces contribute to a sense of place.	
LU-A: Preserve unique neighborhoods, corridors, and subareas, and continue to use specific plans to distinguish districts and neighborhoods by character and appearance. **LU-B:** Use street trees, signage, and landscaping, street furniture, public art, and other aesthetic elements to enhance the appearance and identity of subareas, neighborhoods, corridors, nodes, and public spaces.	**Consistent.** As discussed under LU-2C and LU-2E, the proposed project would be designed to reflect a traditional style of architecture that would be reflective of the City's beach lifestyle and complement and enhance the architectural style of the larger surrounding area. The proposed design would incorporate a variety of building materials and would use multilevel rooflines and varying building setbacks along Warner Avenue and Bolsa Chica Street to break up the scale and massing of the building. Landscaping would include a variety of tree and plant species and would be designed to complement the architecture and frame buildings, consistent with the Design Guidelines set forth in the Specific Plan. No conflict with this policy would occur.
LU-F: Encourage undergrounding of utilities on approaches to and within the intersection subareas.	**Consistent.** The proposed project would implement guidelines for placement of utilities underground, where feasible. Existing power poles and overhead wiring located along the project site's frontage with Bolsa Chica Street would be removed and installed underground. All new utility infrastructure for electricity, natural gas, telecommunications, and cable service that is not installed underground within the project site would be screened from public view with a minimum 3-foot-wide landscaped around in accordance with Section 230.76 of the City's Zoning Code. No conflict with this policy would occur.
Goal LU-13: The City provides opportunities for new businesses and employees to ensure a high quality of life and thriving industry.	
LU-D: Improve transit and other alternative transportation options, including shuttles and safe bicycle routes, for employees who live and work in the community. **LU-E:** Do not preclude future mobility technologies in land use planning.	**Consistent.** The proposed project provides sidewalks and walkways throughout the project site promoting connection. In addition, updated sidewalks on Warner Avenue and Bolsa Chica Street will be developed. On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. Additionally, van service would be provided for residents. The project would not make any changes to the public right-of-way in the project vicinity and would not conflict with existing or planned pedestrian, bicycle, or transit facilities. No conflict with these policies would occur.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
Circulation Element	
Goal CIRC-1a: The circulation system supports existing, approved, and planned land uses while maintaining a desired level of service and capacity on streets and at critical intersections.	
CIRC-F: Require development projects to provide circulation improvements to achieve stated City goals and to mitigate to the maximum extent feasible traffic impacts to adjacent land uses and neighborhoods as well as vehicle conflicts related to the project.	**Consistent.** The proposed senior living community would include on-site amenities for residents including recreational areas, exercise areas, dining, and entertainment options thereby reducing the need for residents to travel off-site for such amenities. The proposed project would provide updated sidewalks and walkways throughout the project site promoting connectivity. On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. Additionally, van services would be provided for residents. The proposed project would not make any changes to the public right-of-way in the project vicinity and would not conflict with existing or planned pedestrian, bicycle, or transit facilities. No conflict with this policy would occur.
CIRC-G: Limit driveway access points, require driveways to be wide enough to accommodate traffic flow from and to arterial roadways, and establish mechanisms to consolidate drives where feasible and necessary to minimize impacts to the smooth, efficient, and controlled flow of vehicle, bicycles, and pedestrians.	**Consistent.** The proposed project's circulation design would be developed to avoid pedestrian and vehicular conflict. Vehicle access to the facility would be provided via three driveways on Bolsa Chica Street including one entry-only driveway, one exit-only driveway for the porte cochere, and one full-access driveway for the subterranean parking garage. A passenger drop-off zone for the facility would be located in front of the main entrance along Bolsa Chica Street. A full-access driveway on Warner Avenue would also be provided for emergency and service vehicle use. An additional fire access road with gate would be provided on the south side of the project site, with full-access provided from Bolsa Chica Street. No conflict with this policy would occur.
CIRC-H: Protect residential neighborhoods from adverse conditions associated with cut-through and nonresidential traffic.	**Consistent.** As discussed in CIRC-1G above, the proposed project's circulation design would be developed to avoid pedestrian and vehicular conflict. The circulation design would efficiently serve the senior living community and its residents, and impacts associated with cut-through or nonresidential traffic are not anticipated as a result of project implementation. No conflict with this policy would occur.
Goal CIRC-6: Connected, well-maintained, and well-designed sidewalks, bike lanes, equestrian paths, and waterways allow for both leisurely use and day-to-day required activities in a safe and efficient manner for all ages and abilities.	
CIRC-C: Require new commercial and residential projects to integrate with pedestrian and bicycle networks, and that necessary land is provided for the infrastructure.	**Consistent.** On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. The project would not make any changes to the public right-of-way in the project vicinity and would not conflict with existing

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
	or planned pedestrian, bicycle, or transit facilities. No conflict with this policy would occur.
CIRC-E: Ensure that bicycle and pedestrian facilities comply with accessibility provision of the Americans with Disabilities Act.	**Consistent.** The proposed project would provide pedestrian access to the senior living community through sidewalks along Warner Avenue and Bolsa Chica Street and internal walkways. All sidewalks and walkways would be designed to comply with the accessibility provisions of the Americans with Disabilities Act. No conflict with this policy would occur.
Goal CIRC-7: Designated scenic corridors protect and enhance visual quality and scenic vistas.	
CIRC-A: Establish and implement landscape and urban streetscape design themes for landscape corridors, minor urban scenic corridors, and major urban scenic corridors that create a distinct character for each, enhancing each corridor's surrounding land uses.	**Consistent.** The General Plan identifies Pacific Coast Highway (PCH), located approximately 1.25 miles southwest of the project site, as an informal scenic highway and a major urban scenic corridor. Warner Avenue east of the intersection with Bolsa Chica Street is a City-designated major urban scenic corridor. In addition, segments of Bolsa Chica Street south of the intersection with Warner Avenue and Warner Avenue west of the intersection with Bolsa Chica Street are designated landscape corridors. The proposed project would feature landscaped areas along all project site boundaries, including those along Bolsa Chica Street and Warner Avenue, which would contribute to the design continuity of that corridor and represent an improvement to current conditions. The streetscape design would complement the architecture, frame buildings, and provide trees consistent with the overall low water use and drought tolerant planting concept. No conflict with this policy would occur.
CIRC-B: Require that any bridges, culverts, drainage ditches, retaining walls and other ancillary scenic and landscaped corridor elements be compatible and architecturally consistent with surrounding development and establish design guidelines, to the greatest extent practicable.	**Consistent.** As discussed in CIRC-7A above, the design of the proposed project would be developed consistent with the aesthetic elements of the existing beach community and surrounding area, including landscape corridors. With implementation of the project, runoff from the project site would be collected by inlets, a trench drain, and multiple roof drains and would flow towards either a biofiltration planter or modular wetlands. A new 8-foot-high masonry wall would be installed along the project site's southern boundary and the existing retaining wall and fence along the project site's southern boundary would remain intact. These elements would be designed to be compatible and consistent with the surrounding development and design. No conflict with this policy would occur.
CIRC-F: Continue to locate new and relocated utilities underground within scenic corridors to the greatest extent possible. All other utility features shall be placed and screened to minimize visibility.	**Consistent.** The proposed project would implement guidelines for placement of utilities underground, where feasible. Existing power poles and overhead wiring located along the project site's frontage with Bolsa Chica Street would be removed and installed underground. All new utility infrastructure for electricity, natural gas, telecommunications, and cable service that is not installed underground within the project site would be screened from public view with a minimum 3-foot-wide landscaped area in accordance with Section 230.76 of the City's Zoning Code. No conflict with this policy would occur.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
Environmental Resources and Conservation Element	
Goal ERC-1: Adequately sized and located parks meet the changing recreational and leisure needs of existing and future residents.	
ERC-A: Maintain or exceed the current park per capita ratio of 5.0 acres per 1,000 persons, including the beach, in calculations.	**Consistent.** The proposed project would create a senior living community including 213 living units, multiple restaurant-style dining venues, fitness and wellness center, salon and studio spaces, theater, art room, music room, library, lounge, multipurpose rooms, and outdoor spaces that include gardens, a swimming pool, outdoor exercise area, fire pit, and meditation spaces. These recreational and open space elements would be for private use by residents and not open to the public but are anticipated to reduce the strain on surrounding parks and open spaces as residents would be more likely to use on-site facilities. In addition, the proposed project would be required to pay in-lieu park impact fees to the City as a standard condition of project approval. The fees would be used to improve existing City parks. No conflict with the policy would occur.
ERC-B: Seek opportunities to develop and acquire additional parks and open space in underserved areas where needed, including pocket (mini) parks, dog parks, athletic fields, amphitheaters, gardens, and shared facilities.	**Consistent.** As discussed in ERC-1a above, the proposed project would create a senior living community including outdoor spaces that include gardens, a swimming pool, outdoor exercise area, fire pit, and meditation spaces. These recreational and open space elements would be for private use by residents and not open to the public but are anticipated to reduce the strain on surrounding parks and open spaces as residents would be more likely to use on-site facilities. In addition, the proposed project would be required to pay in-lieu park impact fees to the City as a standard condition of project approval. No conflict with the policy would occur.
ERC-C: Distribute future developed park and recreational sites to equitably serve neighborhood and community needs while balancing budget constraints.	**Consistent.** As discussed in ERC-1a and ERC-1b above, the proposed project would create a senior living community including outdoor spaces that include gardens, a swimming pool, outdoor exercise area, fire pit, and meditation spaces. These recreational and open space elements would be for private use by residents and not open to the public but are anticipated to reduce the strain on surrounding parks and open spaces as residents would be more likely to use on-site facilities. In addition, the proposed project would be required to pay in-lieu park impact fees to the City as a standard condition of project approval. No conflict with the policy would occur.
Goal ERC-4: Air quality in Huntington Beach continues to improve through local actions and interagency cooperation.	
ERC-A: Continue to cooperate with the South Coast Air Quality Management District and other regional, state, and national agencies to enforce air quality standards and improve air quality.	**Consistent.** As discussed in Section 4.2, Air Quality, of this Draft EIR, the proposed project would be required to comply with all applicable regulatory compliance measures pertaining to air quality set forth by the South Coast Air Quality Management District (SCAQMD) and other regional, State, and national agencies. No conflict with this policy would occur.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
ERC-B: Continue to require construction projects to carry out best available air quality mitigation practices, including use of alternative fuel vehicles and equipment as feasible.	**Consistent.** As discussed in Section 4.2, Air Quality, of this Draft EIR, the proposed project would comply with regulatory requirements to address the potential construction and operational air quality impacts of the proposed project. No conflict with this policy would occur.
ERC-C: Enforce maximum idling time regulations for off road equipment.	**Consistent.** As discussed in Section 4.2, Air Quality, of this Draft EIR, the proposed project would comply with regulatory requirements to address the potential construction air quality impacts of the proposed project. This includes idling time regulations for off road construction equipment. No conflict with this policy would occur.
ERC-D: Require grading, landscaping, and construction activities to minimize dust while using as little water as possible.	**Consistent.** As discussed in Section 4.2, Air Quality, of this Draft EIR, the proposed project would comply with regulatory requirements to address the potential construction and operational air quality impacts of the proposed project. This includes compliance with all the fugitive dust control measures listed within SCAQMD Rule 403. No conflict with this policy would occur.
ERC-E: Continue to explore and implement strategies to minimize vehicle idling, including traffic signal synchronization and roundabouts.	**Consistent.** As discussed in Section 4.2, Air Quality, of this Draft EIR, the proposed project would comply with regulatory requirements to address the potential construction and operational air quality impacts of the proposed project. No traffic signals or roundabouts are proposed for the project site, and circulation on and around the project site would be designed to increase vehicle efficiency and minimize vehicle idling. No conflict with this policy would occur.
ERC-F: Minimize exposure of sensitive land uses to toxic air contaminants by locating new pollutant sources away from sensitive uses and disproportionally affected communities and by encouraging existing pollutant sources to reduce emissions when changes to existing operations or permits are proposed.	**Consistent.** Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD rules for standard construction practices. In addition, the emissions from operations resulting from implementation of the proposed project are not expected to exceed the SCAQMD's project level thresholds. No conflict with this policy would occur.
Goal ERC-5: Greenhouse gas emissions from activities occurring in Huntington Beach are reduced to levels consistent with state goals.	
ERC-C: Explore strategies to reduce greenhouse gas emissions from off-road construction and landscaping equipment.	**Consistent.** As discussed in Section 4.6, Greenhouse Gas Emissions, of this Draft EIR, construction activities would result in the temporary generation of GHGs through worker vehicles and construction equipment. Measures to reduce these potential impacts are also discussed in Section 4.6. In addition, the proposed project includes design elements to meet sustainability goals, including the California Green Building Standards Code (CALGreen Code), and Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings. No conflict with this policy would occur.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
Goal ERC-12: New buildings are increasingly energy efficient and ultimately equipped to support zero net energy performance.	
ERC-A: Create incentives for proposed development and reuse projects to exceed the minimum energy efficiency standards established in the California Building Standards Code when constructing new or significantly renovated residential and nonresidential building, including achieving zero net energy performance in advance of state-level targets. **ERC-B:** Promote the use of passive solar design techniques and technologies in new buildings to reduce energy use for heating and cooling.	**Consistent.** As discussed in Section 4.6, Greenhouse Gas Emissions, the proposed project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen Code). The proposed project would also incorporate energy and water conservation measures, green building features, and Low Impact Development (LID) design features. No conflict with this policy would occur.
Goal ERC-15: Adequate water supply is available to the community through facilities, infrastructure, and appropriate allocation.	
ERC-B: Monitor demands on the water system, manage new development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the system, and maintain and expand water supply and distribution facilities.	**Consistent.** The Utilities Division of the City's Public Works Department currently provides potable water and wastewater service to the project site. The proposed project would connect to an existing 8-inch water line running parallel to Warner Avenue as well as to an existing 12-inch water line running parallel to Bolsa Chica Street. The proposed project would also perpendicularly extend an existing 8-inch sewer lateral line from the north side of the facility to connect to an existing 18-inch sewer line running parallel to Warner Avenue. Additional sewer points of connection would be provided along the east side of the project connecting to an existing 8-inch sewer main running parallel to Bolsa Chica Street. The proposed project would not require new or expanded off-site water or wastewater facilities. The City has sufficient capacity to provide water service for the proposed project and existing off-site infrastructure exists to provide water and wastewater services to the project site. No conflict with this policy would occur.
Goal ERC-16: Water conservation efforts are maximized in every aspect of use.	
ERC-A: Continue to require incorporation of feasible and innovative water conservation features in the design of new development and reuse projects. **ERC-C:** Require the use of recycled water for landscaping irrigation, grading, and other non-contact uses in new development or substantial retrofit projects where recycled water is available or expected to be available.	**Consistent.** As described in Section 4.10, Utilities and Service Systems, of this Draft EIR, the proposed project would comply with Sections 4.303 and 4.304 of the CALGreen Code, which require indoor and outdoor water conservation measures such as low flush toilets, aerators on sinks and shower heads, other water-efficient appliances, and water-efficient automatic irrigation system controllers. The proposed project would also comply with the City's water conservation measures and be designed in compliance with the City's Water Efficient Landscape Ordinance (Municipal Code 14.52). This would require the installation of water efficient irrigation and landscaping, including native and drought resistant plants. No recycled water is available for the project site, and no conflict with these policies would occur.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
Natural and Environmental Hazards Element	
Goal HAZ-4: The risk of urban fires is reduced through effective building design and effective fire services.	
HAZ-A: Ensure that all new construction is designed for easy access by fire and other emergency response personnel.	**Consistent.** With implementation of the proposed project, vehicle access to the senior living community would be provided via three driveways on Bolsa Chica Street (one entry-only driveway and one exit-only driveway for the porte cochère, and one full-access driveway for the subterranean parking garage). The proposed project would also provide a full-access driveway on Warner Avenue for emergency and service vehicles. An additional fire access road would be provided on the south side of the project site, with access provided from Bolsa Chica Street. This driveway would feature a gate and a turn-around would be provided at this location. An 8-inch fire service point of connection would be provided at the entrance to the fire access road off of Warner Avenue and at the entrance to the fire access road off of Bolsa Chica Street. An existing fire hydrant would be relocated to the east side of the facility near the entrance to the subterranean parking garage off of Bolsa Chica Street. The proposed project would reconnect an existing fire hydrant lateral line to an existing water line running parallel to Warner Avenue. Additional fire hydrants would be provided along the north side of the facility near the fire access road entrance off of Warner Avenue, at the northeast corner of the facility along Bolsa Chica Street, and at the southwest corner of the fire access road off of Bolsa Chica Street. The fire access roads would meet the California Fire Code Section 503.1.1 and the City of Huntington Beach Fire Department Specification No. 401 requirements for location, width, and turning radii. No conflict with this policy would occur.
Noise Element	
Goal N-1: Noise-sensitive land uses are protected in areas with acceptable noise levels.	
N-A: Maintain acceptable stationary noise levels at existing noise-sensitive land uses such as schools, residential areas, and open spaces. **N-B:** Incorporate design and construction features into residential, mixed-use, commercial, and industrial projects that shield noise-sensitive land uses from excessive noise.	**Consistent.** Design elements in the Specific Plan would include measures to maintain acceptable stationary noise levels at existing noise-sensitive land uses as discussed in Section 4.8, Noise, of this Draft EIR. Noise-generating construction activities would be limited to the hours specified in the Municipal Code and implementation of Standard Condition NOI-1, as described in Section 4.8, would further reduce construction noise to the extent feasible and reasonable. No conflict with these policies would occur.
Goal N-2: Land use patterns are compatible with current and future noise levels.	
N-A: Require an acoustical study for proposed projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-2. The acoustical study shall be performed in accordance with the requirements set forth in this Noise Element.	**Consistent.** As part of the proposed project actions, the Applicant is requesting a General Plan Amendment to change the land use designation from General Commercial (CG) to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). As identified in Table N-2, mixed-use land uses allow for exterior noise levels up to 70 A-weighted decibel equivalent continuous sound level

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
N-B: Allow for higher exterior noise level standard for infill projects in existing residential areas adjacent to major arterials if no feasible mechanism exists to meet exterior noise standards.	(dBA L_{eq}) and noise levels between 71 and 75 dBA L_{eq} are conditionally acceptable. Based on the analysis in Section 4.8, Noise, average noise levels during construction would be 76 dBA L_{eq} and average noise levels during operation would be 41 dBA L_{eq} after distance attenuation and additional reducing from screening walls and building facades. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project area under existing conditions, the noise impacts would no longer occur once project construction is completed, and construction-related noise impacts would remain below the 80 dBA L_{eq} 1-hour construction noise level criteria established by the Federal Transit Administration (FTA). Projected noise levels would not exceed the maximum allowable levels identified in Table N-2 for mixed-use land uses and no acoustical study is necessary. No conflict with these policies would occur.
Goal N-3: The community is not disturbed by excessive noise from mobile sources such as vehicles, rail traffic, and aircraft.	
N-A: Mitigate noise created by any new transportation noise source so that it does not exceed the exterior or interior sound levels specific in Table N-2.	**Consistent.** As discussed in N-2A and N-2B above, Table N-2 in Section 4.8, Noise, of this Draft EIR, identifies a maximum exterior noise level of up to 70 dBA L_{eq} for mixed-use land designations. Based on the analysis in Section 4.8, Noise, average noise levels during operation would be 41 dBA L_{eq} after distance attenuation and additional reducing from screening walls and building facades. This projected noise levels would not exceed the standards identified in Table N-2. Additionally, the proposed project would result in a net trip reduction of 410 average daily trips (ADT). This reduction in ADT would decrease the traffic noise at the project site compared with the existing commercial uses on the project site. No conflict with this policy would occur.
N-B: Prioritize use the site planning and project design techniques to mitigate excessive noise. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project. **N-C:** Employ noise-reducing technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise-sensitive land uses.	**Consistent.** As discussed in Section 4.8, Noise, average noise levels during operation would be 41 dBA L_{eq} after distance attenuation and additional reducing from screening walls and building facades. A new 8-foot-high masonry wall would be installed along the project site's southern boundary and the existing retaining wall and fence along the project site's southern boundary would remain intact. Operational noise levels would not exceed the City's exterior daytime or nighttime noise standards of 55 dBA L_{eq} and 50 dBA L_{eq}, respectively. No conflict with these policies would occur.
Goal N-4: Noise from construction activities associated with discretionary projects, maintenance vehicles, special events, and other nuisances is minimized in residential areas and near noise-sensitive land uses.	
N-A: Reduce construction, maintenance, and nuisance noise at the source as the first and preferred strategy to reduce noise conflicts. **N-B:** Require that new discretionary uses and special events such as restaurants, band, entertainment parking	**Consistent.** As discussed in N-2A and N-2B above, Table N-2 in Section 4.8, Noise, of this Draft EIR, identifies a maximum exterior noise level of up to 70 dBA L_{eq} for mixed-use land designations and noise levels between 71 and 75 dBA L_{eq} are conditionally acceptable. Based on the analysis in Section 4.8, Noise, average noise levels during construction would be 76

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
facilities, and other commercial uses or beach events where large numbers of people may be present adjacent to sensitive noise receptors comply with the noise standards in Table N-2 and the City Noise Ordinance. **N-C:** Encourage shielding for construction activities to reduce noise levels and protect adjacent noise-sensitive land uses. **N-D:** Limit allowable hours for construction activities and maintenance operations located adjacent to noise-sensitive land uses.	dBA $L_{eq.}$ Noise-generating construction activities would be limited to the hours specified in the Municipal Code and compliance with the City's Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the project vicinity, construction noise would cease to occur once project construction is completed. In addition, compliance with appropriate construction times as specified in Standard Condition NOI-1 would reduce noise impacts to the greatest extent feasible during construction. As discussed previously, average noise levels during operation would be 41 dBA L_{eq} after distance attenuation and additional reducing from screening walls and building facades. This projected noise level would not exceed the standards identified in Table N-2. Furthermore, operational noise levels would not exceed the City's exterior daytime or nighttime noise standards of 55 dBA L_{eq} and 50 dBA L_{eq}, respectively. No conflict with these policies would occur.
Public Services and Infrastructure Element	
Goal PSI-1: Public safety services, education, facilities, and technology protect the community from illicit activities and crime.	
PSI-A: Consider the relationship between the location and rate of planned growth and resulting demands on police facilities and personnel. **PSI-D:** Ensure that new development and reuse projects and existing land uses promote community safety.	**Consistent.** As discussed in Section 4.15, Public Services, of this Draft EIR, the proposed project is expected to generate the typical range of service calls for residential developments. The proposed project would result in a less than significant impact to the Huntington Beach Police Department's (HBPD) level of service. Compliance with Standard Condition (SC) PS-2, which requires payment of Police Facilities Development Impact Fees per Huntington Beach Municipal Code Chapter 17.75, would ensure that adequate police protection services would be provided to the proposed project. No conflict with these policies would occur.
Goal PSI-2: Huntington Beach residents and property owners are protected from fire hazards and beach hazards, and adequate marine safety and emergency medical services are provided by modern facilities and advanced technology.	
PSI-A: Consider the relationship between the location and rate of planned growth and resulting demands on fire, marine safety, and EMA facilities and personnel. **PSI-E:** Ensure that new development and reuse projects and existing land uses promote fire safety.	**Consistent.** As discussed in Section 4.15, Public Services, of this Draft EIR, the proposed project is expected to generate the typical range of service calls for residential developments, including structural fires; emergency medical and rescue services; and hazardous materials inspections and response. The proposed project would result in a less than significant impact to the Huntington Beach Fire Department's (HBFD) level of service. Compliance with Standard Condition (SC) PS-1, which requires payment of Fire Facilities Development Impact Fee per Huntington Beach Municipal Code Chapter 17.74, would ensure that adequate fire protection services would be provided to the proposed project. No conflict with these policies would occur.

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
PSI-G: Ensure development provides adequate access for public safety responders in the event of an emergency.	**Consistent.** As discussed in HAZ-4A above, the proposed project would provide a full-access driveway on Warner Avenue for emergency and service vehicles and an additional fire access road on the south side of the project site, with access provided from Bolsa Chica Street. The driveway on Warner Avenue would feature a gate and a turn-around. An 8-inch fire service point of connection would be provided at the entrance to the fire access road off of Warner Avenue and at the entrance to the fire access road off of Bolsa Chica Street. No conflict with this policy would occur.
Goal PSI-5: A range of educational programs and facilities meets the needs of all ages of the community.	
PSI-D: Ensure that developers consult with the appropriate school district with the intent to mitigate a potential impact of school facilities prior to project approval by the City.	**Consistent.** As discussed in Section 4.15, Public Services, of this Draft EIR, the proposed project would result in a less than significant impact to school facilities in the area. The proposed senior living community would prohibit school-age children from residing on the project site and therefore would not result in an increased need for school facilities. Furthermore, the proposed project would comply with Standard Condition (SC) PS-3, which requires payment of School Development Impact Fees. No conflict with these policies would occur.
Goal PSI-7: The flood control system supports permitted land uses while preserving public safety.	
PSI-C: Monitor demands and manage future development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the storm drainage system. **PSI-E:** Control surface runoff water discharge into the stormwater conveyance system to comply with the City's National Pollutant Discharge Elimination System Permit and other regional permits issued by the Santa Ana Regional Water Quality Control Board.	**Consistent.** The proposed project would generate storm water pollutants during grading and construction activities on the site. However, preparation and implementation of the Storm Water Pollution Prevention Plan (SWPPP) in compliance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit would reduce pollutants in the storm water. Runoff on the project site is currently collected by an existing 48-inch storm drain system located on Bolsa Chica Street flowing north, prior to discharging into the Sunset Channel. The Sunset Channel flows into Huntington Harbour and Anaheim Bay. With implementation of the proposed project, runoff from the project site would be collected by inlets, a trench drain, and multiple roof drains and would flow towards either a biofiltration planter or modular wetlands, or a combination of both, for treatment. Following treatment, runoff would be directed into an existing catch basin located on Warner Avenue, where it would be collected into an existing 48-inch storm drain system. No conflict with these policies would occur.
Goal PSI-9: An adequate and orderly system for solid waste collection and disposal meets the demands of new development and reuse projects, existing land uses, and special events.	
PSI-A: Ensure that new development and reuse projects provide adequate space for recycling and organics collection activities to support state waste reduction goals.	**Consistent.** The City of Huntington Beach contracts third-party services for solid waste collection, recycling, green waste collection, and composting services. Solid waste is taken to a transfer station in Huntington Beach, where it is processed and transported to the Frank Bowerman Landfill in Irvine. The proposed project will provide adequate space for

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
	recycling and organics collection activities, and no conflict with this policy would occur.
Goal PSI-10: Superior electricity, natural gas, telephone, and date services improve quality of life and support economic development.	
PSI-A: Continue to consult with dry utility service providers to ensure that the community's current and future needs are met. **PSI-B:** Continue to require utilities to be placed underground as part of new development projects. **PSI-E:** Encourage integrated and cost-effective design and technology features within new development and reuse projects to minimize demands on dry utility networks.	**Consistent.** The design and configuration of dry (power and communications) and wet (water, gas, and sewer) utilities would take into account functionality and aesthetics, including street landscape and view protection and enhancement. Existing power poles and overhead wiring located along the project site's frontage with Bolsa Chica Street would be removed and installed underground. All new utility infrastructure for electricity, natural gas, telecommunications, and cable service that is not installed underground within the project site would be screened from public view with a minimum 3-foot-wide landscaped area in accordance with Section 230.76 of the City's Zoning Code. No conflict with these policies would occur.
Housing Element	
Goal 1: Maintain and enhance the quality and affordability of existing housing in Huntington Beach.	
Policy 1.1 Neighborhood Character: Preserve the character, scale and quality of established residential neighborhoods.	**Consistent.** As discussed in Section 4.1, Aesthetics, the proposed project would be designed to reflect a traditional style of architecture that would be reflective of the City's beach lifestyle and complement and enhance the architectural style of the larger surrounding area. The proposed design would incorporate a variety of building materials and would use multilevel rooflines and varying building setbacks along Warner Avenue and Bolsa Chica Street to break up the scale and massing of the building. Landscaping would include a variety of tree and plant species and would be designed to complement the architecture, frame buildings, and be consistent with the overall character of the project area and surrounding neighborhoods. No conflict with this policy would occur.
Goal 2: Provide adequate housing sites through appropriate land use, zoning, and specific plan designations to accommodate Hunting Beach's share of regional housing needs.	
Policy 2.1 Variety of Housing Choices: Provide site opportunities for development of housing that responds to diverse community needs in terms of housing types, cost and location, emphasizing locations near services and transit that promote walkability.	**Consistent.** The proposed senior living community would develop a total of 213 living units, including 28 Memory Care units, 62 Assisted Living units, and 123 Independent Living units in order to the serve the senior residents of Huntington Beach. Additionally, the proposed senior living community would include on-site amenities for residents including recreational areas, exercise areas, dining, and entertainment options thereby reducing the need for residents to travel off-site for such amenities. The proposed project would provide updated sidewalks and walkways throughout the project site promoting connectivity. On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the Orange County Transportation Authority (OCTA) operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and

Table 4.7.B: General Plan Consistency Analysis

General Plan Policy or Goal	Project Consistency
	southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. Additionally, van services would be provided for residents. No conflict with this policy would occur.
Goal 5. Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations, so that residents can reside in the housing of their choice.	
Policy 5.3 Housing for Persons with Disabilities: Support the provision of permanent, affordable, and accessible housing that allows persons with disabilities to live independent lives. Provide assistance to residents in making accessibility improvements to their homes.	**Consistent.** The proposed senior living community would develop a total of 213 living units, including 28 Memory Care units, 62 Assisted Living units, and 123 Independent Living units in order to the serve the senior residents of Huntington Beach. No conflict with this policy would occur.
Goal 6: Promote a healthy and sustainable Huntington Beach through support of housing which minimizes reliance on natural resources and automobile use.	
Policy 6.1 Green Building: Implement the City's Green Building Program to ensure new development is energy and water efficient. **Policy 6.2 Energy Efficiency and Alternative Energy Sources:** Promote modifications to increase energy efficiency and the use of alternative energy sources such as solar energy, cogeneration, and non-fossil fuels.	**Consistent.** As discussed in Section 4.6, Greenhouse Gas Emissions, the proposed project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen Code). The proposed project would also incorporate energy and water conservation measures, green building features, and Low Impact Development (LID) design features. As described in Section 4.10, Utilities and Service Systems, of this Draft EIR, the proposed project would comply with Sections 4.303 and 4.304 of the CALGreen Code, which require indoor and outdoor water conservation measures such as low flush toilets, aerators on sinks and shower heads, other water-efficient appliances, and water-efficient automatic irrigation system controllers. The proposed project would also comply with the City's water conservation measures and be designed in compliance with the City's Water Efficient Landscape Ordinance (Municipal Code 14.52). This would require the installation of water efficient irrigation and landscaping, including native and drought resistant plants. No conflict with these policies would occur.
Policy 6.3 Healthy Community: Promote healthy living and physical activity through decisions on the location, site planning, and design of housing and mixed-use development. **Policy 6.4: Transportation Alternatives and Walkability:** Incorporate transit and other transportation alternatives including walking and bicycling into the design of new development, particularly in area within a half mile of designated transit stops.	**Consistent.** As discussed in Policy 2.1 above, the proposed senior living community would include on-site amenities for residents including recreational areas, exercise areas, dining, and entertainment options thereby reducing the need for residents to travel off-site for such amenities. The proposed project would provide updated sidewalks and walkways throughout the project site promoting connectivity. On street Class II bike lanes are provided on each side of Warner Avenue in the project vicinity. In addition, the OCTA operates bus services (Route 72) along Warner Avenue. Bus stops are provided at the northwest and southeast corners of the intersection of Bolsa Chica Street and Warner Avenue. Additionally, van services would be provided for residents. No conflict with these policies would occur.

Source: City of Huntington Beach General Plan, as amended.

Pursuant to Threshold 4.7.2, the proposed project would generally be consistent with the applicable goals and policies of the City of Huntington Beach General Plan as described in Table 4.7.B above.

Even if the proposed project may conflict with a distinct policy or goal, the proposed project is nonetheless consistent with the Huntington Beach General Plan because after considering all aspects of the proposed development, the proposed project would further the objectives and policies of the General Plan without obstructing their attainment. A given project need not be in perfect conformity with every general plan policy to be consistent, which is particularly applicable to vague, general polices that "encourage" actions.

The proposed project would construct a five-story, approximately 298,000-square-foot State-licensed senior living community consisting of 213 total living units on an approximately 3.10-acre parcel. The project site is currently fully developed with commercial (retail and office) uses and an associated surface parking lot. The existing commercial uses total approximately 55,000 square feet. The commercial uses are contained in two buildings comprised of a two-story commercial building fronting on Warner Avenue and a larger three-story office building fronting on Bolsa Chica Street. Amenities for residents are anticipated to include multiple restaurant-style dining venues, fitness and wellness center, salon and studio spaces, theater, art room, music room, library, lounge, and multi-purpose rooms. Outdoor spaces are anticipated to include a memory care garden, swimming pool with outdoor exercise area, outdoor seating area with fire pit, outdoor dining areas, meditation spaces, and roof decks.

The project site is currently designated and zoned CG – Commercial General. The Commercial General designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/motels, timeshares, cultural facilities, institutional, health care, government offices, and educational uses. The maximum Floor Area Ratio (FAR) is 1.5, and the maximum building height of 50 feet. As currently designated, the proposed project would be inconsistent with the City's established development standards under the project site's current CG zoning.

However, the Applicant is requesting a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). The land use designation change to MU would allow development and operation of a Residential Care Community for the Elderly and independent living apartments with approval of a Conditional Use Permit. A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. The Specific Plan would increase the allowable FAR to 2.5 and the maximum building height to 65 feet.

Therefore, approval of the General Plan Amendment to change the land use designation to MU and the Zoning Map Amendment to change the zoning to SP would render the proposed project consistent with the City's established development standards, and no mitigation would be required.

4.7.7 Level of Significance Prior to Mitigation

Although the project is currently inconsistent with the City's established development standards for the current land use and zoning designations, approval of the proposed General Plan Amendment and Zoning Map Amendment would render the proposed project consistent with the General Plan and Zoning Code. There would be no potentially significant impacts related to land use and planning.

4.7.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

No standard conditions, regulatory compliance measures, or mitigation measures are applicable to the proposed project pertaining to land use and planning.

4.7.9 Level of Significance after Mitigation

There would be no significant unavoidable impacts of the proposed project related to land use and planning, and no mitigation is required.

4.7.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines,* cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for land use. The cumulative impact area for land use for the proposed project is the City of Huntington Beach. Several mixed use, residential, commercial and industrial development projects are approved, pending, or in the planning stages in the City. All proposed development in the City, would be subject to its own General Plan consistency analysis and would be reviewed for consistency with adopted land use plans and policies.

As described above, the proposed project would include a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP). A Specific Plan is proposed to adopt site development standards consistent with the proposed project design. Approval of the General Plan Amendment and Zoning Amendment would render the proposed project consistent with the City's established development standards, and no mitigation would be required. Therefore, cumulative land use impacts with respect to consistency with adopted land use plans and policies would be less than significant.

The proposed project would include land uses that are consistent with the surrounding development and therefore would not contribute to a pattern of development that would adversely impact adjacent land uses or conflict with existing or planned development. Currently, the City has a lack of existing and proposed senior housing opportunities. Development of the proposed project would aid in meeting the existing and future senior housing needs in the City. As discussed further above, proposed on-site improvements would be consistent with the long-range planning goals of local and regional governing plans and policies for the surrounding area.

There are no incompatibilities between the proposed project and planned future projects in the City, which primarily include mixed-use and residential developments. As stated above, proposed projects in the City would be reviewed for consistency with adopted land use plans and policies by the City. For this reason, current and future projects are anticipated to be consistent with applicable General Plan and zoning requirements or would be subject to allowable exceptions. Further, each discretionary project would be subject to CEQA, mitigation requirements, and design review, as applicable. Therefore, the proposed project would not contribute a significant cumulative land use compatibility impact in the City, and no mitigation is required.

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4.8 NOISE

This section of the Draft Environmental Impact Report (EIR) evaluates the potential short-term and long-term noise and vibration impacts associated with the construction and operation of the proposed Bolsa Chica Senior Living Community Project (proposed project). This analysis is intended to satisfy the City of Huntington Beach's (City's) requirement for a project noise impact analysis by examining the short-term construction and long-term operational impacts on on-site and off-site land uses involving sensitive receptors and evaluating the effectiveness of proposed mitigation measures. Supporting calculations are presented in Appendix I of this Draft Environmental Impact Report (EIR).

4.8.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project and a Scoping Meeting was held on November 10, 2022. The City received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to noise and/or vibration.

4.8.2 Fundamentals of Noise and Vibration

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

4.8.2.1 Characteristics of Sound

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

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

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales used by cities and counties in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours), and a

10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The City uses the CNEL noise scale for long-term noise impact assessment. Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels (3 dB or greater) are considered potentially significant.

4.8.2.2 Characteristics of Vibration

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

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

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

$$L_V = 20 \log10 [V/Vref]$$

where L_V is the velocity in decibels (VdB), "V" is the RMS velocity amplitude, and "Vref" is the reference velocity amplitude, or 1 x 10-6 inches per second (inch/sec) used in the United States.

4.8.3 Existing Environmental Setting

The project site is located at the southwest corner of Bolsa Chica Street and Warner Avenue on an approximately 3.10-acre parcel. Currently, the overall site is developed with commercial (retail and office) uses and an associated surface parking lot. The surrounding uses include the following:

- North: Existing mix of retail businesses, including Walgreens and CVS, opposite Warner Avenue
- South: Existing industrial property
- East: Existing automotive repair business and single-family homes opposite Bolsa Chica Street
- West: Existing multi-family residences (two-story apartment complex)

The noise levels at the project site and surrounding areas are dominated by traffic on Warner Avenue and Bolsa Chica Street and parking lot activities at the existing commercial uses.

4.8.3.1 Sensitive Uses in the Project Vicinity

The closest sensitive uses in the vicinity of the project site are the single-family homes on the opposite side of Bolsa Chica Street, approximately 60 feet east of the project site boundary, and the multi-family residences approximately 80 feet west of the project site boundary.

4.8.3.2 Overview of the Existing Noise Environment

In order to assess the existing noise conditions in the area, noise measurements were gathered at the project site, the locations of which are shown in Figure 4.8-1. Two long-term 24-hour measurements (LT-1 and LT-2) were taken from July 26 to July 27, 2022. The results of the noise measurements are shown in Table 4.8.A below.

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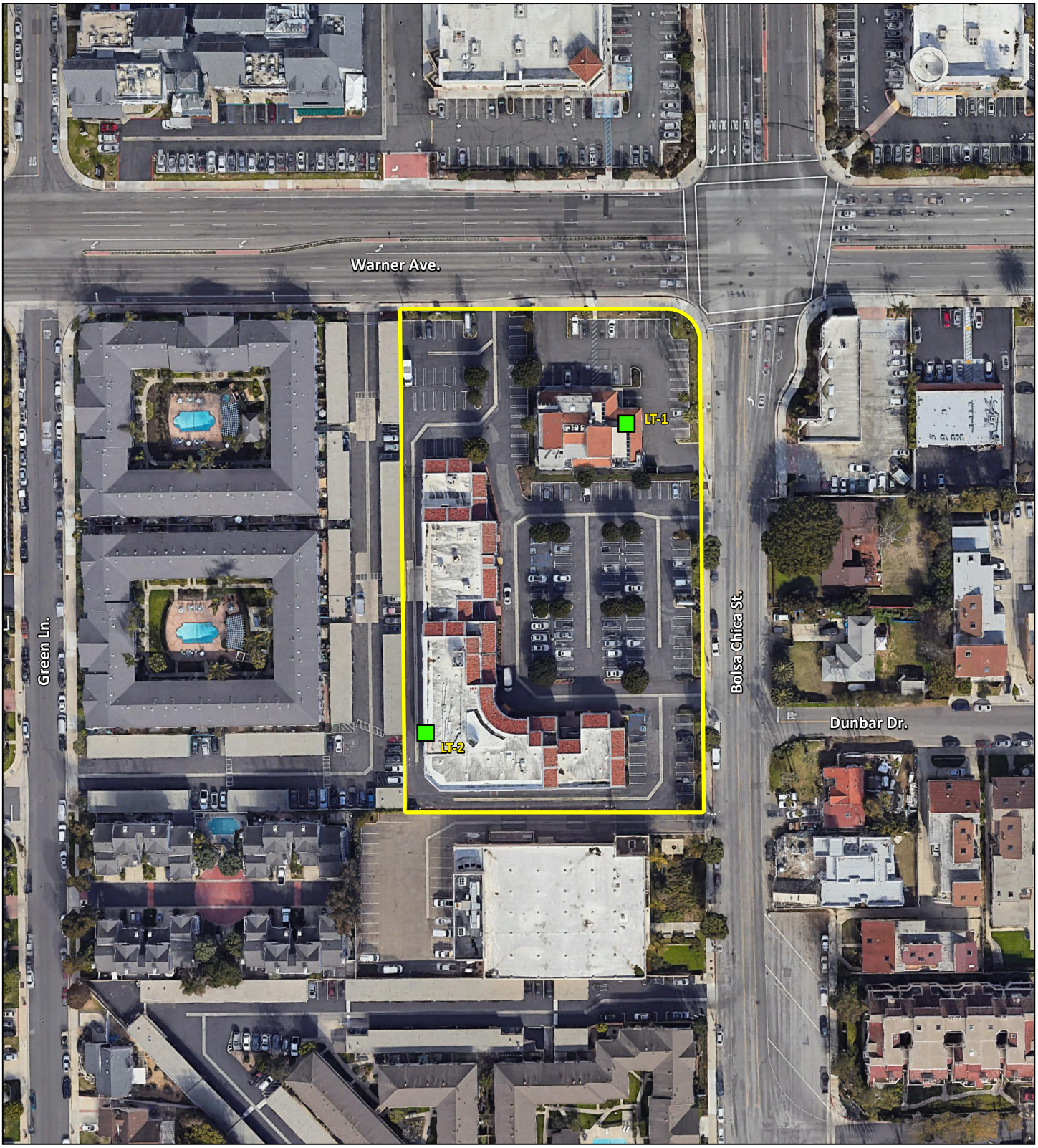

LSA

LEGEND

Project Site

LT-1 Long-term Noise Monitoring Location

FIGURE 4.8-1

0 75 150

FEET

SOURCE: Google Earth, 2021

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Bolsa Chica Senior Living Community

Noise Monitoring Locations

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Table 4.8.A: Existing Noise Level Measurements

Location	Description	Range of Daytime Noise Levels (dBA L_{eq})	Range of Evening Noise Levels (dBA L_{eq})	Range of Nighttime Noise Levels (dBA L_{eq})	Average Daily Noise Level (dBA CNEL)
LT-1	Northeast corner of project site on the second story of the building near a window, approximately 100 feet away from Bolsa Chica Street centerline and approximately 155 feet away from Warner Avenue centerline.	62.9–65.3	62.3–65.6	50.9–65.0	67.6
LT-2	Southwest corner building of the project site in the carport, approximately 275 feet away from Bolsa Chica Street centerline.	51.0–63.7	52.7–56.3	45.5–52.7	58.2

Source: LSA Associates, Inc., July 26-July 27, 2022.
dBA = A-weighted decibel(s)
L_{eq} = average noise level

4.8.4 Regulatory Setting

4.8.4.1 Applicable Noise Standards

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

City of Huntington Beach General Plan Noise Element. The City of Huntington Beach General Plan 2017 Noise Element describes the City's noise environment. Table 4.8.B below presents the Land Use-Noise Compatibility Standards as presented in the Noise Element. These standards are used in the land planning stage of the development process to identify project opportunities and constraints and may be used to determine whether a certain type of land use would be compatible with the existing and future noise environment. Proposed land uses should be compatible with existing and forecasted future noise levels. Projects with incompatible land use-noise exposures should incorporate noise attenuation and/or control measures within the project design that reduce noise to an acceptable interior level of 45 dBA CNEL or lower, as required by State regulations (California Code of Regulations Title 24) for residential uses. The City's compatibility standards provide for normally acceptable conditions and are generally based on State recommendations and City land use designations. These standards, which use the CNEL noise descriptor, are intended to be applicable for land use designations exposed to noise levels generated by transportation-related sources. Land use compatibility noise exposure limits are generally established as 60 dBA CNEL for low-density and medium-density residential uses. However, for medium-high density residential, high-density residential, and mixed-use land use designations, 65 dBA CNEL is permitted. Higher exterior noise levels are more often permitted for multi-family housing and housing in mixed-use contexts than for single-family land uses. This is because multi-family complexes are generally located in transitional areas between single-family and commercial districts or near major arterials served by transit, and a more integrated mix of residential and commercial activity (accompanied by higher noise levels) is often desired in such locations.

Table 4.8.B: Land-Use Noise Compatibility Standards

General Plan Land Use Designation	Proposed Uses	Exterior Normally Accetpable[1] (dBA CNEL)	Exterior Conditionally Accetpable[2] (dBA CNEL)	Exterior Normally Unaccetpable[3] (dBA CNEL)	Interior Accetpable[2] (dBA CNEL)
Residential					
Low Density	Single-family, mobile home, senior housing	Up to 60	61 – 65	≥66	45
Medium Density, Medium High Density, High Density	Attached single-family, duplex, townhomes, multi-family, condominiums, apartments	Up to 65	66 – 70	≥71	45
Mixed-Use					
Mixed-Use	Combination of commercial and residential uses	Up to 70	71 – 75	≥76	45
Commercial					
Neighborhood Commercial, General Commercial	Retail, professional office, health services, restaurant, government offices, hotel/motel	Up to 70	71 – 75	≥76	45
Visitor Commercial	Hotel/motel, timeshares, recreational commercial, cultural facilities	Up to 65	66 – 75	>75	45
Office	Office, financial institutions	N/A	N/A	N/A	N/A
Public / Semi-public					
Semi-public (School)	Schools	Up to 60	61 – 65	≥66	45
Semi-public (Other)	Hospitals, churches, cultural facilities	Up to 65	66 – 70	≥71	45
Public	Public utilities, parking lot	N/A	N/A	N/A	N/A
Industrial					
Research and Technology	Research and development, technology, warehousing, business park	N/A	N/A	N/A	N/A
Industrial	Manufacturing, construction, transportation, logistics, auto repair	N/A	N/A	N/A	N/A

Table 4.8.B: Land-Use Noise Compatibility Standards

General Plan Land Use Designation	Proposed Uses	Exterior Normally Accetpable[1] (dBA CNEL)	Exterior Conditionally Accetpable[2] (dBA CNEL)	Exterior Normally Unaccetpable[3] (dBA CNEL)	Interior Accetpable[2] (dBA CNEL)
Open Space and Recreational					
Conservation	Environmental resource conservation	N/A	N/A	N/A	N/A
Park	Public park	Up to 65	65 – 75	≥76	N/A
Recreation	Golf courses, recreational water bodies	Up to 65	65 – 75	≥76	N/A
Shore	City and state beaches	N/A	N/A	N/A	N/A

Source: City of Huntington Beach General Plan Noise Element.
1. Normally acceptable means that land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances.
2. Conditionally acceptable means that land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the project or noise levels in exterior areas can be mitigated to the normally acceptable level. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
3. Normally unacceptable means that land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the project in addressing other General Plan goals and policies outweigh concerns about noise, the use should be established only where exterior areas are omitted from the project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
4. Interior acceptable means that the building must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use
dBA CNEL = A-weighted decibel Community Noise Equivalent Level
N/A = not applicable

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

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

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

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

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

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

- A: Require an acoustical study for proposed projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-2 (see Table 4.8.B of this Draft EIR section). The acoustical study shall be performed in accordance with the requirements set forth in this Noise Element.

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

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

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

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

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

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

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

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

City of Huntington Beach Municipal Code. The Huntington Beach Municipal Code, Section 8.40.050, Exterior Noise Standards, presents the exterior noise levels standards by land use as shown in Table 4.8.C.

Table 4.8.C: Exterior Noise Standards (dBA)

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

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

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

- For a cumulative period of more than 30 minutes in any hour;
- Plus five db(A) for a cumulative period of more than 15 minutes in any hour;
- Plus 10 db(A) for a cumulative period of more than five (5) minutes in any hour;
- Plus 15 db(A) for a cumulative period of more than one (1) minute in any hour; or
- Plus 20 db(A) for any period of time.

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

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

Federal Transit Administration. Given that the Municipal Code exempts construction activities and that no standard criteria for assessing construction noise impacts is provided, for the purposes of determining the amount of noise increase experienced at noise-sensitive uses surrounding the project, the guidelines within the 2018 FTA *Transit Noise and Vibration Impact Assessment Manual* are used in this analysis for construction noise impact identification. The guidelines for construction noise identify a noise level criterion of 80 dBA L_{eq} for residential uses. This provides reasonable criterion for assessing construction noise impacts based on the potential for adverse community reaction when the noise criterion is exceeded.

4.8.4.2 Applicable Vibration Standards

Due to the lack of vibration standards developed for projects similar to the proposed project, vibration standards included in the FTA Manual are used in this analysis to determine ground-borne vibration impacts, as shown in Table 4.8.D.

Table 4.8.D: Construction Vibration Damage Criteria

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

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) re 1 micro-inch/second.
FTA = Federal Transit Administration
inch/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity in decibels

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. Table 4.8.D lists the potential vibration damage criteria associated with construction activities, as suggested in the FTA Manual. FTA guidelines show that a vibration level of up to 102 vibration velocity in decibels (VdB) (an equivalent to 0.5 inch per second [inch/sec] in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 inch/sec in PPV).

4.8.5 Methodology

Evaluation of noise and vibration impacts associated with the proposed project includes the following:

- Determination of the short-term construction noise and vibration impacts.
- Determination of the long-term off site traffic noise impacts.
- Determination of the long-term stationary noise impacts from project operations.
- Determination of the required mitigation measures to reduce short-term construction-related noise and vibration impacts and long-term stationary and mobile source noise impacts.

The evaluation of noise and vibration impacts was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the City of Huntington Beach General Plan Noise Element, the City of Huntington Beach Municipal Code, and FTA criteria.

4.8.6 Thresholds of Significance

Threshold 4.8.1: Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

Threshold 4.8.2: Generate excessive ground-borne vibration or ground-borne noise levels; or

Threshold 4.8.3: 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, expose people residing or working in the project area to excessive noise levels.

The Initial Study, included as Appendix A, substantiates that there would be no impacts associated with Threshold 4.8.3. The nearest public use airport to the project site is Long Beach Airport located at 4100 Donald Douglas Drive in the City of Long Beach, approximately 8.3 miles northwest of the project site. There are no private airstrips within 2 miles of the project site, and the project site is not within an airport land use plan. Therefore, no impacts related to excessive airport noise would be observed and Threshold 4.8.3 will not be further addressed in the Draft EIR.

4.8.7 Project Impacts

Threshold 4.8.1: **Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

4.8.7.1 Short-Term Construction-Related Noise Impacts

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

Two types of short-term noise impacts could occur during construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential during heavy truck pass-bys causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 84 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be small when compared to existing daily traffic volumes on Warner Avenue and on Bolsa Chica Street. Because construction-related vehicle trips would not approach the daily traffic volumes of the adjacent roadways, traffic noise would not increase by 3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term, construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

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

The site preparation phase tends to generate the highest noise levels because earthmoving equipment are the noisiest construction equipment. Additionally, this phase would be the longest of the phases expected to occur near the project site boundary. The loudest pieces of equipment during this phase are estimated to include three dozers and four tractors. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

In addition to the reference maximum noise level, the usage factor provided in Table 4.8.E is utilized to calculate the hourly noise level impact for each piece of equipment based on the following equation:

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

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

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

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

D = distance from the receiver to the piece of equipment

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

$$Leq\ (composite) = 10 * \log_{10}\left(\sum_{1}^{n} 10^{\frac{Ln}{10}}\right)$$

Consistent with FTA guidance, utilizing the equations from the methodology above and the reference information in Table 4.8.E, the composite noise level of the two loudest pieces of equipment during construction, typically the concrete saw and tractor/truck, as required by the FTA criteria, would be 85.5 dBA L_{eq} at a distance of 50 feet from the construction area.

Table 4.8.E: Typical Maximum Construction Equipment Noise Levels (L_{max})

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

Source: *Highway Construction Noise Handbook* (FHWA, August 2006).
dBA = A-weighted decibel(s)
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum instantaneous noise level

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

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

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

It is expected that the average noise levels during construction would be 76 dBA L_{eq} based on an average distance of 210 feet to the nearest residence to the west from the center of activity. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the vicinity of the project site under existing conditions, the noise impacts would no longer occur once project construction is completed, and construction-related noise impacts would remain below the 80 dBA L_{eq} 1-hour construction noise level criteria established by the FTA.

Compliance with the City's Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the vicinity of the project site, construction noise would cease to occur once project construction is completed. In addition to compliance with appropriate construction times, Standard Condition NOI-1, provided below, would

implement measures during construction to reduce noise impacts to the greatest extent feasible. Therefore, construction activity noise impacts would be less than significant.

4.8.7.2 Long-Term Stationary-Source Noise Impacts

The proposed project has the potential to result in noise impacts to off-site surrounding uses from operations related to heating, ventilation, and air conditioning (HVAC) equipment. This section provides further details for these potential impacts and support the determination of less than significant requiring no mitigation.

The proposed project would include rooftop heating, ventilation, and air conditioning (HVAC) equipment. The HVAC equipment could operate 24 hours per day. As a conservative approach, it is assumed the project could have 40 units within proposed 4 feet high roof equipment screening walls and up to 5 air handling units. Rooftop HVAC equipment for a single unit would generate a noise level of 66.6 dBA L_{eq} at 5 feet based on previous measurements conducted by LSA, and a single air handling unit would generate sound power levels (SPL) of up to 88 dBA SPL or 72 dBA L_{eq} at 5 feet, based on manufacturer data of similar units (Trane 2015). Table 4.8.F presents the noise levels from HVAC equipment at the nearest noise-sensitive location. After distance attenuation and additional reduction from screening walls and building façades, rooftop equipment noise levels would reach up to 41 dBA L_{eq} at the closest off-site sensitive uses to the proposed location of an on-site rooftop air conditioning unit, which would be approximately 155 feet away. This noise level would not exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise standards of 55 dBA L_{eq} and 50 dBA L_{eq}, respectively. No mitigation is required.

Table 4.8.F: Summary of HVAC Noise Levels

Off-Site Land Use (Direction)	Distance from HVAC Units (ft)	Reference Noise Level for 1 Unit at 5 ft (dBA L_{eq})	Reference Noise for a Bank of 40 Units at 5 ft (dBA L_{eq})	Distance Attenuation (dBA)	Shielding (dBA)	Noise Level (dBA L_{eq})	Combined Noise Level (dBA L_{eq})
Monticello Apartments (West)	170	66.6	82.6	31	15	31	41.0
	250			34	17	34	
	240			34	17	34	
	295			35	17	35	
	240			34	17	34	
	155	72.0	-	30	14	30	
	175			31	14	31	
	180			31	15	31	
	290			35	17	35	
	290			35	17	35	

Source: Compiled by LSA Associates, Inc. (2022).
[1] Includes a minimum reduction of 5 dBA provided by rooftop parapet walls.
dBA = A-weighted decibel(s)
HVAC = heating, ventilation, and air conditioning
ft = foot/feet
L_{eq} = equivalent continuous sound level

4.8.7.3 Long-Term Traffic Noise Impacts

As part of the traffic analysis for the proposed project, the *Trip Generation Analysis*[1] identified that a net trip reduction of 410 average daily trips (ADT) would result with the proposed project which replaces the existing commercial uses on site. A reduction in ADT would not generate an increase in traffic noise. Therefore, traffic noise impacts from project-related traffic on off-site sensitive receptors would be less than significant.

4.8.7.4 Long-Term On-Site Noise Impacts

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

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

In order to assess on-site traffic noise impacts, exterior noise levels at the pool located to the west of the project site could reach 58 dBA CNEL based on measured noise levels in the vicinity of the project site. Exterior noise levels at the interior courtyard located at the center of site could reach 68 dBA CNEL. However, shielding from the building would reduce the noise levels by greater than 3 dBA. For noise levels that are less than 65 dBA CNEL, the Land Use Compatibility Standards shown in Table 4.8.A define the noise environment as normally acceptable for residential uses; therefore, exterior traffic noise levels would remain below the City's exterior noise level standards for transportation noise. Based on this, the long-term on-site traffic noise levels would be less than significant. No mitigation is required.

Interior Traffic Noise Impacts. As presented above, based on the future on-site traffic noise impacts, the exterior noise levels at the project site are expected to approach 68 dBA CNEL at the building façades closest to Warner Avenue, thus, a reduction of 23 dBA is necessary to achieve the 45 dBA CNEL interior noise standard.

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

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[1] LSA. 2022. *Trip Generation Analysis for Bolsa Chica Senior Living Community*.

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

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

Threshold 4.8.2: Would the project generate excessive ground-borne vibration or ground-borne noise levels?

4.8.7.5 Short-Term Construction-Related Vibration Impacts

Construction operations can generate varying degrees of ground-borne vibration depending on the construction procedures and the construction equipment used. The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receptor buildings. The results from ground-borne vibration can range from no perceptible effects at the lowest ground-borne vibration levels to low rumbling sounds and perceptible ground-borne vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibration from construction activities rarely reaches the levels that damage structures. As described above, the FTA has published standard vibration velocities for construction equipment operations. Table 4.8.G lists the vibration source amplitudes for construction equipment.

Table 4.8.G shows the PPV and VdB values at 25 feet from the construction vibration source. Bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 0.089 inch/sec PPV of ground-borne vibration when measured at 25 feet. The greatest levels of vibration are anticipated to occur during the site preparation phase, which is expected to use bulldozers and loaded trucks. Project construction would not require the use of pile drivers.

Table 4.8.G: Vibration Amplitudes for Construction Equipment

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

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

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

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

µin/sec = micro-inches per second
ft = foot/feet
FTA = Federal Transit Administration
inch/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

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

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

The closest building to the proposed construction activities is the existing industrial building to the south of the project site, which is approximately 35 feet from the edge of the proposed construction. A PPV damage threshold of 0.2 inch/sec is identified in Table 4.8.D for these types of structures. Based on the reference data provided in the Table 4.8.G, vibration impacts created by heavy construction activities associated with the project would approach 0.054 PPV inch/sec at a distance of 35 feet. This level would not exceed the 0.2 PPV inch/sec damage threshold and would be at a level for which there is virtually no risk resulting in architectural damage. Therefore, construction vibration impacts would be less than significant, and no mitigation is required.

4.8.8 Level of Significance Prior to Mitigation

The proposed project would result less than significant impacts related to noise and vibration, and no mitigation is required.

4.8.9 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

In addition to the compliance with the hours specified in the City's Municipal Code, the following standard condition would be implemented as part of the proposed project to further reduce construction noise to the extent feasible and reasonable:

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

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

4.8.10 Level of Significance after Mitigation

There would be no significant unavoidable adverse impacts of the proposed project related to noise and vibration, and no mitigation is required.

4.8.11 Cumulative Impacts

After reviewing the list of all current cumulative projects, all other concurrent projects are more than 1,000 feet from the project site. At this distance, it is expected that any construction-related or operational-related noise or vibration impacts would not result in a perceptible increase to sensitive uses in the vicinity of the project site. Lastly, since the proposed project would result in a reduction of vehicle trips, there would be no cumulative traffic noise impact to surrounding uses.

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4.9 TRIBAL CULTURAL RESOURCES

This section provides a discussion of the existing tribal cultural resource environment and an analysis of potential impacts to tribal cultural resources from implementation of the proposed Bolsa Chica Senior Living Community Project (proposed project). According to California Public Resources Code (PRC) Section 21080.3.1 and Chapter 532, Statutes 2014 (i.e., Assembly Bill [AB] 52), "tribal cultural resources" are defined as the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either: (A) included or determined to be eligible for inclusion in the California Register of Historical Resources as defined in CCR Title 14, Section 4852(b) described below; or (B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

   CCR Title 14, Section 4852(b) – Criteria for evaluating the significance of historical resources. An historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

   a. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

   b. It is associated with the lives of persons important to local, California, or national history;

   c. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

   d. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1, as follows:

   a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

   b. Is associated with the lives of persons important to our past.

   c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

   d. Has yielded, or may be likely to yield, information important to prehistory or history.

This section summarizes information obtained from Senate Bill (SB) 18 and AB 52 Native American consultation efforts. The City emailed Native American tribal contacts provided by the NAHC as well as local Native American tribal representatives that previously requested to be notified of future projects proposed by the City in compliance with AB 52 and SB 18 consultation. The list of Native American tribal contacts provided by the NAHC and a copy of the consultation notice sent by the City to Native American tribes is included in Appendix J of this Environmental Impact Report (EIR).

4.9.1 Scoping Process

The City of Huntington Beach (City) received one comment letter during the public review period of the Initial Study/Notice of Preparation (IS/NOP). For copies of the IS/NOP comment letters, refer to Appendix B of this Draft EIR. One comment letter included comments related to Tribal Cultural Resources.

The letter from the Native American Heritage Commission (NAHC), received on November 3, 2022 (Appendix B), suggested contacting the California Historical Research Information System (CHRIS) center for an archaeological records search. They indicated that if an archaeological inventory survey is required, a professional report detailing findings and recommendations shall be included. Additionally, the NAHC advised that the lack of surface evidence of archaeological resources does not preclude their subsurface existence. As discussed, a Cultural Resource Research and Review Report was prepared for the proposed project and is provided in Appendix E (Confidential Appendix) of this Draft EIR.

4.9.2 Methodology

In order to identify tribal cultural resources on the project site and analyze potentially significant impacts associated with construction and implementation of the proposed project, the City conducted Native American consultation in accordance with AB 52 and SB 18 requirements. The tribes consulted and the dates of consultation meetings are described in further detail below. In addition, a resources study was performed by SRSINC in July 2022 for the project site and findings were documented in the Cultural Resources Research, Records Review, and Structure Documentation Report and Addendum. SRSINC submitted a CHRIS Data Request Form to the South Central Coastal Information Center (SCCIC) on July 11, 2022. The SCCIC is the official repository of cultural resources records and reports for Orange County. The records search included a review of all recorded historic-period and prehistoric cultural resources within a 1-mile radius of the project site, as well as a review of known cultural resources surveys and excavation reports (a 1-mile radius was used because the project's indirect effects would be confined to the area within 1 mile of the project site). The records search also included a review of the following State and federal inventories:

- California Points of Historical Interest (SPHI),
- California Historical Landmarks (SHL),
- California Register of Historical Resources (CRHR),
- National Register of Historic Places (NRHP),
- California State Historic Properties Directory (HPD), and
- Local inventories of cultural resources.

Materials reviewed included reports of previous cultural resources investigations, archaeological site records, and historical maps. Preparation of the Cultural Resources Research and Records Review required additional background research including a review of aerial photographs, historic-period maps, and geologic maps to assess the potential for subsurface archaeological deposits at the project site.

A Sacred Lands File (SLF) was requested from the NAHC on July 11, 2020. The search was requested to determine whether there are sensitive or sacred Native American resources on or near the site that could be affected by the proposed project. In its response to the City on August 23, 2022**,** the NAHC indicated that the results of the file search were positive. The entire Bolsa Chica Mesa is considered to be a *Sacred Lands Site Complex*[1] by Native Americans. All archaeological sites associated with the complex are located more than 0.2 mile east of the project site, and no archaeological sites or artifacts have been recorded on the project site. The NAHC also recommended contacting the Gabrielino/ Tongva Band of Mission Indians regarding this site as well as other tribal entities in the region. Most Likely Descendants for this project have been designated as Anthony Morales, Gabrielino/Tongva Band of Mission Indians, and Matias Belardes, Juaneño Band of Mission Indians, Acjachemen Nation.

On September 23, 2022, the City sent emails to local Native American tribes that previously requested to be notified of future projects proposed by the City and to Native American tribal contracts provided by the NAHC in compliance with consultation requirements pursuant to AB 52 and SB 18. Under AB 52, tribes have 30 days upon receipt of such letter to request consultation on the proposed project. In compliance with SB 18, tribes have 90 days from the date of receipt of notification to request consultation on the proposed project. Information provided through the tribal consultation process also informs the assessment as to whether tribal cultural resources are present, and the significance of any potential impacts on such resources.

Two responses to the AB 52 and SB 18 consultation requests were received. One response was received from the Gabrieleno Band of Mission Indians – Kizh Nation, Andrew Salas, Chairperson, on September 27, 2022. The second response was received from the Juaneño Band of Mission Indians - Acjachemen Nation, Joyce Perry, on October 19, 2022. No additional responses or requests for consultation under AB 52/SB 18 were received during the consultation period for the proposed project. A summary of the City's consultation efforts with the Gabrieleno Band of Mission Indians – Kizh Nation and the Juaneño Band of Mission Indians - Acjachemen Nation is described further under Threshold 4.9.1(a), below.

4.9.3 Existing Environmental Setting

The area that is now Huntington Beach was prehistorically occupied by Native Americans. This area is primarily within traditional boundaries of the Gabrielino and is also sometimes included in the traditional territory of the Juaneño. The project site is located on the Bolsa Chica Mesa and is located approximately 1.4 miles northeast of the Bolsa Chica Ecological Preserve. Bolsa Chica Mesa

[1] The *Bolsa Chica Site Complex* includes the *National Register Site Complex* recorded by the Pacific Coast Archaeological Society in 1981 and the *Sacred Lands Site Complex* recorded by the Juaneno Band of Mission Indians in 1994.

is one of the most researched areas in Southern California and contains many important archaeological sites, which may also be considered tribal cultural resources by local tribal groups. Archaeological sites on the Bolsa Chica Mesa have been included on the National Registry of Historic Places, and the entire mesa, which includes 11 documented archaeological sites, has been designated as a "Sacred Lands Site Complex." The 11 Bolsa Chica Mesa sites present a full range of activity areas, including short and long-term residential bases and limited use areas from the Milling Stone period through the very early Late Prehistoric Horizons. As noted in the Cultural Resource Research and Review Report, due to extensive development of the Bolsa Chica Mesa during the historic period, prehistoric sites present on the mesa may have been disturbed, damaged, or destroyed during construction activities. Specifically, prehistoric sites that were recorded during early mesa surveys on the western perimeter of the mesa were destroyed by construction in the historic period. In addition, archaeological surveys and excavations performed in the 1960s found considerable disturbance and a very low yield of artifacts at identified prehistoric sites. Despite the widespread impacts that have occurred on archaeological resources in the area (which may also be tribal cultural resources), much of the remaining undeveloped land in the vicinity of the Bolsa Chica Mesa is either owned by the California Department of Fish and Wildlife (CDFW) and/or subject to conservation easements held by the CDFW. The conservation of this land as habitat for biological resources has also served to protect those archaeological resources which remain in the area of the Bolsa Chica Mesa.

4.9.4 Regulatory Setting

This section includes applicable federal, State, regional, and City regulations.

4.9.4.1 Federal Regulations

There are no federal policies or regulations related to tribal cultural resources that are applicable to the proposed project.

4.9.1.1 State Regulations

Assembly Bill 52 Tribal Consultation. California PRC Section 21080.3.1 and Chapter 532, Statutes 2014 (i.e., AB 52), require that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. The bill requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The bill specifies examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. The bill makes the above provisions applicable to projects that have an NOP or a notice of negative declaration or Mitigated Negative Declaration filed on or after July 1, 2015. By requiring the lead agency to consider these effects relative to tribal cultural resources and to conduct consultation with California Native American tribes, this bill imposes a State-mandated local program.

Senate Bill 18 Tribal Consultation. California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a General or Specific Plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction and are identified, upon request, by the NAHC. As noted in the California Governor's Office of Planning and Research's *Tribal Consultation Guidelines* (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

4.9.4.2 Regional Regulations

There are no regional policies or regulations related to tribal cultural resources that are applicable to the proposed project.

4.9.4.3 Local Regulations

City of Huntington Beach General Plan Historic and Cultural Resources Element. The goal of the Historic and Cultural Resources Element is to "promote the preservation and restoration of the sites, structures, and districts which have architectural, historical, and/or archaeological significance to the City of Huntington Beach. It emphasizes the City's distinctive heritage in both cultural and visual resources and character and promotes the City's engagement in the arts and culture. The element also establishes goals and policies to promote the arts and cultural programs that serve the interests and needs of residents, workers, and visitors. These goals and policies also facilities the rehabilitation of the City's cultural, architectural, and archaeological resources.

4.9.5 Thresholds of Significance

The thresholds for tribal cultural resources impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines.* The proposed project may be deemed to have a significant impact with respect to tribal cultural resources if it would:

Threshold 4.9.1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1 (k).

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

4.9.6 Project Impacts

Threshold 4.9.1(a): Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1 (k)?

Less Than Significant Impact. A cultural resources records search was completed on October 14, 2022 (Records Search file No. 24034.10260), at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton. It included a review of all prehistoric and historic archaeological sites within a 1-mile radius of the project site, as well as a review of known cultural resource survey and excavation reports in that area. The California State Historic Resources Inventory (HRI), National Register of Historic Places (National Register), California Historical Landmarks (SHL), California Points of Historical Interest (SPHI), and various local historical registers were examined. The SCCIC records search results identified no previously recorded cultural resources in the project site. In total, 28 resources were documented within 1 mile of the project site, including 2 archaeological sites and 2 historic-age buildings with determinations of eligibility. All project actions would occur exclusively within the limits of the project site; and therefore, none of the cultural or historical resources identified within 1 mile of the project site would be impacted by implementation of the proposed project. Evaluation of the two commercial buildings on the project site, which were constructed in 1977 and 1979, concluded that the buildings are neither tied to exceptional importance nor do they meet the criteria for historic designation under the California Register's Criteria 1–4. Removal of the buildings would not impact any significant elements of the built environment, and therefore, the buildings do not qualify as "historical resources" as defined by CEQA. As such, there are no tribal cultural resources as defined in PRC Section 21074 or historical resources as defined in Section 15064.5 of the *State CEQA Guidelines* or PRC 5020.1(k) on the project site.

Native American consultation was conducted by the City in compliance with SB 18 and AB 52. As part of the consultation process, a review of the SLF by the NAHC, indicated that the results of the file search were positive. The entire Bolsa Chica Mesa is considered to be a *Sacred Lands Site Complex*[1] by Native Americans. However, all of the archaeological sites associated with the complex are located more than 0.2 mile east of the project site, and no archaeological sites or artifacts have been recorded on the project site. The City emailed Native American tribal contacts provided by the NAHC as well as local Native American tribal representatives that previously requested to be notified of future projects proposed by the City in compliance with AB 52 and SB 18 consultation requirements. The Gabrieleno Band of Mission Indians - Kizh Nation and Juaneño Band of Mission Indians - Acjachemen Nation responded to the City's invitation for consultation.

[1] Ibid.

The City conducted research into permit records for the project site at the request of both of the consulting tribes, provided updates, and formally concluded tribal consultation following the discussion of findings. As a result of consultation, the tribal organizations requested that tribal monitors be present on site during ground- disturbing activities associated with the proposed project. As such, appropriate mitigation measures have been incorporated into the proposed project. No information regarding specific known tribal cultural resources on the project site was provided to the City.

Therefore, no known tribal cultural resources listed or eligible for listing in the California Register of Historical Resources (California Register) or in a local register exist within the project site, and there are no known tribal cultural resources on the project site. Despite there being no known tribal cultural resources on the project site, the potential for resources to be discovered is addressed below under Threshold 4.9.1(ii). The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource defined as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register or in a local register of historical resources as defined in PRC Section 5020.1(k).

Refer to Section 4.3, Cultural Resources, for detailed information regarding historic resources and the Cultural Resources Research and Records Review and Addendum substantiating that no listed properties or resources exist on the project site.

Threshold 4.9.1(b): Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant with Mitigation Incorporated. As noted above, a cultural resources record search, an SLF search through the NAHC, AB 52 Native American consultation, and SB 18 tribal consultation were conducted for the proposed project. The purpose of these efforts was to identify known tribal cultural resources on or near the project site. No on-site cultural resources were identified as part of the records search.

Consultation occurred with the Gabrieleno Band of Mission Indians - Kizh Nation (Kizh Nation) on Tuesday, November 29, 2022. The Kizh Nation discussed the significance of the general project area to historic migratory and trade routes and requested that the City identify whether fill soil was imported to the project site when grading activities were completed for the existing development on the project site. Based on a review of available records, the City was unable to definitively confirm the use of imported fill during previous development of the site. After sharing these findings

with the Kizh Nation, appropriate mitigation measures regarding the potential discovery of Tribal Cultural Resources were developed with input from the Kizh Nation and the City formally concluded the consultation process.

City staff consulted with Joyce Perry from the Juaneño Band of Mission Indians - Acjachemen Nation (Acjachemen Nation) regarding the proposed project on October 19, 2022. On February 6, 2023, the Acjachemen Nation requested that a Tribal Monitor be present on site for all project-related ground-disturbing activities.

Consultation with the Kizh Nation and Acjachemen Nation resulted in the development and approval of Mitigation Measure TCR-1, TCR-2, and TCR-3. Mitigation Measure TCR-1 requires Native American tribal monitoring of ground-disturbing activities associated with project construction. Tribal monitors from both groups shall only be on site when these ground-disturbing activities occur.

Although no human remains are known to be on the project site or are anticipated to be discovered during project construction, there is always a possibility of encountering unanticipated human remains. If human remains are Native American in origin, the remains may be considered a tribal cultural resource. If human remains are encountered, the City is required to adhere to Mitigation Measure TCR-2, which requires compliance with the State's Health and Safety Code for the treatment of human remains and coordination with the NAHC and a Most Likely Descendant if the remains are determined to be Native American. Additionally, the proposed project would be required to adhere to Mitigation Measure TCR-3, which details the procedures for the unanticipated discovery of burial sites and funerary remains.

Implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3, as described in Section 4.9.8.2 below, would ensure that potential impacts to tribal cultural resources would be less than significant.

4.9.7 Level of Significance Prior to Mitigation

The proposed project would result in a potentially significant impact to tribal cultural resources prior to mitigation; however, consultation with the Kizh Nation and the Acjachemen Nation resulted in the development and approval of Mitigation Measures TCR-1, TCR-2, and TCR-3.

4.9.8 Standard Conditions and Mitigation Measures

4.9.8.1 Standard Conditions

No standard conditions or regulatory compliance measures are applicable to the proposed project pertaining to tribal cultural resources.

4.9.8.2 Mitigation Measures

The following mitigation measures are required to reduce potentially significant impacts to archaeological resources:

Mitigation Measure TCR-1

Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

A. The Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) and the Juaneño Band of Mission Indians – Acjachemen Nation (Acjachemen Nation). The monitors shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

B. A copy of the executed monitoring agreement shall be submitted to the City prior to the earlier commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The monitors shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Kizh Nation and the Acjachemen Nation. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCRs"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Applicant and City upon written request to the Kizh Nation and the Acjachemen Nation.

D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh Nation and the Acjachemen Nation from a designated point of contact for the Applicant that all ground-disturbing activities and phases that may involve

ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh Nation and the Acjachemen Nation to the Applicant and City that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh Nation and Acjachemen Nation TCRs.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh Nation and Acjachemen Nation monitor and/or archaeologist. The Kizh Nation and Acjachemen Nation shall recover and retain all discovered TCRs in the form and/or manner the tribal groups deem appropriate and for any purpose the tribes deem appropriate, including for educational, cultural and/or historic purposes.

Mitigation Measure TCR-2

Unanticipated Discovery of Human Remains and Associated Funerary Objects.

A. Native American human remains are defined in Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the Coroner has determined the nature of the remains. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the

Native American Heritage Commission (NAHC), and PRC Section 5097.98 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California PRC Sections 5097.98(d)(1) and (2).

D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh Nation and Acjachemen Nation monitors determine that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh Nation and Acjachemen Nation monitors and/or archaeologists deems necessary). (CEQA Guidelines Section 15064.5(f).)

E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Mitigation Measure TCR-3 **Procedures for Burials and Funerary Remains.**

A. If the Native American Heritage Commission designates the Kizh as the Most Likely Descendant ("MLD") for any human remains discovered or recognized on the project site, the Koo-nas-gna Burial Policy shall be implemented. To the Kizh Nation, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial,

the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Kizh Nation will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

E. In the event that preservation in place is not possible despite good faith efforts by the project applicant/ developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred

objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/ repatriation shall be on the project site but at a location agreed upon between the Kizh Nation and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

G. The Kizh Nation will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Kizh Nation, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery-related forms of documentation shall be approved in advance by the Kizh Nation. If any data recovery is performed, once complete, a final report shall be submitted to the Kizh Nation and the NAHC. The Kizh Nation does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

4.9.9 Level of Significance after Mitigation

With implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3, the proposed project would result in less than significant impacts to tribal cultural resources.

4.9.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects. The cumulative impact area for tribal cultural resources for the proposed project is the City of Huntington Beach.

The project site is located within the Bolsa Chica Mesa, which contains many important archaeological, historic, and paleontological sites. As described in the Cultural Resource Research and Review Report, extensive development of the Bolsa Chica Mesa has occurred during the historic period, which has resulted in the disturbance, damage, or destruction of many of the prehistoric sites on the mesa. Although no tribal cultural resources have been recorded on or in the immediate vicinity of the project site, potential impacts of the proposed project to unknown tribal cultural resources, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Huntington Beach, could contribute to a cumulatively significant impact due to the overall loss of tribal cultural resources unique to the region. As described above, potential impacts

to previously unidentified tribal cultural resources on the project site would be reduced with implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3, as described above.

Discretionary development proposals received by the City are required to undergo environmental review pursuant to CEQA. If there were any potential for significant impacts to tribal cultural resources, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures for each project. When resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant. In addition, future development projects would be required to consult with the appropriate tribes and identify proper mitigation to address any potentially significant impacts to tribal cultural resources in the area.

Implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3 would ensure that the incremental effects of the proposed project are not cumulatively considerable, and the project effects would not result in a significant cumulative impact to tribal cultural resources or previously undiscovered buried human remains.

4.10 UTILITIES AND SERVICES SYSTEMS

This section of the Draft Environmental Impact Report (EIR) evaluates the potential for the proposed Bolsa Chica Senior Living Community Project (proposed project) to impact utilities and service systems in the City of Huntington Beach (City). The energy use analysis in this section is based on information from the California Emissions Estimator Model (CalEEMod) version 2020.4.0 modeling results in Appendix D of this Draft EIR.

4.10.1 Scoping Process

The Notice of Preparation (NOP) was published in November 2022 for the proposed project and a Scoping Meeting was held on November 10, 2022. The City received one comment letter during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letter received, refer to Appendix B of this Draft EIR. No comments received were related to utilities and service systems.

4.10.2 Existing Environmental Setting

The 3.10-acre project site is located at the southwest corner of Bolsa Chica Street and Warner Avenue in Huntington Beach in northwest coastal Orange County, California. Regional access is provided by Interstate 405 (I-405) to the north and east; State Route 1 (SR-1) or Pacific Coast Highway to the west; and State Route 39 or Beach Boulevard, which bisects the City running north to south. Local access is provided from Bolsa Chica Street and Warner Avenue. In the existing condition, access to the project site is provided by three driveways along Bolsa Chica Street and two driveways along Warner Avenue. The regional location is depicted in Figure 3-1 in Chapter 3.0, Project Description.

4.10.2.1 Water

The City of Huntington Beach's water service area is approximately 17,472 acres of land and includes Huntington State Beach (Huntington Beach 2020 Urban Water Management Plan). The City relies on a combination of imported water and local groundwater to meet its water needs and works together with three primary agencies, MWD, MWDOC, and OCWD to ensure a safe and reliable water supply for the City. The reliability of the water supply to the City currently depends on the reliability of both groundwater and imported water supplies, which are managed and delivered by the OCWD and MWD, respectively.

Domestic water service in Huntington Beach is provided by the City's Utilities Division of the City Public Works Department. According to the 2020 Urban Water Management Plan (UWMP), from 2019–2020, the City's water supply was approximately 70 percent groundwater and 30 percent imported water. The City supplements its local groundwater, which is obtained from the Lower Santa Ana River Groundwater Basin (also known as the Orange County Groundwater Basin) with imported water purchased from Metropolitan through the Municipal Water District of Orange County (MWDOC). It is projected that by the year 2045, the water supply mix will shift to approximately 85 percent groundwater and 15 percent imported water. According to the 2020 UWMP, the City's projected water supply is able to meet projected water demands in the years 2025, 2030, 2035, 2040, and 2045 during normal years, single dry years, and multiple dry years. In

2020, the actual water supply and actual water demand was 25,966 acre-feet (af). In 2045, the total projected water supply and projected water demand is 26,054 af annually, with supply and demand increasing equally and incrementally every 5-year period between 2025 and 2045. Therefore, the City's existing water supplies are projected to meet full service demands through the year 2045.

The Utilities Division of the City's Public Works Department currently provides potable water service to the project site.

4.10.2.2 Wastewater

The Utilities Division of the City's Public Works Department operates and maintains the local sewer collection pipes that feed into the Orange County Sanitation District's (OC San) sewer system. The City's sewer system includes 360 miles of sewer lines, 10,091 manholes, and 27 lift stations.[1] Wastewater in the City is conveyed to OC San's Plant No. 2, which has a current daily capacity of 64 million gallons per day (mgd) for treatment and discharge. Plant No. 2 also has a 120-inch diameter ocean outfall that extends 4 miles off the coast of the City, and a 78-inch diameter emergency outfall that extends 1.3 miles off of the coast. Plant No. 2 is currently undergoing a number of construction projects: the Outfall Low Flow Pump Station, the Primary Treatment Replacement, and the Groundwater Replenishment System Final Expansion.

The Utilities Division of the City's Public Works Department currently provides sewer service to the project site.

4.10.2.3 Drainage

The project site has a relatively flat topography. Stormwater discharged from the project site is directed to a Municipal Separate Storm Sewer System (MS4) that discharges into the westerly flowing Sunset Channel. Runoff on the project site that flows easterly is ultimately collected by an existing ribbon gutter and by one of the existing City-owned catch basins located on Bolsa Chica Street near the corner of Warner Avenue. The runoff is collected by an existing 48-inch storm drain system located on Bolsa Chica Street flowing north, which increases in size to a 60-inch and then a 72-inch concrete pipe prior to discharging into the Sunset Channel. The Sunset Channel flows into Huntington Harbor and Anaheim Bay.

4.10.2.4 Utilities and Service Systems

Utilities for the proposed project would include electricity provided by Southern California Edison, natural gas provided by the Southern California Gas Company, and telecommunication facilities and cable services provided by third-party providers. The City of Huntington Beach contracts third-party services for solid waste collection, recycling, green waste collection, and composting services. Solid waste is taken to a transfer station in Huntington Beach, where it is processed and transported to the Frank Bowerman Landfill in Irvine.

According to the most recent data available, in 2020, California's electricity was generated primarily by natural gas (37.06 percent), renewable sources (33.09 percent), large hydroelectric (12.21 percent), nuclear (9.33 percent), and coal (2.74 percent). Total electric generation in

[1] City of Huntington Beach. 2022. Sewer System Management Plan.

California in 2020 was 272,576 gigawatt-hours (GWh), down 2 percent from the 2019 total generation of 277,704 GWh. As discussed above, the project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.[2] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2021 was 103,045.2 GWh (36,375.8 GWh for the residential sector and 66,669.4 GWh for the non-residential sector). Total electricity consumption in Orange County in 2021 was 18,931.8 GWh (7,272.3 GWh for the residential sector).[3] The electricity consumption associated with the existing uses on the project site is estimated to be 711,955 kWh/year.

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[4] The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[5] According to the CEC, total natural gas consumption in the SoCalGas service area in 2021 was 6,755.6 million therms (2,308.9 million therms for the residential sector). Total natural gas consumption in Orange County in 2021 was 580.2 million therms (362.2 million therms for the residential sector).[6] For comparison purposes, the natural gas consumption associated with the existing uses on the project site is estimated to be 4,000 therms/year.

4.10.3 Methodology

The impact analysis of this section is based on comparing the energy usage estimates from the CalEEMod modeling results in Appendix D against energy consumption data published by the CEC.

4.10.4 Regulatory Setting

This section includes applicable federal, State, regional, and City regulations.

4.10.4.1 Federal Regulations

There are no federal policies or regulations that are applicable to the proposed project with respect to utilities and service system regulation.

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2 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed November 2022).

3 California Energy Commission (CEC). 2020a. Electricity Consumption by County and Entity. Websites: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed November 2022).

4 CEC. 2020b. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed November 2022).

5 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed November 2022).

6 CEC. 2020b. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed November 2022).

4.10.4.2 State Regulations

Urban Water Management Planning Act. The California Urban Water Management Planning Act (*California Water Code,* Sections 10610– 10656) requires urban water suppliers that provide over 3,000 acre-feet (af) of water annually or serve more than 3,000 or more connections to analyze the reliability of their water sources over a 20-year planning horizon. The Act requires urban water suppliers to prepare and update Urban Water Management Plans (UWMPs) that analyze the availability of water supplies to meet demands during normal, single-dry, and multiple-dry years, to encourage water conservation programs and create long-term planning obligations. The City of Huntington Beach 2020 Urban Water Management Plan was adopted in June of 2021 and provides an assessment of the present and future water supply sources and demands within the City's service area. It updates various 2015 UWMP items related to: water resource needs, water use efficiency, assessment of water reliability, and strategies to mitigate water shortage conditions. The 2020 UWMP adds a 2020 Water Shortage Contingency Plan (WSCP) to help the City effectively respond to potential water shortages.

Water Conservation Act of 2009. The Water Conservation Act of 2009 or Senate Bill 7 (SB X7-7) was approved in November 2009 and requires urban water retail suppliers in California to reduce per capita water use by at least ten percent on or before December 31, 2015, and to achieve a 20 percent reduction by December 31, 2020. In their 2020 Urban Water Management Plans, urban retail water suppliers must include a Water Shortage Contingency Plan (WSCP), which assesses the Supplier's near-term, five-year drought risk assessment (DRA) and provides a structured guide to deal with water shortages, and an Annual Water Supply Demand Assessment (WSDA), which assesses the current year plus one dry year i.e., short-term demand/supply outlook. Analyses over near- and long-term horizons together provide a more complete picture of a Supplier's reliability and serve to inform appropriate actions needed to build up capacity over the long term.

20x2020 Water Conservation Plan. The 20x2020 Water Conservation Plan, issued by the California Department of Water Resources (DWR) in 2010 pursuant to SB X7-7, established a water conservation target of 20 percent reduction in water use by 2020 compared to 2005 baseline use.

California Integrated Waste Management Act (AB 939). The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939, Sections 40050 to 40063 of the California Public Resources Code), created the California Department of Resources Recycling and Recovery (CalRecycle) and accomplished the following: (1) it required each jurisdiction in the state to submit detailed solid waste planning documents for CalRecycle approval; (2) it set diversion requirements of 25 percent in 1995 and 50 percent in 2000; (3) it established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and (4) it authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. Jurisdictions select and implement the combination of waste prevention, reuse, recycling, and composting programs that best meet the needs of their community while achieving the diversion requirements.

Construction and Demolition Waste Diversion Requirements. In 2002, SB 1374 required CalRecycle, by March 1, 2004, to adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition (C&D) waste materials from

landfills. It required jurisdictions to summarize progress made in diversion of C&D waste materials in their annual progress reports to CalRecycle. The bill also gives CalRecycle the authority to determine penalties for a jurisdiction's failure to implement its source reduction and recycling element or its household hazardous waste element. The bill required CalRecycle to determine if the jurisdiction has provided information on whether C&D waste materials are at least a moderately significant portion of the waste stream and, if so, whether the jurisdiction has adopted a local C&D ordinance, adopted CalRecycle's model ordinance, or implemented another C&D diversion program.

Solid Waste Disposal Measurement Act of 2008. The purpose of the Solid Waste Disposal Measurement Act of 2008 (SB 1016) is to make the process of goal measurement (as established by AB 939) more simple, timely, and accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. It accomplishes this by changing to a disposal-based indicator—the per capita disposal rate—which uses only two factors: (1) a jurisdiction's population (or, in some cases, employment) and (2) its disposal, as reported by disposal facilities. Since 2008, CalRecycle calculates each jurisdiction's per capita (per resident or per employee) disposal rates each year. If business is the dominant source of a jurisdiction's waste generation, CalRecycle may use the per employee disposal rate. Each year's disposal rate will be compared to that jurisdiction's 50 percent per capita disposal target. As such, jurisdictions will not be compared to other jurisdictions or the statewide average, but they will only be compared to its own 50 percent per capita disposal target. Among other benefits, per capita disposal is an indicator that allows for jurisdiction growth because, as residents or employees increase, report year disposal tons can increase and still be consistent with the 50 percent per capita disposal target. A comparison of the reported annual per capita disposal rate to the 50 percent per capita disposal target will be useful for indicating progress or other changes over time.

Assembly Bill 341. On October 6, 2011, Governor Brown signed AB 341 establishing a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandates that local jurisdictions implement commercial recycling by July 1, 2012. CalRecycle will review each jurisdiction's commercial recycling program every two to four years for compliance. Businesses and public entities generating four cubic yards of trash or more and multi-family residential dwellings with five or more units are required to establish and maintain recycling service under AB 341.

Title 24 Green Building Standards. The 2016 California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations), effective January 1, 2017, requires the use of green building principles and practices in site planning and building design to promote energy and water efficiency and conservation; material conservation and resource efficiency; and environmental quality. Also known as the CALGreen Code, the voluntary and mandatory standards in this Code apply to new low-rise residential buildings, privately owned non-residential buildings (i.e., theaters, restaurants, banks, offices, daycare centers, industrial buildings, laboratories, department stores, storage and accessory buildings); State-owned buildings; public schools; medical facilities; and additions/alterations to existing non-residential buildings. Mandatory measures include storm water pollution prevention, water conservation, and recycling and/or salvage of at least 50 percent of

nonhazardous construction and demolition wastes. The Huntington Beach Municipal Code adopts the CALGreen Code by reference, with specific amendments.

4.10.4.3 Regional Regulations

Orange County Water District Groundwater Management Plan. The Orange County Water District (OCWD) was formed in 1933 by the State Legislature to manage the region's groundwater basin, which provides approximately 75 percent of the water supply to more than 2.5 million residents in Orange County. There are 19 city water departments and water districts that are member agencies of OCWD and pump groundwater from the basin, which serves the project site. The OCWD adopted the Groundwater Management Plan 2015 Update in June 2015. The plan sets forth management goals and objectives for the OC Basin and describes how the basin is managed. The Plan includes discussion about groundwater resources in the basin; hydrogeology; groundwater producers; OCWD objectives; programs for water supply monitoring, recharge, and replenishment; seawater intrusion monitoring and barrier management, water quality protection, and sustainable basin management; and OCWD facilities and projects to protect groundwater resources while increasing its sustainable yield (OCWD 2015).

Orange County Water District Long-Term Facilities Plan. OCWD has a Long-Term Facilities Plan 2014 Update (OCWD 2014) that identifies 65 potential projects that implement the Groundwater Management Plan and which would increase the groundwater basin's yield in a cost-effective manner and protect water quality. The Long-Term Facilities Plan includes existing and future water demands, current water supplies for groundwater recharge, and a list of projects. The projects are grouped into four categories: (1) water supply, (2) basin management, (3) recharge facilities, and (4) operational efficiency. It also discusses the selection process for prioritizing and focusing OCWD efforts on the most viable and beneficial projects. A total of 17 projects were identified for focused study and project benefits, project details, cost estimates, and proposed schedules. These projects are expected to be implemented within a 20-year planning period but may be refined during future reevaluations and Long-Term Facilities Plan updates.

Municipal Water District of Orange County 2020 Regional Urban Water Management Plan. The Municipal Water District of Orange County (MWDOC) has adopted the 2020 Regional Urban Water Management Plan (RUWMP) in compliance with the Urban Water Management Planning Act. Adopted in June 2021 by the MWDOC Board of Directors, the 2020 RUWMP provides a comprehensive assessment of the present and future water supply sources and demands within the MWDOC's service area. It presents an update to the 2015 UWMP on the MWDOC's water resource needs, water use efficiency programs, water reliability assessment and strategies to mitigate water shortage conditions. It also presents a new 2020 Water Shortage Contingency Plan (WSCP) designed to prepare for and respond to water shortages. (MWDOC 2020).

Imported water from the Metropolitan Water District of Southern California (MET) accounts for about 33 percent of MWDOC's service area water use. The other 67 percent is from various other sources, including groundwater from the OC Basin, groundwater from other smaller groundwater basins such as the Main San Gabriel Basin, and recycled water. The Orange County Sanitation District (OC San) and South Orange County Wastewater Authority (SOCWA) are the wastewater providers of North County and South County agencies, respectively.

MWDOC is the wholesale provider of treated and untreated imported water from MET for municipal and industrial (M&I) uses (i.e., direct uses) and non-M&I (indirect uses e.g., groundwater recharge) within its service area. MWDOC's service area M&I water use has consistently exceeded 400,000 acre-feet per year (afy) until recently. Since fiscal year (FY) 2013–14, as a result of drought, retail water usage (including recycled water) began to trend downward. FY 2015–16 was the first year that water use in the MWDOC's service area dropped below 400,000 af due to large-scale water efficiency efforts undertaken by MWDOC and member agencies.

MWDOC's total service area water demands are expected to gradually increase between now and 2023 due to projected growth in M&I demands. The bulk of the increases between 2023 and 2025 are due to indirect imported demands for groundwater replenishment returning in those years 2024 and 2025. The current regulatory impacts of PFAS in the OC Basin has reduced the need for purchasing any imported groundwater replenishment water, due to reductions in groundwater pumping expected to last until 2023. Over the next 25 years, total water demands within the MWDOC service area are projected to increase by about 17 percent from approximately 428,000 af in 2020 to approximately 501,000 af by 2045. This demand projection considers such factors as current and future demographics, future conservation measures, and ground and surface water needs.

MWDOC in collaboration with all its retail member agencies as well as the cities of Anaheim, Fullerton, and Santa Ana, created the Orange County 20x2020 Regional Alliance to assist retail agencies in complying with the requirements of Water Conservation Act of 2009, also known as SBx7-7 (Senate Bill 7 as part of the Seventh Extraordinary Session). Signed into law on February 3, 2010, it requires the State of California to reduce urban water use by 20 percent by 2020. Retail water suppliers are required to comply with SBx7-7 individually or as a region in collaboration with other retail water suppliers, in order to be eligible for water related state grants and loans. As a wholesale water supplier, MWDOC is not required to establish a baseline or set targets for daily per capita water use itself. Orange County, as a region, had a 2020 target water use of 159 gallons per capita per day (GPCD). The actual water usage in 2020 was 109 GPCD which is well below its target. This is indicative of the collective efforts of MWDOC and retail agencies in reducing water use in the region.

County Solid Waste Integrated Waste Management Plan. The California Integrated Waste Management Act of 1989 requires all Counties to prepare an Integrated Waste Management Plan. The Orange County Integrated Waste Management Plan (IWMP), last updated in 2007, provides an update to the County's compliance with regulatory review and reporting requirements (OC Waste & Recycling 2007). Topics in the CIWMP include a Local Task Force review; an update to the California Code of Regulations (to Section 18788(3)(A)–(H) of Title 14); and an annual report review and a summary of findings. As reported in the CIWMP, the County's review of the IWMP finds that the goals, objectives, and policies in the elements are still applicable and consistent with current regulations.

4.10.4.4 Local Regulations

City of Huntington Beach 2020 Urban Water Management Plan. The City of Huntington Beach has adopted its 2020 UWMP in compliance with the Urban Water Management Planning Act. Adopted

on June 2021 by the Huntington Beach City Council, the 2020 UWMP provides an assessment of the present and future water supply sources and demands within the City's service area. It updates various 2015 UWMP items related to: water resource needs, water use efficiency, assessment of water reliability, and strategies to mitigate water shortage conditions. The 2020 UWMP adds a 2020 Water Shortage Contingency Plan (WSCP) to help the City effectively respond to potential water shortages.

The City meets its demands through a combination of local groundwater and supplemental imported water. The City works together with two primary agencies, MWDOC and OCWD, to ensure a safe and reliable water supply that will continue to serve the community in periods of drought and shortage. The Huntington Beach 2020 Urban Water Management Plan arcadis.com ES-3 sources of imported water supplies include water from the Colorado River and the State Water Project (SWP) provided by MET and delivered through MWDOC. In FY 2019–20, the City's water supplies consisted of 70 percent groundwater and 30 percent imported water. It is projected that by 2045, the water supply mix will shift to 85 percent groundwater and 15 percent imported water. Note that these representations of supply match the projected demand.

Water use within the City's service area has been relatively stable in the past decade with an annual average of 27,753 af for potable use. In FY 2019–20, the City's water use was 25,966 af of potable water (groundwater and imported). In FY 2019–20, 18,206 af (or 70 percent) of the City's potable water demand was residential, with commercial, industrial, institutional/governmental, dedicated landscape, and losses accounting for the remaining 30 percent of the total potable water demand. More specifically, commercial water use accounted for 3,240 af (or 12.5 percent) of total water demand and dedicated landscape for 2,141 af (or 8.2 percent) of total water demand. Industrial and institutional/governmental uses make up about 741 af (2.9 percent) of total demand. Nonrevenue water comprised 6.3 percent of total water demand. Water use within the City's service area has been relatively stable in the past decade and is expected to remain stable as the City is essentially built out and the rate of population growth is expected to average less than 0.1 percent per year for the next 25 years. Water demand is projected to increase 1.7 percent over the next five years. In the longer term, water demand is projected to decrease 1.3 percent from 2025 through 2045. The projected potable water usage for 2045 is 26,054 af. This demand projection considers such factors as current and future demographics, future water use efficiency measures, and long-term weather variability.

Retail water suppliers are required to comply with the requirements of Water Conservation Act of 2009, also known as SBx7-7 (Senate Bill 7 as part of the Seventh Extraordinary Session), which was signed into law in 2010 and requires the State of California to reduce urban water use by 20 percent by 2020 from a 2013 baseline. The retail water suppliers can comply individually or as a region in collaboration with other retail water suppliers, in order to be eligible for water-related State grants and loans. The City is part of the Orange County 20x2020 Regional Alliance created in collaboration with MWDOC, its retail member agencies as well as the cities of Anaheim, Fullerton and Santa Ana. The Alliance was created to assist Orange County retail agencies in complying with SBx7-7. The City met its 2020 water use target and is in compliance with SBx7-7; the actual 2020 consumption was 88 gallons per capita per day (GPCD), which is below its 2020 target of 142 GPCD.

City of Huntington Beach Sewer System Management Plan. The City's Sewer System Management Plan (SSMP) (Huntington Beach 2022) discusses the sewerage facilities, operations and maintenance, and programs for monitoring and inspection; rehabilitation/replacement; overflow emergencies; fats, oils, and grease control; spill response; prevention of illicit discharges; audits; and communication. Inspection activities have identified less than one percent of the sewer pipelines requiring near-term action, such as local repairs and sewer rehabilitation. The SSMP also identifies capital improvement projects needed to increase the capacities of several sewer mains and to improve system reliability through new interceptors, bypass, and relief lines.

Construction and Demolition Program. To comply with the CALGreen Code, as adopted by the Huntington Beach Code, the City implements a Construction and Demolition (C&D) Debris Re-Use and Recycling Program that requires a 65 percent diversion of all C&D wastes (Huntington Beach 2018). This requirement applies to all projects that fall within the Huntington Beach C&D Ordinance Section 8.21.

4.10.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to utilities and service systems if it would:

Threshold 4.10.1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which would cause significant environmental effects;

Threshold 4.10.2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

Threshold 4.10.3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

Threshold 4.10.4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

Threshold 4.10.5: Comply with federal, state, and local management and reduction statures and regulation related to solid waste.

As discussed in Section 4.19 of the Initial Study prepared for the proposed project (Appendix A), the proposed project would have sufficient water supplies available (Threshold 4.10.2) and impacts related to this threshold would be less than significant. In addition, impacts related to the provision of wastewater treatment for the proposed project would be less than significant (Threshold 4.10.3). The proposed project would not generate an excess of solid waste (Threshold 4.10.4) and would comply with all federal, state, and local management and reduction statutes and regulations related

to solid waste (Threshold 4.10.5). Impacts to these thresholds would be less than significant. Therefore, these topics are not further addressed below.

4.10.6 Project Impacts

Threshold 4.10.1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which would cause significant environmental effects?

As discussed in Section 4.19 of the Initial Study (provided in Appendix A), implementation of the proposed project would result in less than significant impacts related to water, wastewater treatment, stormwater drainage facilities, and telecommunication facilities.

4.10.6.1 Electric Power

Less Than Significant Impact. Project construction would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Energy use during construction would be short-term and cease following completion of construction. As such, impacts to electric power consumption due to project construction would be less than significant and would not require or result in the relocation or construction of new or expanded electric power facilities.

Energy use consumed by operation of the proposed project would be associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with the project. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or “plug-in” energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.). Annual natural gas and electricity usage estimates associated with project operation were obtained from CalEEMod.

As previously noted, the electricity consumption associated with the existing uses on the project site is estimated to be 711,955 kWh/year. Upon completion of the proposed project, on-site electricity consumption is anticipated to increase by 539,351 kWh/year to 1,251,306 kWh/year. Total electricity demand in Orange County in 2021 was approximately 18,931.8 GWh (18,931,838,624 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in Orange County by less than 0.01 percent. As such, the proposed project would have less than significant impacts associated with electric power and would not require or result in the relocation or construction of new or expanded electric power facilities. No mitigation is required.

4.10.6.2 Natural Gas

Less Than Significant Impact. As discussed previously, transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). The construction-related equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction of the proposed project.

As described above, the natural gas consumption associated with the existing uses on the project site is estimated to be 4,000 therms/year. Upon completion of the proposed project, on-site natural gas consumption is anticipated to increase by 19,753 therms/year to 23,753 therms/year. Total natural gas consumption in Orange County in 2021 was approximately 580.2 million therms (580,187,556 therms). Therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Orange County by less than 0.01 percent. As such, the proposed project would have less than significant impacts associated with natural gas and would not require or result in the relocation or construction of new or expanded natural gas facilities. No mitigation is required.

4.10.7 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to utilities and service systems, and no mitigation is required.

4.10.8 Standard Conditions, Regulatory Compliance Measures, and Mitigation Measures

No standard conditions, regulatory compliance measures, or mitigation measures are applicable to the proposed project pertaining to utilities and service systems.

4.10.9 Level of Significance after Mitigation

There would be no significant unavoidable adverse impacts of the proposed project related to utilities and service systems, and no mitigation is required.

4.10.10 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines,* cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for land use. The cumulative impact area for utilities and service systems for the proposed project is the City of Huntington Beach. Several mixed use, residential, commercial and industrial development projects are approved, pending, or in the planning stages in the City. All proposed development in the City, would be subject to its own General Plan consistency analysis and would be reviewed for consistency with adopted land use plans and policies.

Electricity consumption and natural gas consumption during project implementation is anticipated to be 1,251,306 kWh/year and 23,753 therms/year, respectively. This usage increases demand for

electricity and natural gas by less 0.01 percent for both electricity and natural gas. As such, cumulative impacts with respect to electricity and natural gas would be less than significant.

Further, each discretionary project would be subject to CEQA, mitigation requirements, and design review, as applicable. Therefore, the proposed project would not contribute a significant cumulative impact to utilities and service systems in the City, and no mitigation is required.

5.0 ALTERNATIVES

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant impacts of the project, and evaluate the comparative merits of the alternatives" (*State CEQA Guidelines*, Section 15126.6). This chapter identifies potential alternatives to the Bolsa Chica Senior Living Community Project (proposed project), evaluates the potential impacts of each alternative, and compares the potential impacts of each alternative against the proposed project's impacts, as required by CEQA.

All impacts of the proposed project can be mitigated to below a level of significance; therefore, the proposed project does not have any significant unavoidable impacts. A lead agency is only required to prepare findings rejecting alternatives if one or more significant environmental effect will not be avoided or substantially lessened by mitigation measures (see *Laurel Hills Homeowners Ass'n v. City Council* [1978] 83 Cal. App. 3rd 515 [if mitigation measures substantially lessen a project's significant environmental effects, the lead agency may approve the project without making findings on the feasibility of the EIR's project alternatives]).

If the City of Huntington Beach (City) finds that a proposed project's significant adverse effects will be avoided or substantially lessened by mitigation measures, it need not make findings that environmentally superior alternatives are infeasible (see *Mira Mar Mobile Community v. City of Oceanside* [2004] 119 Cal. App. 4th 477; *Protect Our Water v. County of Merced* [2003] 110 Cal. App. 4th 362, 373; *Kings County Farm Bureau v City of Hanford* [1990] 221 Cal. App. 3rd 692).

Accordingly, analysis of a "no project" alternative to the proposed project discussed in this section is provided for informational purposes and to allow the decision makers to consider the proposed project in light of a hypothetical alternative land use scenario, thereby promoting CEQA's purpose as an information disclosure statute.

Key provisions of the *State CEQA Guidelines* on alternatives (Sections 15126.6[b] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly (15126.6[b]). The CEQA Guidelines indicate that "[a]lternatives shall be limited to ones that would avoid or substantially lessen any of the *significant effects of the project*." (Guidelines, § 15126.6, subd. (f), italics added; see Pub. Resources Code, §§ 21002, 21002.1, subd. (b), 21081, subd. (a) [discussing mitigation of "significant" impacts]. An EIR's discussion of alternatives need not include alternatives that do not offer significant environmental advantages in comparison with the project. (*Tracy First v. City of Tracy* [2009] 177 Cal. App. 4th 912, 928 [EIR not required to evaluate a reduced-size project alternative where the alternative

would not reduce significant effects]; See also *North Coast Rivers Alliance v. Marin Municipal Water Dist.* [2013] 216 Cal. App. 4th 614, 648-649 [EIR not required to consider alternative energy mitigation because project reduced energy effects to less than significant.])

- The specific alternative of 'no project' shall also be evaluated along with its impact (15126.6[e][1]). The 'no project' analysis shall discuss the existing conditions at the time the Notice of Preparation is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (15126.6[e][2]).

- The range of alternatives required in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent) (15126.6[f]).

- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (15126.6[f][2][A]).

- If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location (15126.6[f][2][B]).

- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (15126.6[f][3]).

Pursuant to the guidelines stated above, a "no project" alternative to the proposed project is considered and evaluated in this EIR. This alternative was developed in the course of project planning and environmental review. The discussion in this section provides:

1. A description and analysis of impacts for each alternative considered;

2. Environmental analysis of the potential impacts of the alternative and the significance of those impacts (per the *State CEQA Guidelines*, significant effects of an alternative shall be discussed but, in less detail than those of the proposed project);

3. Overview of the potential impacts of the alternative and the significance of those impacts; and

4. Summary comparison of the alternative relative to the proposed project's impacts, specifically addressing whether the alternative would meet the project objectives, eliminate or reduce impacts as compared to the project, and other comparative merits.

5.2 SELECTION OF ALTERNATIVES

Section 21100 of the Public Resources Code and Section 15126.6 of the *State CEQA Guidelines* require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the proposed project and would avoid or substantially lessen any of the significant environmental impacts. However, the lead agency is only required to prepare findings rejecting alternatives if one or more significant environmental effect will not be avoided or substantially lessened by mitigation measures (*Laurel Hills Homeowners Ass'n v. City Council* [1978] 83 Cal. App. 3rd 515). In addition, if the City finds that a proposed project's significant adverse effects will be avoided or substantially lessened by mitigation measures, it need not make findings that environmentally superior alternatives are infeasible (*Mira Mar Mobile Community v. City of Oceanside* [2004] 119 Cal. App. 4th 477; *Protect Our Water v. County of Merced* [2003] 110 Cal. App. 4th 362, 373; *Kings County Farm Bureau v City of Hanford* [1990] 221 Cal. App. 3rd 692).

As discussed in Section 5.3.2 below, six key objectives have been established for the proposed project, one of which is a policy taken directly from the City's 2020 Housing Element regarding the development of affordable senior housing and supportive services. As described in further detail in Section 5.5, the proposed project would be able to achieve each of the project objectives, including meeting the demand for senior living facilities in Huntington Beach at a scale of development suitable to current industry standards, with the goal of producing as many senior housing units as possible. Any alternative proposed would not meet all of the project objectives and would fall short of addressing the needs of the City's senior population.

As there are no significant and unavoidable impacts resulting from the proposed project, based on the criteria listed above, and any alternative proposed would not meet all of the project objectives, only the No Project Alternative has been selected for analysis. This alternative is outlined below:

- **Alternative 1: No Project Alternative.** This alternative would involve no changes to the existing land uses and conditions on the project site. Under this alternative, no new development on the project site is proposed, and therefore, no development would occur, and the project site would remain in its current condition. The No Project Alternative would allow for the project site to remain developed with commercial (retail and office) uses and an associated surface parking lot.

5.3 PROPOSED PROJECT

5.3.1 Project Characteristics

The proposed community would include 213 total living units, an entire level of recreation and fitness, and 207 on-site subterranean parking spaces, open space, and associated hardscape and landscape improvements. Of the total 213 senior living units, 28 would be Memory Care units, 62

would be Assisted Living units, and 123 would be Independent Living units. The units would range in size from a studio (approximately 540 square feet) to three-bedroom units (approximately 2,580 square feet). Amenities for residents will include multiple restaurant-style dining venues, fitness and wellness center, salon and studio spaces, theater, art room, lounge, and multi-purpose rooms. Outdoor spaces are anticipated to include a memory care garden, swimming pool with outdoor exercise area, outdoor seating area with fire pit, outdoor dining areas, meditation spaces, and roof decks. Refer to Figure 3-3, Illustrative Site Plan and Surrounding Land Uses, and Figure 34, Conceptual Site Plan, in Chapter 3.0, Project Description, for the proposed project's illustrative site plan and conceptual site plan, respectively.

A portion of the new community would be licensed by the California Department of Social Services, Community Care Licensing Division (CCLD) per California Code of Regulations (CCR) Title 22, Division 6, Chapter 8 as a Residential Care Facility for the Elderly (RCFE). The State would enforce laws and regulations governing the resident rooms, including a building inspection prior to opening and thorough periodic inspections during operations. The RCFE designation would allow residents at the community to age in place and receive assistance with the activities of daily living. Care for assisted living and memory-impaired residents would be provided 24 hours per day, seven days per week. Once the community reaches full residential occupancy, it is anticipated there would be a total of 110 full-time employees. Vans would be provided to transport residents to off-site activities. The development of the new community would require demolition and removal of the existing two commercial buildings, surface parking (including existing asphalt concrete pavement, curb, and gutter), fence and block wall, landscaping, yard lights, signage, and all above-ground water and gas lines on the project site. All existing utility sewer, water, and gas lines below grade would be disconnected and capped.

5.3.2 Project Objectives

As discussed in Chapter 3.0, Project Description, of this EIR, the following Project Objectives have been established to aid decision-makers in their review of the proposed project and its associated environmental impacts:

1. Support development of affordable senior housing and supportive services to facilitate maximum independence and the ability of seniors to remain in their homes and/or in the community (Policy 5.2 in the City's 2020 Housing Element).

2. Develop a project that helps meet the increasing demand for senior living facilities in Huntington Beach at a scale of development suitable to current industry standards, with the goal of producing as many senior housing units as possible.

3. Provide opportunity for residents to age in place through provision of multiple unit types accommodating independent living, assisted living, and memory care.

4. Provide a community with around-the-clock staff assistance, as well as a range of amenities that would aid in maintaining a high quality of life and support activities associated with daily living of residents.

5. Deliver benefits to the community by expanding the range of housing opportunities with a particular focus on addressing the needs of the elderly.

6. Implement a project that would be compatible with surrounding land uses and would enhance the character of the surrounding neighborhood through high quality design.

5.3.3 Project-Related Impacts

As described further in Chapter 4.0, Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures, the proposed project would not result in adverse impacts related to the following environmental factors including agriculture and forestry resources, biological resources, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, public services, recreation, transportation, and wildfire. Additionally, the proposed project was determined not to result in adverse impacts for some thresholds under the following environmental factors including aesthetics, air quality, cultural resources, geology and soils, land use and planning, noise, and utilities and service systems.

As described in Chapter 4.0, the proposed project would result in less than significant impacts related to aesthetics, energy, greenhouse gas emissions, land use, noise, transportation, and utilities and service systems. No mitigation measures would be required to reduce project-related impacts, and the proposed project would not result in any significant unavoidable impacts. Additionally, the proposed project would result in less than significant impacts related to air quality, cultural resources, geology and soils, and tribal cultural resources with implementation of mitigation measures. Prescribed mitigation measures are detailed throughout Chapter 4.0 of this Draft EIR and with implementation, the proposed project would not result in any significant unavoidable impacts.

5.4 ALTERNATIVES INITIALLY CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

The following is a discussion of the development alternatives considered during the environmental review process and the reasons they were not selected for detailed analysis in this Alternatives section of this Draft EIR.

5.4.1 Maximum Buildout of the Project Site Under the Existing Commercial General (CG) Designation (Maximum CG Buildout Alternative)

The project site is currently designated and zoned CG – Commercial General. Without implementation of the proposed project, which includes a General Plan Amendment to change the land use designation from CG to Mixed Use (MU) and a Zoning Map Amendment to change the zoning from CG to Specific Plan (SP), the project site would only support uses allowed under the CG designation. The CG designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/ motels, timeshares, cultural facilities, institutional, health care, government offices, and educational uses.

If the proposed project, which would provide senior housing, is not approved, the redevelopment of the project site with a retail commercial project is the next most likely use that could occur on the project site. Therefore, the Maximum CG Buildout Alternative assumes the project site would be redeveloped with a retail commercial center. Under the CG development standards, the maximum buildout of the 3.10-acre (135,036 sq. ft.) project site would result in a 202,554 sq. ft. commercial retail building that would be a maximum of 50 feet and would provide up to 1,013 parking spaces[1] for employees and customers of the center. In order to meet this parking requirement, the Maximum CG Buildout Alternative would likely require the construction of a two-level subterranean parking garage, resulting in deeper excavation and additional truck trips to remove cut material during construction as compared to the level of excavation required for the proposed project. Implementation of the Maximum CG Buildout Alternative would likely involve the demolition of the existing on-site structures and removal of the surface parking to allow for construction of the new commercial retail center, which would have a larger building footprint than the existing onsite structures. The Maximum CG Buildout Alternative would be designed in a similar manner to the proposed project, reflecting a traditional style of architecture with a variety of building materials and complementary light colors reflective of the City's beach lifestyle. Development of the Maximum CG Buildout Alternative would also include landscape and project site access, circulation, and parking improvements.

The Maximum CG Buildout Alternative would generate 7,497 daily vehicle trips, including a.m. and p.m. peak hour trips. The 45,340 sq. ft. of existing occupied commercial (office and strip retail plaza) uses generate approximately 947 daily vehicle trips, including a.m. and p.m. peak hour trips. As such, the Maximum CG Buildout Alternative would result in a net increase of 6,550 daily trips, including a net increase in a.m. and p.m. peak hour trips. This represents a substantial increase in daily traffic at and around the project site and could result in a potentially significant impact on the surrounding circulation system. Additionally, the increase in vehicle trips to and from the site would result in increased air quality impacts at and around the project site. The Maximum CG Buildout Alternative would not reduce the daily trips to and from the project site, thereby not providing the same beneficial traffic impacts as the proposed project. Further, the Maximum CG Buildout Alternative would result in increased transportation impacts when compared to the proposed project.

The Maximum CG Buildout Alternative would not achieve any of the housing-related Project Objectives. The Maximum CG Buildout Alternative would not help the City achieve its goals of meeting the increasing demand for senior living facilities by providing as many senior housing units as possible, providing opportunities for residents to age in place through a variety of housing accommodations and around-the-clock staff assistance, or expanding the range of housing

[1] Chapter 231.04, Off Street Parking and Loading Spaces Required, of the City's Zoning Code details the minimum number of off-street parking spaces required for commercial uses. The parking requirements range from one parking space per 200 sq. ft. to one space per 5,000 sq. ft. depending on the commercial use present on the project site. In order to provide the most conservative estimate of environmental impacts associated with a maximum buildout of the project site under the CG designation, the requirement of one space per 200 sq. ft. was used. 202,554 sq. ft. / 200 sq. ft. = 1,012.77 spaces (rounded to 1,013 spaces).

opportunities focusing on the elderly. The City of Huntington Beach is experiencing an increasing demand for senior living facilities to address the housing needs of its large senior population.[2] Development of senior housing projects within the City, such as the proposed project, provide an opportunity to address this housing need, as well as bolster the local economy through job creation. Retail/commercial use at the project site is allowable under the current zoning designation and would be the next most likely use to occur at the site if the proposed project is not approved. Although the Maximum CG Buildout Alternative would be able to attain one of the Project Objectives because it could implement a project that would be compatible with surrounding land uses and would enhance the character of the surrounding neighborhood through high quality design, maximum buildout of the project site under the current CG designation would result in greater environmental impacts, specifically with regards to transportation, when compared to the proposed project. For these reasons, the Maximum CG Buildout Alternative has been rejected and is not considered further in the alternatives analysis.

5.4.1.1 Air Quality

Under existing conditions, the 45,340 sq. ft. of existing occupied commercial uses generate approximately 947 daily trips. The proposed project is expected to generate 513 daily trips. Implementation of the proposed project would result in a net reduction of 434 daily vehicle trips to and from the project site compared to the existing conditions due to the change in use of the project site from commercial uses to a senior living community[3]. As such, implementation of the proposed project would provide beneficial air quality impacts by decreasing the number of daily vehicle trips and associated air pollution. The proposed project would result in less than significant air quality impacts, and the Maximum CG Buildout Alternative's impacts on air quality associated with construction activities would be similar to the proposed project. However, because implementation of the Maximum CG Buildout Alternative would generate 7,497 daily vehicle trips (6,984 more trips than the proposed project), air quality impacts associated with operational vehicle trips would be greater with implementation of the Maximum CG Buildout Alternative as opposed to the proposed project.

Overall, impacts to air quality from the Maximum CG Buildout Alternative would be potentially significant and greater to those associated with the proposed project. Although the Maximum CG Buildout Alternative would result in similar construction-related air quality emissions, its operational emissions would be higher than those under the proposed project due to the increased number of daily vehicle trips.

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[2] See "Age Characteristics" 2021–2029 Draft Huntington Beach Housing Element (incorporated by reference). As of 2019, 18 percent of the population is over 65, and is now (mid-2023) estimated to be 20 percent over 70. The City's Adopted 2022/23 Operating Budget estimates over 40 percent of the existing Huntington Beach population is over 65.

[3] Daily vehicle trips were calculated based on trip generation rates from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition (2021). For project trips generation during project operation and construction, ITE trip rates for Land Use Codes 253 (Congregate Care Facility) and 254 (Assisted Living) were used. ITE trip rates for Land Use Codes 710 (General Office Building) and 822 (Strip Retail Plaza) were applied to the existing commercial uses.

5.4.1.2 Energy

The proposed project would result in less than significant energy impacts, and the Maximum CG Buildout Alternative's impacts on energy associated with construction activities would be similar to the proposed project. However, because implementation of the Maximum CG Buildout Alternative would generate 6,984 more daily vehicle trips to and from the project site than the proposed project, energy impacts associated with operational vehicle trips would be greater with implementation of the Maximum CG Buildout Alternative as opposed to the proposed project.

Overall, impacts to energy from the Maximum CG Buildout Alternative would be potentially significant and greater to those associated with the proposed project. Although the Maximum CG Buildout Alternative would result in similar construction-related energy consumption, its operational energy consumption, particularly its gasoline and diesel fuel consumption, would be higher than that of the proposed project due to the increased number of daily vehicle trips.

5.4.1.3 Greenhouse Gas Emissions

Implementation of the maximum buildout under the CG designation would likely require the demolition of existing on-site structures, grading, and construction and would increase the intensity of the existing on-site use. As such, additional greenhouse gas emissions related to grading, construction, additional vehicle trips, and operational uses would be generated under this alternative, and greater impacts relating to greenhouse gas emissions would occur. In addition, because implementation of the Maximum CG Buildout Alternative would generate 6,984 more daily vehicle trips to and from the project site than the proposed project, greenhouse gas emissions associated with operational vehicle trips would be greater with implementation of the Maximum CG Buildout Alternative as opposed to the proposed project.

Overall, impacts relating to greenhouse gas emissions from the Maximum CG Buildout Alternative would be potentially significant and greater to those associated with the proposed project. Although the Maximum CG Buildout Alternative would result in similar construction-related greenhouse gas emissions, its operational emissions would be higher than those under the proposed project due to the increased number of daily vehicle trips.

5.4.1.4 Land Use and Planning

Implementation of the maximum buildout under the CG designation would likely require the demolition of existing on-site structures, grading, and construction and would increase the intensity of the existing on-site use. The Maximum CG Buildout Alternative would not require a General Plan Amendment or a Zoning Map Amendment. However, the Maximum CG Buildout Alternative would not assist the City of Huntington Beach in meeting the goals of its General Plan of providing a variety of housing accommodations for residents of all demographics, specifically to meet the increasing demand for senior living facilities. Therefore, although the proposed project would result in a less than significant impact related to land use and planning with approval of the General Plan Amendment and Zoning Map Amendment, the Maximum CG Buildout Alternative's impacts on land use and planning would be similar to those of the proposed project.

5.4.1.5 Noise

Implementation of the maximum buildout under the CG designation would likely require the demolition of existing on-site structures, grading, and construction and would increase the intensity of the existing on-site use. As such, noise associated with construction would be generated under this alternative. In addition, because implementation of the Maximum CG Buildout Alternative would generate 6,984 more daily vehicle trips to and from the project site than the proposed project, noise associated with operational vehicle trips would be greater with implementation of the Maximum CG Buildout Alternative as opposed to the proposed project.

Overall, noise impacts from the Maximum CG Buildout Alternative would be potentially significant and greater to those associated with the proposed project. Although the Maximum CG Buildout Alternative would result in similar construction-related noise impacts, its operational noise impacts would be higher than those under the proposed project due to the increased number of daily vehicle trips.

5.4.1.6 Attainment of Project Objectives and Comparison to Proposed Project

The Maximum CG Buildout Alternative would not help the City achieve its goals of meeting the increasing demand for senior living facilities, providing opportunities for residents to age in place through a variety of housing accommodations and around-the-clock staff assistance, or expanding the range of housing opportunities focusing on the elderly. In addition, maximum buildout of the project site under the current CG designation would result in greater environmental impacts when compared to the proposed project.

5.5 ALTERNATIVE 1: NO PROJECT ALTERNATIVE

5.5.1 Description

Consistent with Section 15126.6 of the *State CEQA Guidelines*, the No Project Alternative assumes the existing land uses and condition of the project site at the time the Notice of Preparation (NOP) was published (November 2022) would continue to exist without any changes. The setting of the project site at the time the NOP was published is described throughout Chapter 4.0 of this Draft EIR with respect to individual environmental issues and forms the baseline of the impact assessment of the proposed project. The No Project Alternative represents the environmental conditions that would exist if no new development of any kind were to occur on the project site.

The existing General Plan land use designation and zoning district for the project site is CG – Commercial General. The Commercial General designation provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/motels, timeshares, cultural facilities, institutional, health care, government offices, and educational uses. The current maximum Floor Area Ratio (FAR) that applies to the project site is 1.5, and the current maximum building height is 50 feet.

The No Project Alternative would allow for the project site to remain developed with commercial (retail and office) uses and an associated surface parking lot. The existing commercial and retail uses total approximately 55,000 square feet and are contained in two buildings comprised of a three-

story office building fronting on Bolsa Chica Street and a two-story commercial retail building fronting on Warner Avenue. There are currently three vehicular access points along Bolsa Chica Street and two vehicular access points along Warner Avenue. Figure 3-2, Existing Conditions, in Chapter 3.0, Project Description, shows the project setting, including the locations of existing on-site structures.

The currently approved City General Plan and zoning designations (CG) would remain applicable to the project site and there would be no improvements implemented on the project site. The No Project Alternative would allow existing conditions on the project site to remain unchanged. The existing two-story commercial building and the three-story office building are not fully occupied, and the impacts analysis of the No Project Alternative is based on this existing level of use. However, implementation of the No Project Alternative would allow for future uses at the project site to occupy 100 percent of the existing commercial and office buildings, which could result in increased/greater environmental impacts.

5.5.2 Environmental Analysis

5.5.2.1 Aesthetics

The No Project Alternative would not require any demolition of the existing on-site structures or surface parking, grading, site work, or removal of vegetation because no new development would occur on the project site. In addition, no new buildings would be constructed on the project site, and public views of and from the project site would remain unchanged. As such, this alternative would result in no impacts to scenic vistas or scenic highways. The project site is currently developed with commercial (retail and office) uses and an associated surface parking lot, which produce light and glare from the on-site lighting. Because the No Project Alternative would not include demolition activities, construction activities, construction of new buildings, or intensification of the on-site lighting sources, the No Project Alternative would not result in new impacts related to visual character or quality, or light and glare. However, the No Project Alternative would not result in landscaping improvements to the site as detailed in Chapter 3.0, Project Description, the implementation of which would improve the visual quality of the site. Although the proposed project would result in less than significant impacts related to aesthetics, because no development would occur on site, aesthetic impacts under the No Project Alternative would be less than compared to the proposed project.

5.5.2.2 Air Quality

The No Project Alternative would not require demolition of existing on-site structures, grading, or construction and would not change or increase the intensity of the existing on-site use. Additionally, the No Project Alternative would not increase vehicle trips to and from the project site as compared to existing conditions. Therefore, no additional air pollutant emissions related to grading, construction, additional vehicle trips, and operational uses would be generated under this alternative, and no air quality impacts would occur.

Under existing conditions, the 45,340 sq. ft. of existing occupied commercial uses generate approximately 947 daily trips. The proposed project is expected to generate 513 daily trips. Implementation of the proposed project would result in a net reduction of 434 daily vehicle trips to

and from the project site compared to the existing conditions due to the change in use of the project site from commercial uses to a senior living community. As such, implementation of the proposed project would provide beneficial air quality impacts by decreasing the number of daily vehicle trips and associated air pollution. Although the proposed project would result in less than significant air quality impacts, the No Project Alternative's impacts on air quality associated with construction activities would be less than the proposed project. However, air quality impacts associated with operational vehicle trips would be greater with implementation of the No Project Alternative as opposed to the proposed project.

Overall, impacts to air quality from the No Project Alternative would be less than significant and similar to those associated with the proposed project. Although the No Project Alternative would not result in any construction-related air quality emissions, its operational emissions would be higher than those under the proposed project due to the increased number of daily vehicle trips.

5.5.2.3 Cultural Resources

The No Project Alternative would not require any grading or site work because no new development would occur on the project site. In addition, no buildings would be demolished or constructed on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource. Further, the No Project Alternative would not have the potential to disrupt human remains or result in the discovery of previously unknown archaeological resources. No impacts related to cultural resources would occur under this alternative. Therefore, although the proposed project would result in less than significant impacts to cultural resources with implementation of mitigation, the No Project Alternative's impacts on cultural resources would be less than the proposed project as no disturbance would occur on the project site.

5.5.2.4 Energy

The No Project Alternative would not require any grading or site work because no new development would occur on the project site. In addition, no new buildings would be demolished or constructed on the project site and no increased operations would occur. As discussed previously, implementation of the proposed project would result in a net reduction of 434 daily vehicle trips to and from the project site due to the change in use of the project site from commercial uses to a senior living community. As such, implementation of the proposed project would provide beneficial energy impacts by decreasing the amount of fuel consumption associated with daily vehicle trips.

Although the proposed project would result in less than significant energy impacts, the No Project Alternative's impacts on energy associated with construction activities would be less than the proposed project. However, energy impacts associated with operational vehicle trips would be greater with implementation of the No Project Alternative as opposed to the proposed project.

Overall, impacts to energy from the No Project Alternative would be less than significant and similar to those associated with the proposed project. Although the No Project Alternative would not result in any construction-related energy consumption, its operational energy consumption, particularly its gasoline and diesel fuel consumption, would be higher than that of the proposed project due to the increased number of daily vehicle trips.

5.5.2.5 Geology and Soils

The No Project Alternative would not require any grading or site work because no new development would occur on the project site. In addition, no buildings would be demolished or constructed on the project site. Therefore, the No Project Alternative would have no impacts related to geology and soils. The proposed project would result in less than significant geology and soils impacts with mitigation incorporated; the No Project Alternative would not require any mitigation measures and its impacts on geology and soils would be less than those associated with the proposed project.

5.5.2.6 Greenhouse Gas Emissions

The No Project Alternative would not require any grading or site work because no new development would occur on the project site. In addition, no buildings would be demolished or constructed on the project site. Implementation of the proposed project would result in a net reduction in daily vehicle trips to and from the project site and overall vehicle miles traveled due to the change in use of the project site from commercial uses to a senior living community. As such, implementation of the proposed project would decrease the amount of greenhouse gas emissions associated with vehicle trips.

Similar to the proposed project, the No Project Alternative's impacts on greenhouse gas emissions would also be less than significant. While the No Project Alternative's greenhouse gas emissions associated with construction activities would be less than the proposed project, its greenhouse gas emissions during operation would be greater than the proposed project due to the increased number of daily vehicle trips.

5.5.2.7 Land Use and Planning

No development would occur on the project site under the No Project Alternative. The project site would remain developed with commercial (retail and office) uses and an associated surface parking lot. The No Project Alternative would not require a General Plan Amendment or a Zoning Map Amendment. However, the No Project Alternative would not assist the City of Huntington Beach in meeting the goals of its General Plan of providing a variety of housing accommodations for residents of all demographics, specifically to meet the increasing demand for senior living facilities. Therefore, although the proposed project would result in a less than significant impact related to land use and planning with approval of the General Plan Amendment and Zoning Map Amendment, the No Project Alternative's impacts on land use and planning would be less than significant and similar to those of the proposed project.

5.5.2.8 Noise

The No Project Alternative would not involve any demolition activities, grading, construction vehicle, or truck trips. Therefore, the noise impacts that are typically associated with demolition and construction would not occur under this alternative. Because no additional development would be constructed under the No Project Alternative and vehicle trips would not increase from existing uses, there would be no long-term operational increase in noise levels. Implementation of the proposed project would result in a net reduction in daily vehicle trips to and from the project site due to the change in use of the project site from commercial uses to a senior living community. As

such, implementation of the proposed project would provide beneficial noise impacts by decreasing the number of daily vehicle trips.

Although the proposed project would result in less than significant noise impacts, the No Project Alternative's impacts on noise associated with construction activities would be less than the proposed project. However, noise impacts associated with operational vehicle trips would be greater with implementation of the No Project Alternative as opposed to the proposed project due to the reduced number of daily vehicle trips generated by the proposed project.

Overall, impacts to noise from the No Project Alternative would be less than significant and similar to those associated with the proposed project.

5.5.2.9 Tribal Cultural Resources

The No Project Alternative would not require any grading, site work, or removal of vegetation because no new development would occur on the project site. In addition, no buildings would be demolished, and no new buildings would be constructed on the project site. Therefore, the No Project Alternative would not cause a substantial adverse change in the significance of a tribal cultural resource as defined by CEQA that is listed or eligible for listing in the California Register of Historical Resources (California Register) or a local register. Further, the No Project Alternative would not have the potential to disrupt human remains or result in the discovery of previously unknown tribal cultural resources. No impacts related to tribal cultural resources would occur. Although the proposed project would result in less than significant impacts to tribal cultural resources with implementation of mitigation, the No Project Alternative's impacts would be less than those of the proposed project.

5.5.2.10 Utilities and Service Systems

The No Project Alternative would not include any new development on the project site and would therefore not increase the demand for or require any enhancement or new construction of public facility infrastructure for electricity, natural gas, water, or telecommunications over existing demand. Additionally, because no construction would occur and there would be no new or expanded uses on the project site, no increase in solid waste or wastewater generation would occur. Therefore, the No Project Alternative would have no impacts on utilities and service systems. Although the proposed project would result in less than significant impacts to utilities and service systems, the No Project Alternative's impacts would be less than those of the proposed project.

5.5.3 Overview of Potential Impact/Comparison to Proposed Project

Under the No Project Alternative, no physical changes would occur on the project site. The existing two-story commercial building and the three-story office building are currently not fully occupied, and the impacts analysis of the No Project Alternative is based on this existing level of use. The level of significance of the impacts of the No Project Alternative and the proposed project are similar and neither alternative would result in significant impacts. Because the No Project Alternative does not require any demolition activities or new construction, the impacts of the No Project Alternative would be less than the impacts of the proposed project for aesthetics, geology and soils, energy (construction), tribal cultural resources, and utilities and service systems. Further, the No Project

Alternative and the proposed project would have varying, but similar impacts, regarding land use and planning. The No Project Alternative would not require amendments to the general plan or a change to the zoning designation for the project site. However, the No Project Alternative would not address the City's identified need for adequate senior housing. Potential impacts resulting from implementation of the No Project Alternative would be greater than the potential impacts resulting from implementation of the proposed project for air quality, greenhouse gas emissions, energy (operational), and noise. However, the No Project Alternative would result in greater impacts to air quality, greenhouse gas emissions, and noise when compared to the proposed project; therefore, overall the potential impacts of the No Project Alternative and the proposed project would be similar.

Although the impacts analysis of the No Project Alternative is based on the current occupancy of the existing commercial buildings on the site; the No Project Alternative would allow for future uses of the site to occupy 100 percent of the existing commercial buildings. Full/increased occupancy of the existing commercial buildings would result in an increase in the number of daily trips to and from the site thereby resulting in greater impacts to the surrounding circulation system. Assuming the currently vacant 9,513 sq. ft. were to be occupied by retail uses in the future, an additional 518 daily trips would be generated to and from the site when compared to the existing uses of the site. Increased traffic to and from the project site would proportionally increase impacts associated with air quality, greenhouse gas emissions, and noise. Therefore, there is the potential that the future effects of the No Project Alternative related to transportation, air quality, energy, greenhouse gas emissions, and noise could be greater than under existing conditions if the existing buildings were to become fully utilized.

5.5.4 Attainment of Project Objectives

The No Project Alternative would not achieve any of the identified Project Objectives. Without the proposed project, the project site would not be redeveloped with a senior living community that is compatible with the surrounding community and that would enhance the character of the surrounding neighborhood. Further, the No Project Alternative would not help the City achieve its goals of meeting the increasing demand for senior living facilities, providing opportunities for residents to age in place through a variety of housing accommodations and around-the-clock staff assistance, or expanding the range of housing opportunities focusing on the elderly.

5.6 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. *State CEQA Guidelines* Section 15126.6(e)(2) states that if the No Project/No Development Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Neither the No Project Alternative nor the proposed project would result in significant effects. Because the No Project Alternative does not require new construction, the existing level of effects of the No Project Alternative are less than the effects of the proposed project compared against existing conditions for aesthetics, geology and soils, tribal cultural resources, energy (during the construction period), and utilities and service systems. The No Project Alternative and the proposed project have different, but equivalent effects, regarding land use and planning. The No Project Alternative would not require changes to the General Plan or

zoning ordinances. On the other hand, the No Project Alternative does not have the land use benefits associated with addressing the City's need for senior housing. The effects of the No Project Alternative are greater than the effects of the proposed project for air quality, greenhouse gas emissions, noise, and energy use during the project's operational life. In addition, as discussed previously, there is the potential that the future effects of the No Project Alternative regarding transportation, air quality, energy, greenhouse gas emissions, and noise could be greater than under existing conditions if the existing buildings were to become fully utilized. Overall, the No Project Alternative is not environmentally superior to the proposed project. As such, it is reasonable that no further alternatives are required to be evaluated in this EIR (see *Laurel Hills Homeowners Ass'n v. City Council* [1978] 83 Cal. App. 3rd 515; *Mira Mar Mobile Community v. City of Oceanside* [2004] 119 Cal. App. 4th 477; *Protect Our Water v. County of Merced* [2003] 110 Cal. App. 4th 362, 373; *Kings County Farm Bureau v City of Hanford* [1990] 221 Cal. App. 3rd 692). Table 5.A provides, in summary format, the level of impacts for the No Project Alternative in comparison to the proposed project.

Table 5.A: Comparison of the Environmental Impacts of the Proposed Project to the Project Alternatives

Environmental Topic	Proposed Project Level of Impacts After Mitigation	Alternative 1: No Project Alternative
Aesthetics	Less Than Significant	L
Air Quality	Less Than Significant	G
Cultural Resources	Less Than Significant	L
Energy	Less Than Significant	S
Construction	Less Than Significant	L
Operation	Less Than Significant	G
Geology and Soils	Less Than Significant	L
Greenhouse Gas Emissions	Less Than Significant	G
Land Use and Planning	Less Than Significant	S
Noise	Less Than Significant	G
Tribal Cultural Resources	Less Than Significant	L
Utilities and Service Systems	Less Than Significant	L
Attainment of Project Objectives	Meets all of the Project Objectives	Meets none of the Project Objectives

Source: LSA (January 2023)
Legend: L = Less impact than the proposed project
S = Similar impacts as the proposed project, does not eliminate significant and adverse impacts
G = Greater impacts than the proposed project

Of the alternatives discussed, the No Project Alternative has the least impact to the environment during the short term because it would not result in any construction activities on the project site or the intensification of land uses. However, when compared to the proposed project, the No Project Alternative would result in greater environmental impacts to air quality and transportation-related

impacts to the surrounding circulation system due to the greater number of vehicle trips (and resulting increase in Vehicle Miles Traveled) to and from the project site.

In addition, the No Project Alternative would not meet any of the Project Objectives established for the proposed project including helping the City to achieve its land use goals of meeting the increasing demand for senior living facilities by providing senior housing units without resulting in significant environmental effects, providing opportunities for residents to age in place through a variety of housing accommodations and around-the-clock staff assistance, and expanding the range of housing opportunities focusing on the elderly would not occur. Furthermore, the No Project Alternative would not redevelop the project site with a senior living community that is compatible with the surrounding community and that would enhance the character of the surrounding neighborhood. Therefore, none of the Project Objectives would be met.

The Maximum CG Buildout Alternative would result in potentially significant impacts that would not occur under the proposed project. Similarly, the No Project Alternative has the potential to result in potentially significant impacts if the existing buildings were to become fully utilized. Potentially significant impacts associated with implementation of the proposed project would be reduced to a less than significant level with implementation of mitigation. Therefore, the proposed project would not result in any significant impacts. None of the alternatives considered would eliminate the potentially significant impacts associated with the project prior to/without implementation of mitigation. Further, potentially significant impacts associated with construction activities, such as impacts to noise and air quality, would occur regardless of the project's location in the City, and similar mitigation measures, standard conditions, and regulatory compliance measures as detailed throughout this EIR would be required to reduce potentially significant impacts to a less than significant level.

The City of Huntington Beach is experiencing an increasing demand for senior living facilities to address the housing needs of its senior population. As such, the City has adopted a policy to support the development of affordable senior housing and supportive services to facilitate maximum independence and the ability of seniors to remain in their homes and/or in the community (Policy 5.2 in the City's 2020 Housing Element). The proposed project meets each of the identified project objectives, including meeting the demand for senior living facilities in Huntington Beach at a scale of development suitable to current industry standards, with the goal of producing as many senior housing units as possible. Any alternative proposed would not meet all of the project objectives and would fall short of addressing the needs of the City's senior population. In addition, as described throughout this EIR, the proposed project would not result in any significant unavoidable impacts as all impacts of the proposed project can be mitigated to below the appropriate level of significance. Therefore, no alternative is identified as the Environmentally Superior Alternative.

6.0 OTHER CEQA CONSIDERATIONS

6.1 SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(c) of the California Environmental Quality Act (CEQA) Guidelines (*State CEQA Guidelines*) requires that an Environmental Impact Report (EIR) describe any significant impacts that cannot be avoided. Specifically, Section 15126.2(c) states that an EIR shall:

> "Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described."

The Executive Summary of this document (Chapter 1.0) contains a detailed summary that identifies the proposed project's environmental impacts as compared to existing conditions, proposed mitigation measures, and the level of significance of any impacts after mitigation. No impacts were identified that are considered significant, adverse, and unavoidable after all mitigation is applied. These impacts and proposed mitigation measures are also described in detail in Chapter 4.0, Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures. Chapter 2.0, Introduction, also provides a summary of those topics for which no impacts would occur with implementation of standard conditions and compliance with existing regulations, including agriculture and forestry resources, biological resources, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, public services, recreation, transportation, and wildfire.

6.2 ENERGY IMPACTS

According to Section 15126.2(b) of the *State CEQA Guidelines*, "if analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use."

As described in Section 4.4, Energy, of this Draft EIR, energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. In addition, the project's net increase in electricity usage would not represent a substantial demand on available electricity resources. Furthermore, automobiles and transportation-related energy use to and from the project site would be subject to fuel economy and efficiency standards applied throughout the State and fuel efficiency would increase throughout the life of the project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses. Electrical and natural gas demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The proposed project would be designed to meet sustainability goals, including the

California Green Building Standards Code (CALGreen Code), Title 24 energy efficiency requirements, and Assembly Bill (AB) 1881 water efficient landscape requirements. The proposed project would also incorporate a number of energy and water conservation measures, green building features, and Low Impact Development (LID) design features. CALGreen and Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage.

6.3 GROWTH-INDUCING IMPACTS

Sections 15126(d) and 15126.2(e) of the *State CEQA Guidelines* require that an EIR analyze growth inducing impacts and discuss the ways in which a proposed project could foster economic or population growth or construction of additional housing, either directly or indirectly, in the surrounding environment. This section examines ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly in the surrounding environment. *State CEQA Guidelines* Section 15126.2(d) also requires a discussion of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. To address these issues, potential growth-inducing effects were examined through analysis of the following questions:

- Would the project remove obstacles to, or otherwise foster, population growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?
- Would the project foster economic growth?
- Would approval of the project involve some characteristic that may encourage and facilitate other activities that could significantly affect the environment?

Growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment (*State CEQA Guidelines*, Section 15126.2(e)). This issue is presented to provide additional information on ways in which the proposed project could contribute to significant changes in the environment beyond the direct consequences of developing the proposed land uses as described in earlier sections of this Draft EIR.

6.3.1 Removal of Obstacles to, or Otherwise Foster, Population Growth

The project site is located in an extensively developed and urbanized area. In any event, the proposed project would not remove impediments to population growth in the area surrounding the project site. The project site is equipped with existing infrastructure. As discussed in the Initial Study provided in Appendix A, the proposed project would connect to existing utility infrastructure through established utility easement agreements. While the proposed project may require additional water, sewer, electricity, and natural gas lines on site compared to existing conditions, such improvements would be intended to meet project-related demand and would not necessitate substantial utility infrastructure improvements.

The proposed project includes the construction and operation of a five-story, 213-unit senior living community. The senior living community is not a typical residential use and would likely attract existing residents that already live in the City and surrounding areas rather than inducing new population growth from outside the area. Nevertheless, the project site does not currently contain any permanent residents in the existing condition. As such, implementation of the proposed project would potentially result in an increase in City residents. The community is intended to house one resident per bed. Therefore, the proposed project will induce population growth in the project vicinity by adding up to 278 new residents on the project site. The addition of 278 new residents represents 0.14 percent of Huntington Beach's 2022 population of 196,100 (California Department of Finance 2022).[1] As previously discussed, given the specific services provided by a senior living community, it is expected that a majority of future residents would come from within a 5–7 mile vicinity of the project site. As such, it can be reasonably assumed that a portion of the community's 278 residents would be comprised of individuals who already live in the City, and that a population increase of 0.14 percent represents a conservative, worst-case scenario. Moreover, this population increase is minimal relative to the City's overall population.

During project operation, it is anticipated the community would be staffed by 110 employees, staggered in shifts during which the number of employees on site would range from 20 to 40 employees. According to the most recently data published by the U.S. Census Bureau, Orange County had 9,612 individuals employed at continuing care communities and assisted living communities for the elderly in 2017.[2] Therefore, because the region's existing labor force already includes a large number of people employed in the congregate care industry, it is reasonable to assume that the senior living community's employees would most likely be comprised of individuals who already live in the general area. As such, it is unlikely that these employment opportunities would cause employees to relocate their residences to be close to the project site, thereby inducing growth within the City. Population growth in the area as a result of on-site employment opportunities would be negligible. Therefore, the proposed project would not provide new employment opportunities that would result in substantial indirect growth or create a significant demand for housing or services in the vicinity of the project site.

Short-term employment opportunities offered by the construction and operational phases of the proposed project are likely to be met by the available local and regional labor pool. The proposed project would generate approximately 306 temporary construction-related jobs in Huntington Beach throughout the 24-month construction period. It is unlikely that employees would need to be relocated from outside the region to meet the number of employees needed for construction or operation of the proposed project resulting in unanticipated population growth.

6.3.2 Foster Economic Growth

In its existing condition, the project site is fully developed with commercial (retail and office) uses and an associated surface parking lot. The proposed project would generate approximately 306

[1] 278 / 196,100 residents = 0.00141 or approximately 0.14 percent of the population.

[2] United States Census Bureau. 2020. 2017 Economic Census of Health Care and Social Assistance. Website: https://www.census.gov/data/tables/2017/econ/economic-census/naics-sector-62.html (accessed July 20,2022).

temporary construction-related jobs in Huntington Beach throughout the 24-month construction period. Construction workers are anticipated to be drawn from the existing regional work force, and construction of the proposed project would not be growth inducing from an employment standpoint. As described above, permanent employment opportunities are anticipated to be filled by the existing pool of congregate care employees within the general area. Therefore, the proposed project would not generate new permanent employment opportunities within the City and would not result in significant economic growth.

6.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(d) of the *State CEQA Guidelines* requires that an EIR consider and discuss significant irreversible changes that would be caused by implementation of a proposed project. The *State CEQA Guidelines* specify that the use of nonrenewable resources during the initial and continued phases of a project should be discussed because a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary and secondary impacts (e.g., a highway improvement that provides access to a previously inaccessible area) should also be discussed because such changes generally commit future generations to similar uses. Irreversible damage can also result from environmental accidents associated with a project and should be discussed.

The types and level of development associated with the proposed project would consume limited, slowly renewable, and nonrenewable resources. This consumption would occur during construction of the proposed project and would continue throughout the operational lifetime of the proposed project. The development of the proposed project would require a commitment of resources that would include (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project site.

Construction of the proposed project would require consumption of resources that are not replenishable or that may renew so slowly as to be considered nonrenewable. These resources would include certain types of lumber and other forest products (e.g., hardwood lumber), aggregate materials used in concrete and asphalt (e.g., sand, gravel, and stone), metals (e.g., steel, copper, and lead), petrochemical construction materials (e.g., plastics), and water. Construction of the proposed project would require electricity to power construction-related equipment. Construction of the proposed project would not involve the consumption of natural gas. Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Water, which is a limited, slowly renewable resource, would also be consumed during construction of the proposed project. However, given the temporary nature of construction activities, water consumption during construction would result in a less than significant impact on water supplies.

Energy use consumed during operation of the proposed project would be associated with electricity and natural gas consumption. Electrical and natural gas demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. In addition, the proposed project

would be designed to meet sustainability goals, including the CALGreen Code, Title 24 energy efficiency requirements, and Assembly Bill (AB) 1881 water efficient landscape requirements. The proposed project would also incorporate a number of energy and water conservation measures, green building features, and Low Impact Development (LID) design features. CALGreen and Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage.

The proposed project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle trips. Fuel use associated with the vehicle trips generated by the proposed project is estimated to decrease by approximately 23,487.2 gallons of gasoline and 1,782.6 gallons of diesel fuel per year when compared to the gasoline and diesel fuel consumed by vehicle trips associated with the existing site uses. As such, since the proposed project would result in a net decrease in fuel consumption, fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Project operation would involve the use of potentially hazardous materials (e.g., solvents, cleaning agents, sanitizing solutions, paints, fertilizers, and pesticides) typical of residential/assisted living communities that, when used correctly and in compliance with existing laws and regulations, would not result in a significant hazard to people in the vicinity of the proposed project. Such materials would be used, handled, stored, and disposed of in accordance with applicable government regulations and standards that would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In summary, construction and operation of the proposed project would commit the use of slowly renewable and nonrenewable resources and would limit the availability of these resources on the project site for future generations or for other uses during the life of the proposed project. However, the continued use of such resources during operation would be on a relatively small scale and consistent with regional and local development goals for the area. As a result, the use of nonrenewable resources in this manner would not result in significant irreversible changes to the environment under the proposed project.

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7.0 MITIGATION MONITORING AND REPORTING PROGRAM

7.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that where significant effects have been identified, the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes that have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

- The lead agency shall specify the location and custodian of the documents or other materials that constitute the record of proceedings upon which its decision is based.

- A public agency shall provide measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents that address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.

- Prior to the close of the public review period for a Draft Environmental Impact Report (EIR), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either (1) submit to the lead agency complete and detailed performance objectives for mitigation measures that would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or (2) refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures that mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance with that requirement by a responsible agency or agency having jurisdiction over natural resources affected by a project shall not limit the authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

7.2 MITIGATION MONITORING PROCEDURES

The mitigation monitoring and reporting program has been prepared in compliance with PRC Section 21081.6. It describes the requirements and procedures to be followed by the City of

Huntington Beach (City) to ensure that all mitigation measures adopted as part of the proposed Bolsa Chica Senior Living Community Project (proposed project) will be carried out as described in the Final EIR.

Table 7.A lists each of the mitigation measures (MM), standard conditions (SC), and regulatory compliance measures (RCM) specified in the Draft EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

7.3 STANDARD CONDITIONS MONITORING PROCEDURES

Table 7.B lists all standard conditions associated with the proposed project as specified in the Initial Study (provided in Appendix A of this Draft EIR) and describes the requirements and procedures to be followed by the City to ensure that all standard conditions will be carried out as described in the Final EIR.

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures		Responsible Party/ Approving Agency	Timing for Mitigation Measure
4.1: Aesthetics			
The proposed project would not result in any significant adverse impacts related to aesthetics. No mitigation is required.			
4.2: Air Quality			
RCM AQ-1	**SCAQMD Rule 403.** During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventative measures by using the following procedures, in compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 during construction. The applicable Rule 403 measures are as follows: • Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more). • Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving). • Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. • Pave construction access roads at least 100 feet (30 meters) onto the site from the main road. • Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.	Construction Contractor / City of Huntington Beach	During clearing, grading, earth moving, or excavation operations.
RCM AQ-2	All trucks that are to haul excavated or graded material shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.	Construction Contractor / City of Huntington Beach	During clearing, grading, earth moving, or excavation operations.
RCM AQ-3	Prior to approval of the project plans and specifications, the City of Huntington Beach shall confirm that the construction bid packages specify: • Contractors shall use high-volume low-pressure paint applicators with a minimum transfer efficiency of at least 50 percent; • Coatings and solvents that will be utilized have a volatile organic compound content lower than required under SCAQMD Rule 1113; and • To the extent feasible, construction/building materials shall be composed of pre-painted materials.	Construction Contractor / City of Huntington Beach	Prior to approval of the project plans and specifications.
RCM AQ-4	The project shall comply with SCAQMD Rule 402. Rule 402 prohibits the discharge of air contaminants or other material from any type of operations, which can cause nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort or repose of any such persons, or the public.	Construction Contractor / City of Huntington Beach	During construction of the proposed project.

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures		Responsible Party/ Approving Agency	Timing for Mitigation Measure
4.3 Cultural Resources			
MM CUL-1	**Archaeological Site Monitoring.** Prior to the issuance of a grading permit, a City of Huntington Beach-approved archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards for archaeology shall prepare an Archaeological Mitigation and Monitoring Plan (AMMP) for the proposed project. The AMMP shall include protocols for mitigation of any finds through a Research Design and Recovery Plan outlining significance testing of the inadvertent finds, laboratory analyses, curatorial requirements, and reporting requirements. The AMMP shall include language that all work must be stopped within 50 feet of an archaeological find while the find is assessed by the archaeologist and any Native American monitors. The City-approved archaeologist shall oversee archaeological monitoring of construction-related ground disturbance. Monitoring shall continue until the archaeologist determines that there is a low potential for encountering subsurface archaeological, cultural, or tribal cultural resources. In the event that archaeological cultural resources are identified during ground-disturbing project activities, the protocols outlined in the project's AMMP shall be implemented.	Qualified Archaeologist	Prior to the issuance of a grading permit. During construction-related ground disturbance until the archaeologist determines that there is a low potential for encountering subsurface archaeological, cultural, or tribal cultural resources.
4.4 Energy			
The proposed project would not result in any significant adverse impacts related to energy. No mitigation is required.			
4.5: Geology and Soils			
MM GEO-1	A City of Huntington Beach (City)-approved Paleontologist shall be retained to observe grading activities during grading or trenching activities that cut into the Pleistocene wave-cut marine terrace units. Prior to issuance of any permits the Paleontologist shall prepare a Paleontological Resource Impact Management Plan (PRIMP) to orient the protocols for monitoring and fossil recovery.	City-approved Paleontologist / City of Huntington Beach	Prior to the issuance of any permits. During grading or trenching activities that cut into the Pleistocene wave-cut marine terrace units.
MM GEO-2	The City-approved Paleontologist shall be present at the pre-grade conference and shall establish procedures for paleontological resource surveillance and procedures for temporarily halting and redirecting work to permit sampling and identification and evaluation of fossils. If the resources are deemed to be significant, the paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage. Full-time monitoring and salvage efforts will be necessary whenever previously undisturbed sediments are being disturbed (8 hours per day during grading or trenching activities). Once	City-approved Paleontologist / City of Huntington Beach	During pre-grade conference prior to grading operations. Prior to disturbance of previously undisturbed

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures		Responsible Party/ Approving Agency	Timing for Mitigation Measure
	the earth moving is 50 percent completed, monitoring may be reduced if no fossils are being recovered. The paleontologist shall be empowered to temporarily divert or direct grading operations to facilitate assessment and salvaging of exposed fossils. Collection and processing of matrix samples through fine screens will be necessary to salvage any micro-vertebrate remains. If a deposit of micro-vertebrates is discovered, matrix material can be moved off to one side of the grading area to allow for further screening without delaying the developmental work. Collected fossils shall be prepared to the level of identification, and all fossils shall be identified to the most specific taxonomic level possible. All fossils and their contextual stratigraphic data shall go to an institution with a research interest in the materials. A final report that details methods, fossils recovered, and their significance shall be prepared and submitted to the City, the client, and the institution curating the fossils. This document shall also show compliance with any and all requirements.		sediments.
4.6: Greenhouse Gas Emissions			
The proposed project would not result in any significant adverse impacts related to greenhouse gas emissions. No mitigation is required.			
4.7: Land Use and Planning			
The proposed project would not result in any significant adverse impacts related to land use and planning. No mitigation is required.			
4.8: Noise			
SC NOI-1	Prior to issuance of building permits, the City of Huntington Beach (City) Director of Community Development Department, or designee, shall verify that grading and construction plans include the following requirements: • Ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved. • Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards. • Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development. • The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site whenever feasible. • The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible.	City of Huntington Beach Director of Community Development Department, or designee. Noise disturbance coordinator.	Prior to the issuance of building permits.

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures	Responsible Party/ Approving Agency	Timing for Mitigation Measure
• All residential units located within 500 feet of the construction site shall be sent a notice regarding the construction schedule. A sign, legible at a distance of 50 feet, shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number for the "noise disturbance coordinator." • A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures to reduce noise levels. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.		
4.9: Tribal Cultural Resources		
MM TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities. A. The Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) and the Juaneño Band of Mission Indians – Acjachemen Nation (Acjachemen Nation). The monitors shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the City prior to the earlier commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitors shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Kizh Nation and the Acjachemen Nation. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCRs"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of	Approved Native American Monitor	Prior to the commencement of any ground-disturbing activities.

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures	Responsible Party/ Approving Agency	Timing for Mitigation Measure
monitor logs shall be provided to the Applicant and City upon written request to the Kizh Nation and the Acjachemen Nation. D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh Nation and the Acjachemen Nation from a designated point of contact for the Applicant that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh Nation and the Acjachemen Nation to the Applicant and City that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh Nation and Acjachemen Nation TCRs. E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh Nation and Acjachemen Nation monitor and/or archaeologist. The Kizh Nation and Acjachemen Nation shall recover and retain all discovered TCRs in the form and/or manner the tribal groups deem appropriate and for any purpose the tribes deem appropriate, including for educational, cultural and/or historic purposes.		
MM TCR-2 **Unanticipated Discovery of Human Remains and Associated Funerary Objects.** A. Native American human remains are defined in Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the Coroner has determined the nature of the remains. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC), and PRC Section 5097.98 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California PRC Sections 5097.98(d)(1) and (2). D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh Nation	Construction Contractor and County Coroner	During construction activities.

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures	Responsible Party/ Approving Agency	Timing for Mitigation Measure
and Acjachemen Nation monitors determine that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh Nation and Acjachemen Nation monitors and/or archaeologists deems necessary). (CEQA Guidelines Section 15064.5(f).) E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.		
MM TCR-3 **Procedures for Burials and Funerary Remains.** A. If the Native American Heritage Commission designates the Kizh as the Most Likely Descendant ("MLD") for any human remains discovered or recognized on the project site, the Koo-nas-gna Burial Policy shall be implemented. To the Kizh Nation, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials. D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be	Kizh Nation	During construction activities.

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures, Standard Conditions, or Regulatory Compliance Measures	Responsible Party/ Approving Agency	Timing for Mitigation Measure
posted outside of working hours. The Kizh Nation will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. E. In the event that preservation in place is not possible despite good faith efforts by the project applicant/ developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/ repatriation shall be on the project site but at a location agreed upon between the Kizh Nation and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. G. The Kizh Nation will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Kizh Nation, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery-related forms of documentation shall be approved in advance by the Kizh Nation. If any data recovery is performed, once complete, a final report shall be submitted to the Kizh Nation and the NAHC. The Kizh Nation does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.		
4.10: Utilities and Service Systems		
The proposed project would not result in any significant adverse impacts related to utilities and service systems. No mitigation is required.		

Table 7.B: Standard Conditions as Specified in the Initial Study

Standard Condition		Responsible Party/ Approving Agency	Timing for Compliance Measure
Aesthetics			
SC AES-1	**Photometric Plan.** Prior to issuance of any building permits, the project Applicant shall prepare a photometric plan for review and approval by the City of Huntington Beach (City) Director of Community Development, or designee. The photometric plan shall be prepared by a qualified engineer and shall demonstrate, to the extent feasible, that the intensity and direction of all onsite outdoor lighting minimize spillage and glare onto adjacent properties.	Qualified Engineer / City of Huntington Beach Director of Community Development, or designee	Prior to the issuance of any building permits.
Agriculture and Forestry Resources			
The proposed project would not require any standard conditions related to agriculture and forestry.			
Biological Resources			
SC BIO-1	**Compliance with Migratory Bird Treaty Act (MBTA).** Tree and vegetation removal shall be restricted to outside the active nesting season (February 1 through August 31). If construction is proposed between February 1 and August 31, a qualified biologist familiar with local avian species and the requirements of the MBTA and the California Fish and Game Code shall conduct a pre-construction survey for nesting birds no more than 3 days prior to construction. The survey shall include the entire area that will be disturbed. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around any active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active, as determined by the qualified biologist.	Qualified Biologist / City of Huntington Beach Director of Community Development, or designee	Prior to tree and vegetation removal if such removal is proposed between February 1 and August 31.
Cultural Resources			
SC CUL-1	**Human Remains.** In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the City of Huntington Beach (City), the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City shall consult with the MLD as identified by the NAHC to develop an agreement for	Construction Contractor and County Coroner / City of Huntington Beach Director of Community Development, or designee	Prior to issuance of grading permits. During construction activities.

Table 7.B: Standard Conditions as Specified in the Initial Study

	Standard Condition	Responsible Party/ Approving Agency	Timing for Compliance Measure
	treatment and disposition of the remains. Prior to the issuance of grading permits, the City Director of Community Development, or designee, shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.		
Geology and Soils			
SC GEO-1	**Compliance with the Recommendations in the Project Geotechnical Investigation Report.** The Construction Contractor shall implement the recommendations of the *Geotechnical Investigation Report* prepared for the project and applicable sections of the most current California Building Standards Code, the Uniform Building Code (UBC), and the Huntington Beach Building and Construction Code. Prior to issuance of building permits for the project, the Project Soil Engineer shall review the building plans to verify that the structural design conforms to the requirements of the *Geotechnical Investigation Report*, the UBC, and the Huntington Beach Building and Construction Code.	Construction Contractor and Project Soil Engineer / City of Huntington Beach	Prior to issuance of building permits. During construction activities.
Hazards and Hazardous Materials			
SC HAZ-1	**Soil Management Plan.** The Construction Contractor shall implement the *Soil Management Plan* prepared for the project during excavation and soil-disturbing activities. The handling of any impacted material observed during site grading and excavation shall be handled in accordance with the guidelines provided in the *Soil Management Plan* and in accordance with all applicable transportation and disposal regulations.	Construction Contractor / City of Huntington Beach Director of Community Development, or designee	During excavation and soil disturbing activities.
SC HAZ-2	**Asbestos and Lead-Based Paint Survey.** Prior to initiation of construction activities on the project site a thorough asbestos and lead-based paint survey of the two existing buildings on site shall be conducted by a qualified professional. If asbestos and/or lead-based paint are detected during the survey, abatement and removal procedures in accordance with local and state regulations shall be followed during demolition of the buildings.	Qualified Asbestos and Lead-Based Paint Professional / City of Huntington Beach Director of Community Development, or designee	Prior to initiation of construction activities. During demolition of buildings.

Table 7.B: Standard Conditions as Specified in the Initial Study

	Standard Condition	Responsible Party/ Approving Agency	Timing for Compliance Measure
Hydrology and Water Quality			
SC WQ-1	**Construction General Permit.** Prior to issuance of a grading permit, the project Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System No. CAS000002, as amended by Orders No. 2010-0014-DWQ and 2012-0006-DWQ) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTs). The project Applicant shall provide the Waste Discharge Identification Number (WDID) to the Director of the City of Huntington Beach (City) Public Works Department, or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the Director of the City's Public Works Department, or designee. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented for the proposed project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction best management practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.	Applicant / Director of the City of Huntington Beach Public Works Department, or designee	Prior to issuance of grading permit and initiation of construction activities.
SC WQ-2	**Erosion and Sediment Control Plan.** In compliance with the requirements of Title 17 Buildings and Construction, Chapter 17.05 Grading and Excavation Code, subsection 17.05.320 Erosion Control Plans of Huntington Beach Municipal Code, the project Applicant shall submit a grading plan and erosion control plan to the Director of the City Public Works Department, or designee, for review and approval prior to issuance of a grading permit. The project Applicant shall also submit erosion and sediment control plans annually to the Director of the City Public Works Department, or designee, for review and approval by September 15th of each year during construction.	Applicant / Director of the City of Huntington Beach Public Works Department, or designee	Prior to issuance of grading permit. September 15th of each year during construction.
SC WQ-3	**Water Quality Management Plan.** Prior to the issuance of grading or building permits, the project Applicant shall submit a Final Water Quality Management Plan (WQMP) to the City Engineer, or designee, for review and approval in compliance with the requirements of the Waste Discharge Requirements for the County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff Orange County (Order No. R8- 2009-0030, NPDES No. CAS618030,	Applicant / City Engineer, or designee	Prior to the issuance of grading or building permits.

Table 7.B: Standard Conditions as Specified in the Initial Study

	Standard Condition	Responsible Party/ Approving Agency	Timing for Compliance Measure
	as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit). The Final WQMP shall be prepared consistent with the requirements of the *Technical Guidance Document for Water Quality Management Plans* (December 2013) and the Water Quality Management Plan template, or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project area. The City shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.		
SC WQ-4	**Final Hydrology Study.** The project Applicant shall submit a Final Hydrology Study to the City Engineer, or his/her designee, for review and approval prior to issuance of a building permit. The Final Hydrology Study shall be prepared consistent with the requirements of the *Orange County Hydrology Manual* (Orange County Environment Agency 1986) and *Orange County Hydrology Manual Addendum No. 1* (Orange County Environment Agency 1996), or subsequent guidance manuals. The Final Hydrology Study shall demonstrate that the on-site drainage facilities are designed and adequately sized to accommodate stormwater runoff from the project. The City Engineer, or designee, shall ensure that the drainage facilities specified in the Final Hydrology Study are incorporated into the final project design.	Applicant / City Engineer, or designee	Prior to issuance of a building permit.
Mineral Resources			
The proposed project would not require any standard conditions related to mineral resources.			
Noise			
The proposed project would not require any standard conditions related to noise and vibration.			
Population and Housing			
The proposed project would not require any standard conditions related to population and housing.			
Public Services			
SC PS-1	**Payment of Fire Facilities Development Impact Fee.** Prior to issuance of building permits, the City of Huntington Beach (City) Director of Community Development, or designee, shall confirm that the project Applicant has paid all required Fire Facilities Development Impact Fees in accordance with Chapter 17.74.040, Fire Facilities Development Impact Fee, of the Huntington Beach Municipal Code.	Applicant / City of Huntington Beach Director of Community Development, or designee	Prior to issuance of building permits.
SC PS-2	**Payment of Police Facilities Development Impact Fee.** Prior to issuance of building permits, the City Director of Community Development, or designee, shall confirm that the project Applicant has paid all required Police Facilities Development Impact Fees in accordance with Chapter 17.75.040, Police Facilities Development Impact Fee, of the Huntington Beach Municipal Code.	Applicant / City of Huntington Beach Director of Community Development, or designee	Prior to issuance of building permits.

Table 7.B: Standard Conditions as Specified in the Initial Study

	Standard Condition	Responsible Party/ Approving Agency	Timing for Compliance Measure
SC PS-3	**Payment of School Development Fee.** Prior to issuance of building permits, the project Applicant shall submit proof to the City Director of Community Development, or designee, that payment of applicable school facility development fees to the Ocean View School District and the Huntington Beach Union High School District has been made in compliance with Section 65995 of the California Government Code.	Applicant / City of Huntington Beach Director of Community Development, or designee	Prior to issuance of building permits.
SC PS-4	**Payment of Park Impact Fee.** Prior to the issuance of building permits, the City Director of Community Development, or designee, shall confirm that the project Applicant has paid all required park in-lieu/park impact fees as established in Chapter 17.76.040 of the Huntington Beach Municipal Code.	Applicant / City of Huntington Beach Director of Community Development, or designee	Prior to issuance of building permits.
SC PS-5	**Payment of Library Impact Fee.** Prior to the issuance of building permits, the City Director of Community Development, or designee, shall confirm that the project Applicant has paid all required Library Impact Fees as established in Section 17.67 of the Huntington Beach Municipal Code.	Applicant / City of Huntington Beach Director of Community Development, or designee	Prior to issuance of building permits.
Recreation			
The proposed project would not require any compliance measures related to recreation.			
Transportation			
The proposed project would not require any compliance measures related to transportation.			
Utilities and Service Systems			
SC UTL-1	**Sewer Feasibility Study.** Prior to issuance of a grading or building permit, the project Applicant shall submit a Sewer Feasibility Study prepared by a qualified civil engineer to the City of Huntington Beach City Engineer, or designee, for review and approval. The Sewer Feasibility Study shall include a review of the existing sewer system that would serve the project site to confirm that it has available capacity to accept the wastewater flow generated by the proposed project's uses. Any required improvements shall be identified in the Sewer Feasibility Study. The analysis, conclusions, and recommendations in the Sewer Feasibility Study shall be based on final design plans and shall be consistent with all applicable City requirements. In the event that the Sewer Feasibility Study identifies insufficient sewer capacity to serve the proposed project, the project Applicant would be required to pay a fair-share portion of the cost to improve or replace sewer lines to ensure sufficient capacity.	Qualified Civil Engineer / City of Huntington Beach City Engineer, or designee	Prior to issuance of grading or building permits.
Wildfire			
The proposed project would not require any standard conditions related to wildfire.			

8.0 LIST OF PREPARERS AND PERSONS CONSULTED

8.1 CITY OF HUNTINGTON BEACH

The following individuals from the City of Huntington Beach (City) were involved in the preparation of this Draft Environmental Impact Report (EIR):

- Hayden Beckman, Senior Planner

8.2 EIR PREPARERS

The following individuals were involved in the preparation of this Draft EIR. The nature of their involvement is summarized below.

8.2.1 LSA Associates, Inc.

The following individuals were involved in the preparation of this Draft EIR:

- Ryan Bensley, Principal in Charge
- Laurel Frakes, Project Manager
- Giana Gurrera, Assistant Environmental Planner
- Tamar Gharibian, Assistant Environmental Planner
- Lauren Peachey, Assistant Environmental Planner
- J.T. Stephens, Noise Principal
- Moe Abushanab, Noise Engineer
- Amy Fischer, Principal Air Quality and Greenhouse Gas Emissions
- Cara Carlucci, Associate Environmental Planner
- Bianca Martinez Montano, Noise Analyst
- Dean Arizabal, Transportation Principal
- Meredith Canterbury, Senior GIS Specialist
- Matt Phillips, Graphics Technician
- Lauren Johnson, Technical Editor
- Chantik Virgil, Senior Word Processor

8.3 PERSONS CONSULTED

The following individuals were consulted during the preparation of this Draft EIR:

- Gabrieleno Band of Mission Indians – Kizh Nation, Andrew Salas, Chairman
- Juaneño Band Of Mission Indians – Acjachemen Nation, Joyce Perry

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