1 Executive Summary

1.1 Introduction

This draft environmental impact report (Draft EIR) evaluates the potential for significant environmental impacts from the proposed Irvine Gateway Village Project (project). This summary highlights the major areas of importance in the environmental analysis for the project, as required by Section 15123 of the California Environmental Quality Act (CEQA) Guidelines. It also provides a brief description of the project, alternatives to the project, and areas of controversy known to the City of Irvine (City). In addition, this chapter provides a table summarizing (1) the potential environmental impacts that would occur as the result of the project, (2) the level of impact significance before mitigation, (3) the proposed mitigation measures that would avoid or reduce significant environmental impacts, and (4) the level of impact significance after mitigation measures are implemented.

1.2 Project Overview

The proposed project is the development of a new, approximately 105-acre residential village with approximately 1,360 residential units, called Gateway Village (Planning Area 2). The project would also include development of parks, a community garden, paseos, and an approximately 2,750-foot extension of the Jeffrey Open Space Trail (JOST) east from Portola Parkway to the entrance of the new Gateway Preserve. The project would include 25% affordable housing, consistent with the Surplus Lands Act.

Chapter 3, Project Description, provides a detailed description of the project. A summary of that information is provided in this section.

1.2.1 Project Location and Setting

The approximately 105-acre project site is located in north Irvine, at the northeast corner of Portola Parkway and Jeffrey Road.[1] The site is bounded by Portola Parkway to the south, Jeffrey Road/Hicks Haul Road to the west, and Bee Canyon Access Road to the east. Hicks Canyon Wash is to the north. North Irvine is an area of recent development in the City, including the development of the residential communities of Portola Springs and Orchard Hills. The project site consists primarily of active agricultural fields, with equipment storage and laydown areas in the northern portion of the site.

Hicks Canyon Wash forms the northern boundary of the project site. Just north of Hicks Canyon Wash is a road that stretches east to the Irvine Ranch Conservancy Native Seed Farm and various other special use sites leased to third parties, including a landscape designer, a pump supplier, and an excavating contractor. Following Hicks Haul Road to the north are avocado groves, undeveloped open space, and the closed All American Asphalt (AAA) plant. The final phase of the Orchard Hills development, a single-family residential development (Neighborhood 4, Summit at Orchard Hills), is under construction directly to the west of the project site.

[1] This document uses Irvine directionality, where “north” is the Santa Ana Mountains, “south” is the Pacific Ocean, “west” is the Orchard Hills development, and “east” is Bee Canyon Access Road.

1.2.2 Project Purpose and Objectives

The underlying purpose of the project is to develop a new residential community with a variety of housing types in north Irvine.

The objectives for the project are as follows:

1. **Housing Stock.** Provide diverse housing types and opportunities within the City that address a variety of lifestyles, life stages, and economic segments of the marketplace.
2. **Affordable Housing.** Consistent with Goal 4 of the City's General Plan Housing Element, provide affordable housing to support balanced housing options at the least cost possible to residents.
3. **RHNA Goals.** Contribute new housing units to the City's housing stock to help satisfy the State of California Regional Housing Needs Assessment (RHNA) for the 2021–2029 planning period, allowing the City to advance their fair share of regional housing growth goals.
4. **City Revenue Generation.** Generate net revenue for the City of Irvine General Fund.
5. **Attractive Community and Amenities.** Develop a cohesive architectural and landscape themed community with amenities that both residents and guests seek. Create gathering spaces and encourage outdoor vehicle-free movement by providing parks, paseos, streetside green spaces, and outdoor amenity areas. Establish recreational amenities within walking distance of residential neighborhoods.
6. **Circulation Network.** Complete the comprehensive circulation network with integrated mobility options by connecting pedestrians and bicyclists traveling to a non-vehicular bridge across Portola Parkway to the broader Irvine community to the south and west of Gateway Village. Establish connectivity between land uses through the extension of the JOST to its connection point with the 700-acre Gateway Preserve via the network of trails, which sustains the City's goals to enhance quality living environments through parks and open space.

1.2.3 Project Components

The project would consist of developing a new residential village and associated parks, a community garden, and paseos, as well as extending the JOST east from Portola Parkway to the entrance of the new Gateway Preserve. Components of the project include the following:

- **Zoning and Land Use Changes.** To support the components listed below, the project requires a General Plan Amendment to change the City's Land Use Map from Recreation to Medium High Density Residential, with High Density Residential to be applied on the affordable housing portion of the project site only. Additionally, text, tables, and figure updates in the Land Use Element would be made to establish Planning Area 2 (Gateway Village). Additional General Plan updates include revisions to the figures in the Circulation Element; updates to figures, tables, and text in the Conservation and Open Space Element; and updates to figures in the Safety Element. A zone change to the Irvine Zoning Ordinance is also required to change the zoning classification of the project site from 1.5 – Recreation to 2.4J – Medium High Density Residential; add Chapter 9-2, Planning Area 2; and amend Section 3-3-1, Section 3-37-15, and Chapter 9-6 for consistency purposes.
- **Other Entitlements.** The project also requires Tentative Tract/Parcel Maps to subdivide the project site; Master Plans; a Park Plan; a Master Landscape and Trails Plan; Park Designs; and the annexation of County of Orange land parcels within the boundaries of the project site.

- **Residential Development.** The project would consist of approximately 1,360 two- and three-story attached and detached homes over approximately 65.5 acres. Density ranges for different residential development areas would range from 10 to 22 dwelling units per acre at the lowest density to 30 to 40 dwelling units per acre at the highest density. The project would include single-family and multifamily housing types.
- **Parks.** The project would include the construction of five parks totaling approximately 7.2 acres, consisting of neighborhood parks, linear parks, and an approximately 4.9-acre public park complete with parking, restrooms, and trail staging for the Gateway Preserve.
- **Jeffrey Open Space Trail.** The proposed project would include the extension of the JOST, which links the conservation and open space lands within the City, north approximately 2,750 feet from Portola Parkway to South Park at the entrance to the forthcoming Gateway Preserve; this extension would include a pedestrian bridge over Portola Parkway. The total acreage of the JOST extension under the proposed project would be approximately 9.5 acres.
- **Utilities.** The proposed project would include the extension of all utilities to the project site, including domestic water, sewer, reclaimed water, stormwater, electricity, telecommunications, and natural gas. These utilities would be provided by Irvine Ranch Water District, Southern California Edison, AT&T, Cox Communications, and SoCalGas.
- **Jeffrey Road Improvements.** Jeffrey Road improvements along the western project frontage were completed in 2024 by The Irvine Company as part of the Orchard Hills development. The roadway segment of Jeffrey Road north of Portola Parkway is a four-lane facility, and the intersection of Jeffrey Road/"A" Street would be striped to provide one northbound through lane and one northbound shared through lane/right-turn lane onto "A" Street.

Details related to project construction, including activities, phasing, durations, and staging are provided in Chapter 3.

1.3 Impact Summary

Table 1-1, Summary of Project Impacts, which is provided at the end of this chapter, provides a complete list of the project's environmental impacts, including the level of significance before and after mitigation, based on the analysis and conclusions presented in Chapter 4, Environmental Analysis. As detailed in Table 1-1, the project would result in significant and unavoidable project-specific and cumulative impacts to agriculture and forestry, air quality, greenhouse gas (GHG) emissions, recreation, and transportation, even with implementation of mitigation measures. The table also provides project design features (PDFs) that would be incorporated into the design of the project as part of the City's standard practice.

The project would result in conversion of 67.46 acres of agricultural farmland to non-agricultural uses, resulting in significant and unavoidable project-specific and cumulative agricultural impacts. There are no feasible mitigation measures that would reduce or avoid the loss of this farmland.

The project would result in a significant and unavoidable impact relating to a potential conflict with the South Coast Air Quality Management District (SCAQMD) 2022 Air Quality Management Plan even after implementation of all feasible mitigation measures. The project would also result in a cumulatively considerable increase in criteria air pollutants. Operational emissions would continue to exceed the SCAQMD significance threshold for volatile organic compounds (VOCs) even after implementation of mitigation measures. Accordingly, the potential of the project to violate any air quality standard or contribute substantially to an existing or projected air quality violation would be significant and unavoidable even with mitigation incorporated.

Regarding the project's ability to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, emissions during project operations would exceed the City's threshold for GHG emissions, even after mitigation. Impacts to a potential conflict an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would also be significant and unavoidable. As such, the project would result in significant and unavoidable project-specific and cumulative GHG impacts regardless of the application of feasible mitigation. Specifically, as detailed in Section 4.8, Greenhouse Gas Emissions and Section 4.11, Land Use and Planning, the proposed project would conflict with certain key attributes of the 2022 CARB Scoping Plan Update, Appendix D. Therefore, the proposed project would conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, resulting in significant and unavoidable land use and planning impacts at the project-level and cumulatively.

Because the proposed project includes the construction of parks and the JOST extension, potential adverse physical effects on the environment from construction of these elements are assessed throughout this Draft EIR. Mitigation is required to reduce impacts in several environmental resource areas, as assessed throughout Chapter 4 of this document and summarized in Table 1-1. However, as described in this section, agriculture and forestry, air quality, GHG emissions, and transportation impacts relating to the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment, would remain significant and unavoidable after mitigation; this would also contribute to a significant and unavoidable cumulative impact.

Even with implementation of mitigation measures, the project would have a significant and unavoidable impact related to conflicts or inconsistencies with CEQA Guidelines Section 15064.3(b) due to increased vehicle miles traveled. This would also contribute to a significant and unavoidable cumulative impact.

For information regarding how the alternatives to the project, as identified in Section 1.4, would address these same environmental impacts, see Table 6-2, Comparison of Impacts from the Alternatives, in Chapter 6, Alternatives.

1.4 Project Alternatives

CEQA Guidelines Section 15126.6 requires that an EIR describe and evaluate alternatives to the project that feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project. The following alternatives are evaluated in Chapter 6 of this EIR:

1. **No Project/No Development.** This alternative involves the circumstances under which the project does not proceed and legacy agricultural uses would continue on the project site.
2. **No Project/Community Park.** This alternative involves the circumstances under which the project does not proceed and the project site is developed solely with parks and recreational facilities, consistent with the City General Plan and the project site's zoning designation of Recreation. Development under this alternative would be consistent with City of Irvine Parks Master Plan, which identifies a new community park ("Gateway Park") on the proposed project site.
3. **Reduced Residential.** This alternative involves a reduced residential development scenario with fewer residential units and structures and a smaller buildout footprint than the proposed project. The alternative, consistent with the proposed project, includes parks, paseos, and an extension of the JOST. This alternative's residential unit count would be reduced by 30%: 645 market-rate units and 216 affordable units, for a total of 861 units. Accordingly, it is assumed that this alternative's residential development footprint would also be reduced by 30%. Therefore, this alternative is assumed to maintain more open space than the proposed project for residents and the public.

1.5 Known Areas of Controversy

The City of Irvine, as the lead agency, has identified areas of concern based on the Notice of Preparation (NOP) of an EIR, which is included in Appendix A to this Draft EIR. The NOP for the proposed project was circulated for comment period from October 16, 2024, through November 15, 2024, to determine the scope and extent of environmental issues to be addressed in this Draft EIR. During this period, written agency and public comment letters were received in response to the NOP. These comment letters are summarized in Table 2-1 of Chapter 2, Introduction, of this Draft EIR.

The written comments received in response to the NOP have been taken into consideration in the preparation of this Draft EIR for comments that address environmental issues. The seven written comment letters from agencies concerned cultural resources and recommendations for outreach to Native American tribes; biological resources as related to habitat, biological baseline, special-status species, and recommended mitigation measures; transportation as related to potential impacts to traffic safety and operations, recommended studies, agency coordination, street design, and construction traffic control; air quality and GHG emissions as related to the project's consistency with regional goals and visions; and wildfire as related to a granted fuel modification easement along the southeast edge of Bee Canyon Access Road. The four written comment letters from the private organizations and the public generally concerned air quality, biological resources, transportation/traffic, park facilities, and population growth. Overall, the public comments received during the scoping period showed that the most known controversy was centered on an increase in population and traffic congestion.

1.6 Issues to Be Resolved

CEQA Guidelines Section 15123 requires an EIR summary to identify "issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." This Draft EIR has presented mitigation measures and project alternatives, and the City Council will consider the comments received and the findings in the Final EIR when considering the proposed project. In considering whether to approve the proposed project, the City Council will take into consideration the environmental consequences of the project with mitigation measures and project alternatives, as well as other factors related to feasibility. The City Council will also consider the extent to which the project alternatives would meet the underlying purposes of the project and whether the alternatives would meet the City's specific project objectives.

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Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	Less than significant	None	Less than significant
Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No impact	None	No impact
In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than significant	None	Less than significant
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than significant	None	Less than significant
Would the project have a cumulative effect on aesthetic resources?	Less than significant	None	Less than significant
Agriculture and Forestry Resources			
Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Potentially significant	None	Significant and unavoidable
Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	No impact	None	No impact
Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No impact	None	No impact
Would the project result in the loss of forest land or conversion of forest land to non-forest use?	No impact	None	No impact
Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Less than significant	None	Less than significant
Would the project have a cumulative effect on agriculture and forestry resources?	Potentially significant	None	Significant and unavoidable
Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially significant	**PDF-AQ/GHG-1 All-Electric Residential Development.** All proposed residential development would use all-electric appliances and end uses (including heating, ventilation, and air conditioning; water heating; and induction cooking). **PDF-AQ/GHG-2 Energy-Efficient Appliances.** During construction activities, the project applicant or its designee would install ENERGY STAR®–rated appliances within the residential and recreational land uses, including but not limited to refrigerators, dishwashers, clothes washers, and ceiling fans. **PDF-AQ/GHG-3 Exceedance of Title 24, Part 6 Standards.** The project would exceed the requirements of the 2022 California Code of Regulations Title 24, Part 6, Building Energy Efficiency Standards by 10%. **MM-AQ-1: Construction Equipment Exhaust Minimization.** Prior to the commencement of any construction activities, the applicant or its designee shall provide evidence to the City of Irvine (City) of the following: For off-road	Significant and unavoidable

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Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		equipment with engines rated at 25 horsepower or greater, no construction equipment shall be used that is less than Tier 4 Final. An exemption from the above requirement may be granted if the applicant documents that equipment with Tier 4 Final engines is not reasonably available, and the required corresponding reductions in criteria air pollutant emissions can be achieved for the project through other combinations of construction equipment. Before an exemption may be granted by the City's Community Development Director, the applicant's construction contractor shall demonstrate (1) that at least 3 construction fleet owners/operators in Orange County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Orange County during the desired construction schedule and (2) that the proposed replacement equipment has been evaluated using California Emissions Estimator Model (CalEEMod) or other industry standard emission estimation method and documentation provided to the City to confirm that project-generated emissions will not exceed the estimated maximum daily construction criteria air pollutant emissions (with mitigation) set forth in Table 4.3-12 of the Draft EIR. **MM-AQ-2: Additional Construction Equipment Emission Reductions.** Prior to the issuance of grading permits, the project applicant or its designee shall provide evidence to the City of Irvine (City) that the following strategies shall be implemented during the project's construction phase: A. Use electric or hybrid powered equipment for small pieces of equipment under 25 horsepower (e.g., forklifts), as commercially available. B. Use cleaner-fuel equipment, such as replacing diesel fuel with compressed natural gas or renewable diesel, as commercially available. Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the project site and within 10% of the cost of the diesel-fueled equivalent equipment. The project applicant must contact at least three contractors or vendors within Orange County and submit justification to the City if the specified equipment is not commercially available. **MM-AQ-3: Use of Super-Compliant Low-VOC Paint During Construction.** During construction, the project shall use super-compliant low–volatile organic compound (VOC) paint (less than 10 grams per liter VOC) for all interior and exterior paint applications for residential and nonresidential land uses. **MM-AQ-4: Limit Truck and Equipment Idling During Construction.** The project applicant shall reduce idling time of heavy-duty trucks either by requiring them to be shut off when not in use or limiting the time of idling to no more than 3 minutes (thereby improving upon the 5-minute idling limit required by the state Airborne Toxics Control Measure, 13 CCR 2485). The project applicant shall post clear signage reminding construction workers to limit idling of construction equipment. **MM-AQ-5: Low-VOC Cleaning Supplies and Paint Educational Program.** Prior to the occupancy of any on-site development, the applicant or its designee shall provide evidence to the City of Irvine that the applicant/phase developer has developed a Green Cleaning Product and Paint education program to be made available at rental and purchasing offices and/or on websites. The educational program shall include a flyer (hardcopy and/or digital) that includes, at a minimum, an explanation of what volatile organic compounds (VOCs) are, how VOCs affect us, and where to find low-VOC alternatives for cleaning supplies and paint, as well as including additional resources for learning more. **MM-AQ-6: Use of Low-VOC Cleaning Supplies and Paint for Spaces Operated by Homeowner's Association.** Prior to the issuance of building permits, the applicant or its designee shall provide evidence to the City of Irvine that for applicant (or its designee) and homeowner's association–operated spaces that provisions are in place to ensure that only zero– or low–volatile organic compound (VOC) cleaning supplies and super-compliant VOC paints (less than 10 grams per liter VOC) are used during project operation.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		MM-AQ-7: Use of Zero-Emission Landscape Equipment for Homeowner's Association Land. Only zero-emissions landscaping equipment shall be used during project operation on homeowner's association land. Gasoline-fueled landscaping equipment shall be prohibited consistent with the City's Ordinance No. 23-25. **MM-AQ-8: Landscape Maintenance Equipment Emission Reduction.** The project applicant shall implement the following landscape maintenance equipment emission reduction measures: ▪ **Include Outdoor Electrical Outlets.** Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the City of Irvine that the design plans include electrical outlets on the exterior of the structure to facilitate use of electrical lawn and garden equipment. ▪ **Encourage Use of Existing Yard Equipment Exchange and Rebate Programs.** The project's future homeowner's association shall educate future residents about the South Coast Air Quality Management District Electric Lawn Mower Rebate Program and the Commercial Electric Lawn and Garden Equipment Exchange Program. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chainsaws) are exchanged for electric and rechargeable-battery-powered yard equipment, direct greenhouse gas (GHG) emissions from fossil-fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment.	
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially significant	**PDF-AQ/GHG-1 through PDF-AQ/GHG-3** (see above) **MM-AQ-1 through MM-AQ-8** (see above) **MM-GHG-1** (see Greenhouse Gas Emissions section of this table)	Significant and unavoidable
Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially significant	**MM-AQ-1** (see above)	Less than significant with mitigation incorporated
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant	None	Less than significant
Would the project have a cumulative effect on air quality resources?	Potentially significant	**PDF-AQ/GHG-1 through PDF-AQ/GHG-3** (see above) **MM-AQ-1 through MM-AQ-8** (see above) **MM-GHG-1** (see Greenhouse Gas Emissions section of this table)	Significant and unavoidable
Biological Resources			
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially significant	**MM-BIO-1: Avian Nest Avoidance.** Construction activities shall avoid the migratory bird nesting season (typically January 1 through October 31 for white-tailed kite, and from February 1 through August 31 for all other species), as feasible, to reduce any potential significant impact to birds that may be nesting within or adjacent to the construction area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey within 500 feet of impact areas must be conducted by a qualified wildlife biologist no more than 72 hours prior to initial ground-disturbing activities, including vegetation removal. If construction activities cease for more than 3 consecutive days, avian nesting surveys must be repeated no more than 3 days prior to resumption of construction activities. If an active bird nest is found, the nest location shall be added to construction plans and an appropriate no-disturbance buffer shall be established around the nest, the size of which shall be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The no-disturbance buffer shall be clearly demarcated in the field with highly visible construction fencing or flagging, and construction personnel shall avoid the buffer area until the juveniles have fledged or the nest is no longer considered active, as determined by a qualified biologist. A qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to active nests occur. White-tailed kite is a California Department of Fish and Wildlife fully protected species, and a permitting pathway is not available to the project for take of the species. Therefore, the 500-foot buffer cannot be reduced if a white-tailed kite nest is found within the project site.	Less than significant with mitigation incorporated

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		MM-BIO-2: Demarcation of Disturbance Limits. To prevent inadvertent disturbance to sensitive vegetation and species adjacent to the proposed project area, temporary fencing and/or staking shall be installed prior to construction activities around the perimeter of the work areas, as feasible depending on topography and large vegetation. All construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive biological resources outside the limits of work. The marked disturbance limits shall be maintained throughout vegetation removal and grading, and any windblown trash generated by the project that collects on the fence will be regularly removed. Silt fencing shall be installed at disturbance limits where aquatic resources occur within 100 feet. Temporary 6-foot-high chain-link fencing covered with dust cloth shall be installed at disturbance limits where occupied least Bell's vireo habitat occur within 500 feet. **MM-BIO-3: Pre-Construction Burrowing Owl Survey**. A qualified biologist shall conduct a pre-construction survey for burrowing owls prior to initial ground-disturbing activities, including vegetation removal, to assess whether any burrowing owls have colonized the site prior to the start of construction. The pre-construction survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the pre-construction surveys shall be repeated to ensure burrowing owl has not colonized the site since it was last disturbed. The pre-construction survey will occur within suitable habitat for burrowing owl, as determined by the biologist, and will be conducted in accordance with methods described in the CDFW 2012 Staff Report. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the applicant/developer shall immediately inform the California Department of Fish and Wildlife (CDFW). Prior to ground disturbance, the applicant/developer shall prepare a Burrowing Owl Management Plan, which shall be submitted to CDFW for review and approval at least 30 days prior to initiation of ground-disturbing activities. If burrowing owls are detected after ground-disturbing activities have been initiated, CDFW shall be notified in writing and a Burrowing Owl Management Plan shall be submitted to CDFW for review and approval within 2 weeks of detection; construction activities shall not occur within 400 feet of an active burrow until CDFW approves the Burrowing Owl Management Plan. The Burrowing Owl Management Plan shall include, at a minimum, the following. 1. An impact assessment that details the number and location of occupied burrow sites and acres of burrowing owl habitat with a qualitative description of the habitat vegetation characteristics that will be impacted. 2. Avoidance measures, including no-disturbance buffers clearly delineated at a 250-foot radius around all occupied burrows located on site or within 250 feet of the disturbance footprint, with posted signs demarcating the avoidance area and by using stakes, flags, and/or rope or cord to minimize the disturbance of burrowing owl habitat. No construction shall occur within the avoidance buffer(s) without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated. 3. Monitoring requirements. No take of burrowing owl shall occur without prior authorization in the form of an Incidental Take Permit (ITP) pursuant to California Fish and Game Code Section 2081. If overwintering or nesting burrowing owls are observed during the survey and impacts to burrowing owl cannot be feasibly avoided through implementation of the Burrowing Owl Management Plan, the applicant/developer will consult with CDFW and obtain appropriate take authorization from through the California Endangered Species Act ITP process. In the event an ITP is needed, occupied habitat that is temporarily impacted shall be restored to its original construction immediately following the completion of construction and compensatory mitigation for the permanent loss of occupied burrowing owl habitat shall be fulfilled through habitat replacement of equal or better functions and values to those impacted by the project at a minimum 1:1 ratio, or as otherwise determined through the ITP process. Mitigation shall be achieved through off-site conservation of habitat and/or purchase of appropriate credits at a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate shall be prepared to estimate the initial startup costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an	

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		endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the ITP to fulfill the requirements of the conservation easement(s), which are currently in review and development. **MM-BIO-4: Least Bell's Vireo Mitigation.** Prior to initial ground-disturbing activities, including vegetation removal, the applicant/developer shall prepare a mitigation plan in accordance with the requirements for conditional coverage identified in the Implementing Agreement for the Natural Community Conservation Plan & Habitat Conservation Plan, County of Orange Central and Coastal Subregion (NCCP/HCP). The mitigation plan shall be developed in coordination with the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) and the Natural Communities Coalition (NCC) and shall include, at a minimum, the following: 1. Compensatory mitigation requirements for impacts to occupied least Bell's vireo habitat, which shall be, at a minimum, 1:1 for low-quality habitat, 2:1 for moderate-quality habitat, and 3:1 for high-quality habitat, or as otherwise determined during coordination with the Wildlife Agencies. Compensatory mitigation shall be met through habitat restoration/enhancement activities at an appropriate location (which may include the reserve or other open space) and which may include planting of riparian trees and shrubs and/or brown-headed cowbird trapping. 2. Requirements for monitoring and adaptive management of least Bell's vireo habitat within the NCCP/HCP Reserve, including brown-headed cowbird trapping, consistent with Chapter 5 of the NCCP/HCP. 3. Design modifications and other on-site measures that are consistent with the project's purposes, and which avoid or minimize impacts and provides appropriate feasible protections for least Bell's vireo. At a minimum, the following measures shall be included: a. **Seasonal Avoidance.** To avoid direct impacts nesting individuals and eggs/young, vegetation-disturbing activities within suitable and occupied least Bell's vireo habitat shall occur from September 16 (or sooner if a Wildlife Agency–approved project biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete) through March 14 to avoid the least Bell's vireo breeding season. For other project-related construction that cannot be restricted to outside the least Bell's vireo breeding season, construction noise monitoring and reduction will be provided as detailed below. b. **Noise Monitoring.** To minimize potential adverse impacts to least Bell's vireo from construction-related noise and vibration, non-vegetation clearing construction-related activities within 500 feet of occupied and suitable least Bell's vireo habitat would be timed to occur outside of the breeding season to the extent feasible. For construction-related activities within 500 feet (152.40 meters) of occupied or suitable least Bell's vireo habitat, and that must occur within the least Bell's vireo breeding season, on-site noise reduction techniques shall be implemented to limit construction-related noise within the occupied habitat areas to levels that do not exceed 60 A-weighted decibel (dBA) hourly energy equivalent level (Leq) or pre-construction ambient noise levels, whichever is greater. Noise reduction techniques shall be implemented as necessary to ensure that noise thresholds are not exceeded. These techniques may include but are not limited to installation of temporary sound barriers, utilization of quieter equipment, adherence to equipment maintenance schedules, and/or shifting construction work away from occupied areas. c. **Biological Monitoring.** All construction-related activities within 500 feet of occupied least Bell's vireo habitat shall be monitored by a Wildlife Agency–approved biologist. The biologist shall submit weekly letter reports (including photographs of impact areas) via email to the Wildlife Agencies while construction-related activities within 500 feet of occupied habitat are ongoing. The weekly reports will document that authorized impacts were not exceeded and all avoidance and protection measures were complied with. The reports will also summarize the duration of vireo monitoring, the location of construction activities, the type of construction that occurred, and equipment used. The reports will specify numbers, locations, and sex of vireos (if present); observed vireo behavior (particularly in relation to construction activities); and any remedial measures employed to avoid impacts to vireo individuals. Raw field notes should be available upon	

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		request by the Wildlife Agencies. Any unauthorized impacts to vireo or vireo habitat shall be reported to the Wildlife Agencies within 24 hours. A final report shall be submitted to the Wildlife Agencies and the NCC within 60 days of project completion that includes (1) as-built construction drawings with an overlay of occupied habitat that was impacted and avoided, (2) photographs of avoided occupied habitat areas, and (3) other relevant summary information documenting that authorized impacts were not exceeded and that all mitigation plan measures were generally complied with. Prior to initial ground-disturbing activities, including vegetation removal, the applicant/developer shall obtain concurrence from the Wildlife Agencies that the NCCP/HCP conditions of coverage for least Bell's vireo have been satisfied and that incidental take of least Bell's vireo is authorized under the terms of the NCCP/HCP. If it is determined that incidental take of least Bell's vireo resulting from the project is not conditionally covered under the NCCP/HCP, take authorization shall be obtained authorization shall be obtained through the federal Section 7 Consultation or Section 10 processes and state 2080.1 consistency determination or 2081 Incidental Take Permit requirements. **MM-BIO-5: Crotch's Bumble Bee Pre-Construction Surveys.** Pre-construction surveys for Crotch's bumble bee shall be conducted within the construction footprint prior to initial ground-disturbing activities, including vegetation removal, that would occur during the Crotch's bumble bee queen flight season through the gyne (reproductive female) flight season (February 1 through October 31). The pre-construction survey shall be conducted by a qualified biologist familiar with the species' behavior and life history and shall include (1) a habitat assessment and (2) focused surveys, both of which shall be based on recommendations described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current version at the time of construction. If suitable habitat is not completely cleared during the year of the initial habitat assessment and pre-construction surveys, additional pre-construction surveys shall be repeated within remaining suitable habitat each year ground-disturbing construction activities are scheduled to occur within suitable habitat during the queen flight season through the gyne flight season (February 1 through October 31). Additional pre-construction surveys would not be necessary once all suitable habitat is removed. ▪ The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site, including foraging, nesting, and/or overwintering resources; and identify which plant species are in bloom and their percent cover. Incidental observations of potential nest resources shall also be noted. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. Potential overwintering resources are defined as bare soil, leaf litter, pine needle duff layer, and bunch grasses. ▪ In each year that a habitat assessment is conducted, if nesting resources are determined to be present in the impact area, focused surveys shall be conducted. Focused surveys shall be performed by a biologist who is in possession of a valid Memorandum of Understanding with CDFW (and a valid Scientific Collecting Permit, if applicable) and include at least three survey passes spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the Colony Active Period for Crotch's bumble bee (April 1 through August 31) and shall coincide with the presence of floral resources on site. Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Focused surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors shall wait at least 1 hour following cessation of rain to start or resume surveys. Focused surveys shall be conducted when conditions include sunny to partly sunny skies, a temperature greater than 60°F, and sustained wind speeds less than 8 mph, unless other bees or butterflies are flying, in which case focused surveys can be conducted outside of these weather parameters.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		▪ A written survey report shall be submitted to the City and CDFW within 30 days of the completion of pre-construction surveys. The report shall include survey methods, weather conditions, and survey results, including a detailed habitat assessment, floral resources blooming and percent cover, bumble bee species observed, floral species that bumble bees were observed visiting, nesting and overwintering habitat surveyed, and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved taxonomist(s) for identification of photo vouchers. If Crotch's bumble bee nests are observed, the survey report shall also include avoidance measures, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. ▪ If Crotch's bumble bee is not detected during the focused surveys, no further action or mitigation would be required. If nest resources occupied by Crotch's bumble bee are detected, avoidance measures shall be implemented including, but not limited to, the establishment of no-disturbance zones within 50 feet of the nest, or within a distance determined by a qualified biologist through evaluation of topographic features and/or distribution of floral resources. Construction shall not occur within the no-disturbance zone(s) until the colony is no longer active (i.e., no bees are seen flying in or out of the nest for 3 consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). If the avoidance of nests is not feasible, or if take of foraging individuals is anticipated, the applicant/developer shall consult with CDFW regarding the need for incidental take authorization pursuant to Section 2081 of the California Fish and Game Code. ▪ Mitigation for take of Crotch's bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate shall be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development. **MM-BIO-6: Biological Monitoring.** To prevent impacts to areas outside the limits of disturbance, a qualified biologist shall be present on site to monitor during initial ground disturbance or vegetation removal activities. Biological monitoring shall include the following tasks and responsibilities: ▪ **Tailgate Briefings.** Conduct a pre-construction briefing at the tailgate with construction personnel prior to vegetation removal or initial ground disturbance to outline the biological resources present at the subject work location, prohibition of littering, locations of covered trash receptacles, work location specific disturbance limits, procedures/training for minimizing harm to or harassment of wildlife encountered during construction. ▪ **Pre-Construction Sweeps.** Conduct pre-construction sweeps where construction work is scheduled for the day in areas with suitable habitat to support special-status wildlife or plants. Flush wildlife species from occupied areas immediately prior to vegetation-clearing and earth-moving activities during pre-construction sweeps. ▪ **Spot Checks.** Supervise and conduct regular spot checks during construction work, focusing on areas determined to have potential to support special-status species (as determined by a qualified biologist), to ensure against direct and indirect impacts to biological resources that are intended to be protected and preserved.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		▪ **Relocating Wildlife.** A qualified biologist shall capture animals that are in immediate harm's way and cannot move out of the work area on their own and relocate them to nearby undisturbed areas with suitable habitat located outside of the construction area but as close to their origin as possible. All wildlife moved during project activities shall be documented by the biologist on site. ▪ **Dust Control Monitoring**. Periodically monitor the construction site to see that dust is minimized. If the biological monitor determines that dust is adversely affecting special-status species, the monitor will require the construction personnel to implement best available control measures to reduce dust. Examples of such best available control measures include periodic watering of work areas, application of environmentally safe soil stabilization materials, and/or roll compaction. ▪ **Open-Hole Inspections.** At the end of each workday, any open holes (including large/steep excavations) shall be inspected by the on-site biologist and subsequently fully covered to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the biological monitor shall immediately be informed, and the animal(s) shall be removed. **MM-BIO-7: Coastal California Gnatcatcher Monitoring.** To minimize potential indirect impacts to coastal California gnatcatcher, construction-related activities within 500 feet of occupied habitat shall be timed to occur outside the coastal California gnatcatcher breeding season (February 15 through August 30). Should construction activities occur within 500 feet of coastal sage scrub habitat east of Bee Canyon Access Road during the breeding season (between February 15 and August 30), pre-construction surveys for coastal California gnatcatcher shall be conducted in all suitable habitat within 500 feet. Pre-construction surveys shall be conducted by a permitted coastal California gnatcatcher biologist and shall include three site visits, conducted 1 week apart, with the final site visit conducted no more than 7 days prior to the start of construction. If coastal California gnatcatcher is not detected, no further mitigation related to this species shall be required. If coastal California gnatcatcher is detected but breeding behaviors are not observed, work may proceed and weekly surveys shall continue until the individual(s) leave the area, breeding behaviors and/or nesting is detected, the breeding season ends, or construction ends. If breeding and/or an active nest is observed, the limits of the occupied habitat and a 500-foot avoidance buffer shall be delineated on construction plans, and all construction personnel working near the nest buffer shall be made aware of the presence of occupied gnatcatcher habitat. To the extent feasible, no construction activities shall occur within the 500-foot avoidance buffer during the breeding season. Should it be necessary for construction activities to occur within 500 feet of occupied habitat during the breeding season, noise monitoring would be required to ensure that project-related activities do not result in noise levels above 60 A-weighted decibels (dBA) equivalent continuous sound level (L_{eq}) (1 hour) or the ambient noise level, whichever is higher. If any project activities exceed 60 dBA or the designated existing ambient noise level, construction activities shall be halted until noise reduction measures (such as a sound wall) can be implemented to reduce noise levels to below 60 dBA hourly L_{eq} or ambient noise levels, whichever is higher.	
Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than significant	None	Less than significant
Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant	**MM-BIO-2 and MM-BIO-6** (see above) **MM-BIO-8: Waters and Wetland Mitigation.** Prior to impacts within waters regulated by the Regional Water Quality Control Board (RWQCB), the applicant/developer shall coordinate with the Santa Ana RWQCB (Region 8) to ensure conformance with the requirements of the Porter–Cologne Water Quality Control Act, including applicable requirements to obtain an individual Wastewater Discharge Requirement. Prior to impacts within waters regulated by California Department of Fish and Wildlife (CDFW), the applicant/developer shall coordinate with CDFW (South Coast Region 5) to ensure conformance with California Fish and Game Code Section 1602, including applicable requirements to obtain a Lake and Streambed Alteration Agreement.	Less than significant with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		Permanent impacts to jurisdictional aquatic resources shall be mitigated through the completion of a restoration program at an applicant/developer-sponsored mitigation site. The total mitigation requirement will be 0.32 acres, providing a 2:1 mitigation-to-impact ratio, of which at least 0.03 acres shall be composed of establishment/re-establishment, ensuring no net loss of waters of the state. The balance of the mitigation requirement shall be met through a combination of creation, re-establishment, and/or enhancement. A habitat mitigation and monitoring plan shall be prepared in accordance with resource agency guidelines and shall be approved by the Resource Agencies (i.e., RWQCB and CDFW). The habitat mitigation and monitoring plan shall include, but is not limited to, a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any applicant-sponsored mitigation shall be conserved and managed in perpetuity via a conservation easement and any entity performing long-term management of the mitigation lands shall be funded in perpetuity.	
Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No impact	None	No impact
Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially significant	**MM-BIO-9: Tree Ordinance Tree Inventory and Permit.** Prior to issuance of a grading permit for the project, a tree inventory shall be conducted within the project development area to identify and map tree species subject to the City tree removal permit. If significant trees subject to a tree removal permit are identified within the project development area, a tree removal permit shall be obtained from the City prior to issuance of the grading permit and conditions of the tree removal permit shall be implemented.	Less than significant with mitigation incorporated
Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No impact	None	No impact
Would the project have a cumulative effect on biological resources?	Potentially significant	**MM-BIO-1 through MM-BIO-9** (see above)	Less than significant with mitigation incorporated
Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	No impact	None	No impact
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially significant	**MM-CUL-1: Cultural Resources Sensitivity Training.** Prior to the initiation of ground-disturbing activities, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Topics addressed should include definitions and characteristics of cultural resources and tribal cultural resources, regulatory requirements and penalties for intentionally disturbing cultural resources, and protocols to be taken in the event of an inadvertent discovery. **MM-CUL-2: Cultural Resources Monitoring and Inadvertent Discovery Protocols**. A Cultural Resources Monitoring and Inadvertent Discovery Plan (Plan) shall be prepared by an archaeological principal investigator meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, and subject to City of Irvine (City) review prior to initiation of construction. The Plan shall detail, at a minimum, requirements for archaeological monitoring (as applicable); roles and responsibilities; inadvertent discovery, management, and communication protocols; and daily and post-construction reporting. An archaeological monitor shall be present during all initial ground-disturbing activities for the project in areas with the highest perceived archaeological sensitivity. This includes areas along Hicks Canyon Wash and throughout the northeastern portion of the project area, which has not been subject to past mass-grading efforts. Areas of lower sensitivity, including areas previously graded for agricultural use shall be subject to weekly spot checks. Archaeological monitoring may be adjusted (increased, decreased, or discontinued) at the recommendation of the	Less than significant with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		archaeological principal investigator based on inspection of exposed cultural material and the observed potential for soils to contain intact cultural deposits or otherwise significant archaeological material. The archaeological monitor shall have the authority to temporarily halt work to inspect areas for potential cultural material or deposits. In the event that unanticipated archaeological deposits or features are exposed during construction activities, all construction work occurring within 50 feet of the find shall immediately stop until the archaeological principal investigator is provided access to the project site and can assess the significance of the find and determine whether additional study is warranted. The work exclusion buffer may be adjusted as appropriate to allow work to feasibly continue at the recommendation of the archaeological principal investigator. Should it be required, temporary flagging shall be installed around the resource to avoid any disturbance from construction equipment. The potential for avoidance and preservation in place should be the primary consideration of this initial process. The significance of the find shall be assessed as outlined in the California Environmental Quality Act (CEQA) Guidelines and statute (14 CCR 15064.5[f]; California Public Resources Code Section 21082). If the archaeological principal investigator observes the discovery to be potentially significant under CEQA, additional efforts, such as the preparation of an archaeological treatment plan, testing, and/or data recovery, are warranted prior to allowing construction to proceed in this area. Daily monitoring logs shall be completed by the on-site archaeological monitor. Within 60 days following completion of construction, the archaeological principal investigator shall provide an archaeological monitoring report to the City. This report shall include the results of the cultural monitoring program (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates that all mitigation measures defined in this environmental impact report were appropriately met. Appendices shall include archaeological monitoring logs and documentation relating to any newly identified or updated cultural resources. This report shall be submitted to the South Central Coastal Information Center once considered final.	
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially significant	**MM-CUL-3: Unanticipated Discovery of Human Remains.** In accordance with Section 7050.5 of the California Health and Safety Code and the requirements of the California Environmental Quality Act (CEQA) Guidelines Section 15064.5(e), if human remains are found, the Orange County Coroner (County Coroner) shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with California Public Resources Code Section 5097.98, NAHC must immediately notify the person or persons it believes to be the Most Likely Descendant of the deceased Native American. The Most Likely Descendant shall complete inspection after being granted access to the site and make recommendations for the treatment and disposition, in consultation with the landowner, of the human remains and associated grave goods.	Less than significant with mitigation incorporated
Would the project have a cumulative effect on cultural resources?	Potentially significant	**MM-CUL-1 through MM-CUL-3** (see above)	Less than significant with mitigation incorporated
Energy			
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	None	Less than significant
Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than significant	None	Less than significant
Would the project have a cumulative effect on energy resources?	Less than significant	None	Less than significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
Geology and Soils			
Would the project 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? Refer to Division of Mines and Geology Special Publication 42?	No impact	None	No impact
b. Strong seismic ground shaking?	Less than significant	None	Less than significant
c. Seismic related ground failure including liquefaction?	Less than significant	None	Less than significant
d. Landslides?	Less than significant	None	Less than significant
Would the project result in substantial soil erosion or the loss of topsoil?	Less than significant	None	Less than significant
Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant	None	Less than significant
Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than significant	None	Less than significant
Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No impact	None	No impact
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant	**MM-GEO-1: Paleontological Resources Impact Mitigation Program**. Prior to commencement of any grading activity on site, the applicant shall retain a qualified paleontologist per the 2010 Society of Vertebrate Paleontology guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program for the Project. The Paleontological Resources Impact Mitigation Program shall be consistent with the 2010 Society of Vertebrate Paleontology guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed project site based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the pre-construction meeting and a qualified paleontological monitor, per the 2010 Society of Vertebrate Paleontology guidelines, shall be on site during all rough grading and other significant ground-disturbing activities (including augering) in previously undisturbed, fine-grained Pleistocene alluvial deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the paleontological monitor will remove the rope and allow grading to recommence in the area of the find.	Less than significant with mitigation incorporated
Would the project have a cumulative effect on geology and soils resources?	Potentially significant	**MM-GEO-1** (see above)	Less than significant with mitigation incorporated
Greenhouse Gas Emissions			
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially significant	**PDF-AQ/GHG-1 through PDF-AQ/GHG-3** (see above) **MM-GHG-1: Electric Vehicle Charging Infrastructure.** The project applicant or designee shall provide electric vehicle (EV) charging infrastructure that meets or exceeds 2022 California Green Building Standards Code Tier 2 standards A4.106.8.1 for single-family homes and A4.106.8.2 for multifamily dwellings to encourage use of EVs, consistent with Appendix D, Table 3, of the 2022 CARB Scoping Plan.	Significant and unavoidable

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		MM-GHG-2: Energy Conservation. Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the City that the residential and recreational building design plans include the following energy conservation measures: a) A solar photovoltaic electricity-generating system shall be installed at the proposed on-site amenity building to the extent feasible. b) Outdoor lighting shall be light emitting diode (LED) or other high-efficiency lightbulbs. c) Prior to the issuance of building permits, the Project applicant or its designee shall submit building plans illustrating installation of cool pavements in place of dark pavements within walkways and patios. Walkways and patios shall use natural grey or uncolored concrete with a Solar Reflectance Index (SRI) value of 0.39. d) Information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs shall be provided to future residents of the project. **MM-GHG-3: Water Use Efficiency and Water Conservation.** Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the City of Irvine that the residential and recreational building design plans include water use efficiency and conservation measures, including the following: a) High-efficiency appliances/fixtures to reduce water use, and/or include water-efficient landscape design b) Low-flow or high-efficiency water fixtures c) Water-efficient landscapes with lower water demands than required by the California Department of Water Resources 2015 Model Water Efficient Landscape Ordinance d) Planting of native and drought-tolerant plant species where permissible under fuel modification requirements e) Educational materials provided to future tenants and building occupants about water saving behaviors and water-conserving landscaping **MM-GHG-4: Solid Waste Reduction.** Prior to the issuance of building permits for the project, the project applicant shall provide building plans that include the following solid waste reduction measure: a) Provide storage areas for recyclables and organic waste in new construction, and food waste storage, if a pick-up service is available.	
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially significant	**PDF-AQ/GHG-1 through PDF-AQ/GHG-3** (see above) **MM-GHG-1 through MM-GHG-4** (see above)	Significant and unavoidable
Would the project have a cumulative effect on greenhouse gas emissions?	Potentially significant	**PDF-AQ/GHG-1 through PDF-AQ/GHG-3** (see above) **MM-GHG-1 through MM-GHG-4** (see above)	Significant and unavoidable
Hazards and Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially significant	**MM-HAZ-1: Pre-Demolition Hazardous Materials Abatement.** Prior to issuance of a demolition and/or grading permit, the applicant or its designee shall ensure that demolition or renovation plans and contract specifications incorporate appropriate abatement procedures for the removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous material, hazardous wastes, petroleum and oil products, and universal waste items. Survey for and abatement of these materials must be completed by a licensed contractor in accordance with state regulations. Further, all abatement work shall be done in accordance with federal, state, and local regulations, including, but not limited to, those of the U.S. Environmental Protection Agency (which regulates disposal), federal Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), California Department of Public Health (which certifies lead paint workers), and the South Coast Air Quality Management District. **MM-HAZ-2: Soil Management Plan.** Prior to the issuance of a grading permit, the project applicant/developer or their designated contractor shall retain a qualified environmental consultant to prepare a soil management plan (SMP) that outlines the proper screening, handling, characterization, transportation, and disposal procedures for	Less than significant with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		contaminated or potentially contaminated soils on site. The SMP shall include health and safety and training procedures for workers who may come in contact with contaminated soils. The SMP shall include on-site soil management requirements to avoid fugitive dust and stormwater runoff, including stockpile management, and response and reporting procedures in the event of a release of contaminated soils or violation of air quality or water quality rules (of the South Coast Air Quality Management District and Santa Ana Regional Water Quality Control Board, respectively). The SMP shall be implemented by the project applicant or their designated contractor for all confirmed and suspected contaminated soils that require excavation and off-site disposal. The SMP shall also include procedures for the identification and proper abandonment of underground storage tanks, piping, sumps, or other features, should any be identified during demolition and construction activities. The SMP shall include procedures to meet all applicable federal, state, and local regulations (including those of the Orange County Health Care Agency and South Coast Air Quality Management District) associated with handling, excavating, stockpiling, and disposing of contaminated soils; the proposed disposal facility that will accept the contaminated soils; and appropriate procedures, notifications, permitting requirements, handling, and disposal requirements for decommissioning any underground storage tanks.	
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially significant	**MM-HAZ-1 and MM-HAZ-2** (see above)	Less than significant with mitigation incorporated
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No impact	None	No impact
Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No impact	None	No impact
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No impact	None	No impact
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than significant	None	Less than significant
Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Potentially significant	**MM-WF-1 and MM-WF-2** (see Wildfire section of this table)	Less than significant with mitigation incorporated
Would the project have a cumulative effect on hazards or hazardous materials?	Potentially significant	**MM-HAZ-1 and MM-HAZ-2** (see above)	Less than significant with mitigation incorporated
Hydrology and Water Quality			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than significant	None	Less than significant
Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than significant	None	Less than significant
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			
a. Result in substantial erosion or siltation on or off site;	Less than significant	None	Less than significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
b. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	Less than significant	None	Less than significant
c. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Less than significant	None	Less than significant
d. Impede or redirect flood flows?	No impact	None	No impact
In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	No impact	None	No impact
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	None	Less than significant
Would the project have a cumulative effect on hydrology or water quality resources?	Less than significant	None	Less than significant
Land Use and Planning			
Would the project physically divide an established community?	No impact	None	No impact
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?	Potentially significant	**MM-GHG-1 through MM-GHG-4** (see above) **MM-TRA-1 through MM-TRA-4** (see Transportation section of this table) **MM-CUL-1 and MM-CUL-2** (see above) **MM-GEO-1** (see above) **MM-TRC-1** (see Tribal Cultural Resources section of this table) **MM-AQ-2 and MM-AQ-4** (see above) **MM-WF-1 and MM-WF-2** (see Wildfire section of this table)	Significant and unavoidable
Would the project have a cumulative effect on land use resources?	Potentially significant	**MM-GHG-1 through MM-GHG-4** (see above)	Significant and unavoidable
Noise			
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	None	Less than significant
Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	None	Less than significant
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No impact	None	No impact
Would the project have a cumulative effect on noise resources?	Less than significant	None	Less than significant
Population and Housing			
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than significant	None	Less than significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No impact	None	No impact
Would the project have a cumulative effect on housing and/or population resources?	No impact	None	No impact
Public Services			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			
Fire protection?	Less than significant	None	Less than significant
Police protection?	Less than significant	None	Less than significant
Schools?	Less than significant	None	Less than significant
Parks?	Less than significant	None	Less than significant
Other public facilities?	Less than significant	None	Less than significant
Would the project have a cumulative effect on public services resources?	Less than significant	None	Less than significant
Recreation			
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than significant	None	Less than significant
Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	Potentially significant	All mitigation measures that would affect recreational resources impacts (no new measures)	Significant and unavoidable
Would the project have a cumulative effect on recreation resources?	Potentially significant	All mitigation measures that would affect recreational resources impacts (no new measures)	Significant and unavoidable
Transportation			
Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than significant	None	Less than significant
Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Potentially significant	**MM-TRA-1: Affordable and Below Market Rate Housing.** The project shall include affordable and below market housing integrated into the design. Individuals living in affordable multifamily housing have lower rates of car ownership and higher rates of other transportation modes, such as transit, bicycling, and walking. **MM-TRA-2: Pedestrian Network Improvement.** The project shall include pedestrian network improvements. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive, and this mode shift results in a reduction in vehicle miles traveled. **MM-TRA-3: Expanded Bikeway Network.** The project shall include expansion of the bikeway network. Providing bike lanes and an enhanced bikeway network can increase access to and from transit hubs. This encourages a mode shift from vehicles to bicycles and displaces vehicle miles traveled.	Significant and unavoidable
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially significant	**MM-TRA-4: Traffic Signal Installation.** The project shall include a traffic signal at "A" Street on Jeffrey Road if and when the extension of Jeffrey Road to SR-241 is built, to satisfy both TDP-3 and TDP-12 criteria in the Buildout Approved Plus Project condition.	Less than significant with mitigation incorporated
Would the project result in inadequate emergency access?	Less than significant	None	Less than significant
Would the project have a cumulative effect on transportation resources?	Potentially significant	**MM-TRA-1 through MM-TRA-4** (see above)	Significant and unavoidable

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
Tribal Cultural Resources			
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. 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	None	Less than significant
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Potentially significant	**MM-TCR-1: Tribal Cultural Resources Monitoring**. Prior to the issuance of grading permits, the applicant/developer shall retain a Native American monitor (tribal monitor), initially attempting to retain such tribal monitor from the Gabrieleño Band of Mission Indians–Kizh Nation. The applicant/developer shall allow 45 days from initial contact with the above-listed Tribe to enter into a contract with the Tribe for monitoring services. If the applicant/developer can demonstrate they were unable to secure an agreement from the above-referenced Tribe, or if the contracted Tribe fails to fulfill its obligation under the contract terms, then the applicant/developer may retain an alternative qualified tribal monitor approved by the City. A copy of the executed contract(s) shall be submitted to the Irvine Community Development Department prior to the issuance of any permit necessary to commence ground-disturbing activities. A tribal monitor shall be present on a full-time basis during ground-disturbing activities, including mass grading of the site, and for any trenching or improvements when such activities extend below artificial fill deposits into native soils. If determined necessary by the tribal monitor, further monitoring shall continue until grading and excavation is complete or until the tribal monitor determines, based on field observations, that there is no likelihood of encountering tribal cultural resources (TCRs). Alternatively, monitoring shall be reduced from full time to part time or spot-checking if determined appropriate by the tribal monitor based on monitoring results. The tribal monitor shall complete daily monitoring logs providing descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. If TCRs are discovered during grading or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate area of discovery (within 100 feet) until the tribal monitor or Tribe has had a reasonable opportunity to assess the nature and significance of the find. Project personnel shall not collect or move any TCR materials until the find has been assessed and evaluated. Project personnel shall not collect or move any human remains, items of patrimony, or associated grave goods.	Less than significant with mitigation incorporated
Would the project have a cumulative effect on tribal cultural resources?	Potentially significant	**MM-TCR-1** (see above)	Less than significant with mitigation incorporated
Utilities and Service Systems			
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 telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than significant	None	Less than significant
Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than significant	None	Less than significant
Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant	None	Less than significant
Would the project 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?	Less than significant	None	Less than significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than significant	None	Less than significant
Would the project have a cumulative effect on utilities and/or service systems resources?	Less than significant	None	Less than significant
Wildfire			
Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than significant	None	Less than significant
Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Potentially significant	**MM-WF-1: Pre-Construction Requirements.** Prior to the commencement of construction activities, the project applicant/developer shall ensure the following requirements are met in accordance with Orange County Fire Authority (OCFA) Guideline B-01, Fire Master Plans for Commercial & Residential Development, Appendix A, Access During Construction. Access and water supply during construction shall comply with California Fire Code Chapter 33 and the provisions listed below. Construction activities that do not comply with these requirements may be suspended at the discretion of the fire code official until a reasonable level of compliance is achieved. At no time shall construction impair/obstruct existing fire lanes or access to the operation of an existing fire hydrant (or hydrants) serving other structures. The developer shall provide alternative access routes, fire lanes, and other mitigation features when existing roadways or fire hydrants may need to be moved or altered during construction to ensure adequate fire and life-safety protection. Such alternatives and features shall be submitted to OCFA for review and approval prior to alteration of existing conditions **Lumber Drop Inspection:** An inspection shall be scheduled with an OCFA inspector to verify that access roadways, fire lanes, and operable fire hydrants have been provided for buildings under construction and prior to bringing combustible materials on site. The inspection shall verify the following: ▪ The street address of the site shall be posted at each entrance. Projects on streets without names or street signs posted at the time of construction shall include the project name, tract number, or lot number for identification. ▪ Gates through construction fencing shall be equipped with a Knox padlock or breakaway lock/chain. ▪ When required by the OCFA inspector, fire lanes shall be posted with “Fire Lane – No Parking” signs, or “No Parking Areas” will be identified to maintain obstruction-free areas during construction. ▪ Provisions shall be made to ensure that fire hydrants are not blocked by vehicles or obstructed by construction material or debris. A 3-foot clear space shall be provided around the perimeter of each hydrant and no parking or similar obstructions shall be allowed along the adjacent road within 15 feet of a hydrant. Inoperable fire hydrants shall be bagged. **Temporary Fire Access Roads:** Temporary access roads (construction roads that do not match the final location and configuration of permanent roads as approved on a Fire Master Plan) and temporary hydrants may be permitted for single-family residential model construction or a single detached custom home less than 5,500 square feet in area with the conditions listed below. They may be allowed on a case-by-case basis for other structures with additional requirements, as determined by the fire code official. Conditions allowing the construction of these temporary access roads and hydrants include the following: ▪ Plans for temporary access shall be submitted to the OCFA Planning and Development Services Section. Plans will show proposed temporary roadway locations, location of models, space dedicated to storage of construction materials, and parking for work crews and construction vehicles. The plans shall clearly state that they have been submitted for temporary access and hydrants. ▪ Plans shall be stamped and signed by a licensed civil engineer stating that the temporary access road can support 94,000 pounds of vehicle weight in all weather conditions. Plans shall also provide manufacturer’s documentation that demonstrates suitability of the material, specifically as a road stabilizer.	Less than significant with mitigation incorporated

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		▪ Parking plans shall include details on how the construction site will enforce fire lanes and no-parking zones. ▪ Aboveground invasion lines are acceptable for water supply, as follows: - Drawings shall show details of how the line will be secured in place (e.g., size, depth, and interval of rebar tie-downs) and protected from vehicular damage (e.g., K-rails or bollards). - An invasion line may be run underground if the depth of bury can support the 94,000-pound weight of a fire apparatus. - The temporary water line must provide the required fire flow; calculations may be required. - The pipe shall be listed for fire service. - Fire hydrants shall consist of a minimum 6-inch-diameter barrel with one 2.5-inch outlet and one 4-inch outlet. This shall be noted on the plan. ▪ All other access and water requirements shall apply (e.g., width, approach clearance, premises identification, locks, gates, barriers). ▪ The approved plan for temporary access and water supply shall be available at the construction site prior to bringing combustible building materials on site. ▪ An inspection by OCFA personnel is required to verify adherence to the approved plan prior to bringing combustible materials on site. **Phased Access:** Incremental installation of permanent access roadways as shown on a Fire Master Plan may be permissible for commercial and residential developments. If phased installation is anticipated, the site superintendent or designee shall review the installation process with an OCFA inspector during the lumber drop inspection or pre-construction meeting. Depending on the complexity of the installation, size of the project, and other project-specific factors, the inspector may allow phased installation to proceed immediately or may first require that all or some of the following items are satisfied: ▪ The extent of building construction ▪ Location of operable hydrants serving all buildings under construction ▪ The location of construction fencing, barriers, and vehicle access gates ▪ The location of all temporary or permanent “fire lane—no parking” signs ▪ Equipment/materiel staging locations ▪ Worker parking areas In addition, the following requirements for phased access shall be met: ▪ Phasing plans shall be stamped and signed by a licensed civil engineer stating that the access road can support 94,000 pounds of vehicle weight in all weather conditions. The final road section less the final lift of asphalt topping may be acceptable if certified by the engineer. ▪ The phasing plan shall identify any anticipated areas where fire department access roadways may be temporarily inaccessible due to trenching, slurry coating, striping, or other construction activities after they have been installed and inspected. The plan shall indicate the anticipated period of impairment and include provisions for providing plating over trenches and alternative access routes, notification to the fire department, and/or other forms of mitigation when such roadways are impaired. ▪ A parking plan shall be provided for the construction site detailing how the fire lane no-parking regulations will be enforced. The plan shall include a clause stating that “the job-site superintendent is responsible for informing the work crews of parking requirements and that the entire job site is subject to shutdown by the OCFA inspector if parking is in violation of fire lane posting.” ▪ The approved phasing plan shall be available at the construction site prior to bringing combustible building materials on site. A lumber drop inspection by an OCFA inspector will be required prior to the commencement of each phase; additional inspection fees will be due for each phase. ▪ All other access and water requirements shall apply (e.g., width, approach clearance, premises identification, locks, gates, barriers).	

Table 1-1. Summary of Project Impacts

Environmental Topic	Level of Significance Prior to Mitigation	Mitigation Measures/Project Design Features	Level of Significance After Mitigation
		MM-WF-2: Fire-Resistant Landscape Plan. The proposed landscape plan shall be implemented in accordance with defensible space principles discussed in the project-specific Fire Behavior Analysis and Fuel Modification Plan (Appendices J-1 and J-3 to the Draft EIR) and using fire-resistant plant material in accordance with the Orange County Fire Authority (OCFA) Fuel Modification Zone Plant List. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. Given the project site's proximity to High and Very High Fire Hazard Severity Areas, the project landscape plan shall not include plants that are highly flammable. The landscape plan shall be submitted to OCFA for review and approval prior to issuance of building permits. No plant that is listed as undesirable (according to OCFA's 2014 Orange County Undesirable Plants List) shall be included within the proposed project without prior approval by OCFA.	
Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Potentially significant	**MM-WF-1 and MM-WF-2** (see above)	Less than significant with mitigation incorporated
Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less than significant	None	Less than significant
Would the project have a cumulative effect on wildfire?	Potentially significant	**MM-WF-1 and MM-WF-2** (see above)	Less than significant with mitigation incorporated

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